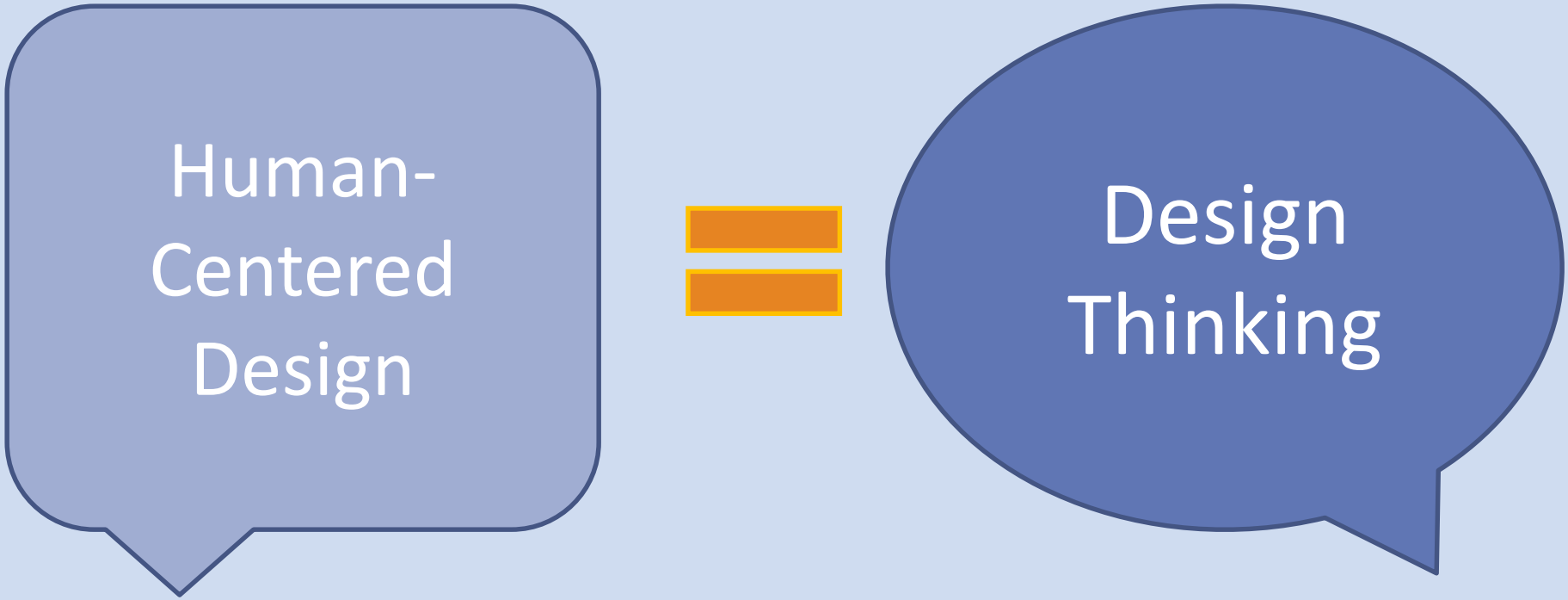
Setting the Context: Human-Centered Design

Session Overview

- Introduction to Human-Centered Design
- Q&A
- Break (15 minutes)
- Project-Based Learning Activity
- Group Gather & Debrief


Human-
Centered
Design
=
Design
Thinking

At its heart, human-centered design is a creative approach to problem-solving. It consists of a set of tools that focus on empathy for the end-user.

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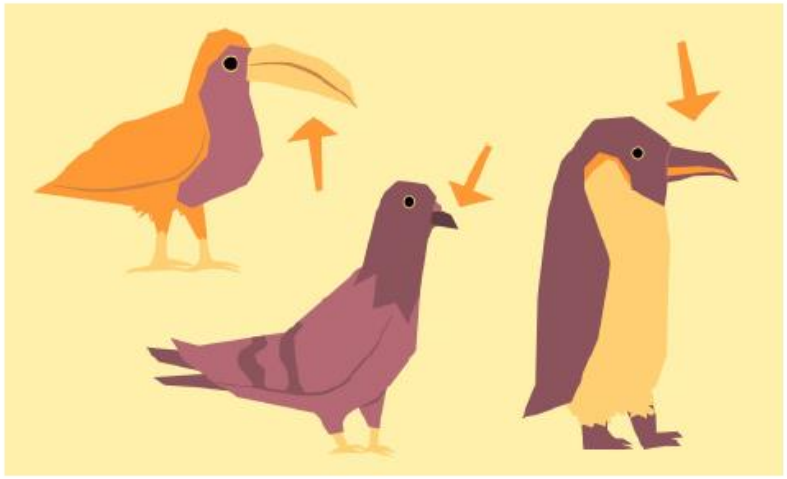
Traditional Forms of Problem-Solving

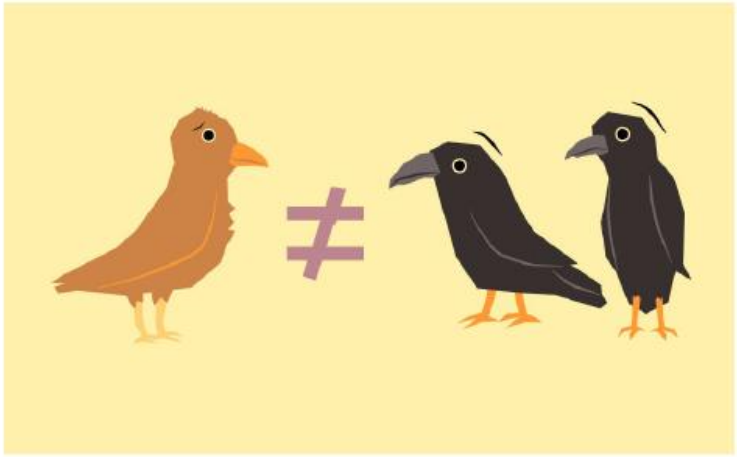
INDUCTIVE REASONING

"Every bird that I see has a beak, so all birds have beaks."



DEDUCTIVE REASONING

"If the general rule is that all crows are black, and I see a brown bird, I can declare deductively that this bird is not a crow."



ABDUCTIVE REASONING

"Imagine you are an archeologist and during an excavation, you find bones like you have never seen before. In order to determine to what type of species these bones belong, you guess that they are from a new type of species that civilization has not discovered before. This educated guess is your starting point. You begin testing your hypothesis by comparing the bones to all different types of species to determine whether you are correct or not."

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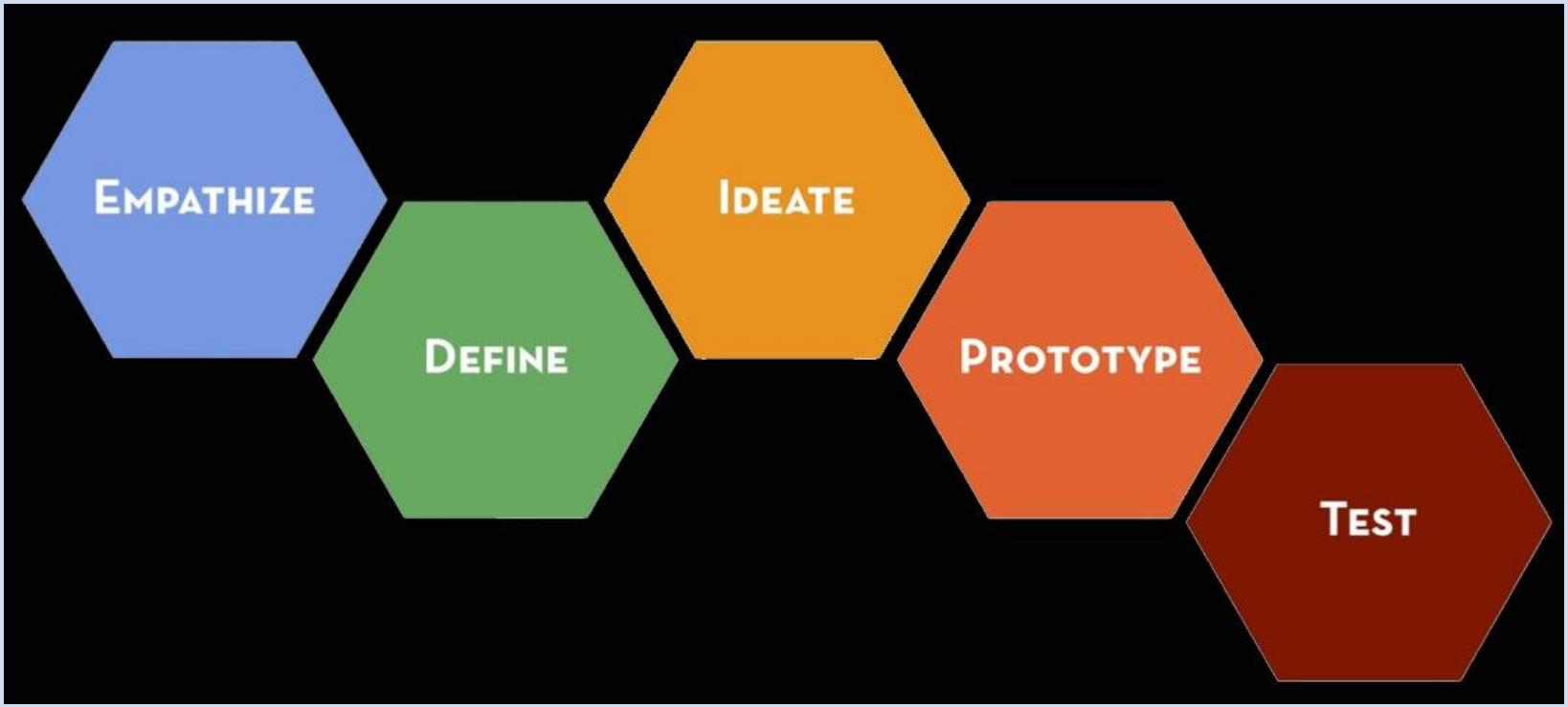


Source: Stanford d.school Process Guide

"To create meaningful innovations, you need to know your users and care about their lives."

WHAT is the Empathize mode

Empathy is the centerpiece of a human-centered design process. The Empathize mode is the work you do to understand people, within the context of your design challenge. It is your effort to understand the way they do things and why, their physical and emotional needs, how they think about world, and what is meaningful to them.

WHY empathize

As a design thinker, the problems you are trying to solve are rarely your own—they are those of a particular group of people; in order to design for them, you must gain empathy for who they are and what is important to them.

Source: Stanford d.school Process Guide

"Framing the right problem is the only way to create the right solution."

WHAT is the Define mode

The Define mode of the design process is all about bringing clarity and focus to the design space. It is your chance, and responsibility, as a design thinker to define the challenge you are taking on, based on what you have learned about your user and about the context. After becoming an instant-expert on the subject and gaining invaluable empathy for the person you are designing for, this stage is about making sense of the widespread information you have gathered.

The goal of the Define mode is to craft a meaningful and actionable problem statement – this is what we call a point-of-view. This should be a guiding statement that focuses on insights and needs of a particular user, or composite character. Insights don't often just jump in your lap; rather they emerge from a process of synthesizing information to discover connections and patterns. In a word, the Define mode is sensemaking.

Source: Stanford d.school Process Guide

"It's not about coming up with the 'right' idea, it's about generating the broadest range of possibilities."

WHAT is the Ideate mode

Ideate is the mode of the design process in which you concentrate on idea generation. Mentally it represents a process of "going wide" in terms of concepts and outcomes. Ideation provides both the fuel and also the source material for building prototypes and getting innovative solutions into the hands of your users.

Source: Stanford d.school Process Guide

"Build to think and test to learn."

WHAT is the Prototype mode

The Prototype mode is the iterative generation of artifacts intended to answer questions that get you closer to your final solution. In the early stages of a project that question may be broad – such as "do my users enjoy cooking in a competitive manner?" In these early stages, you should create low-resolution prototypes that are quick and cheap to make (think minutes and cents) but can elicit useful feedback from users and colleagues. In later stages both your prototype and question may get a little more refined. For example, you may create a later stage prototype for the cooking project that aims to find out: "do my users enjoy cooking with voice commands or visual commands".

A prototype can be anything that a user can interact with – be it a wall of post-it notes, a gadget you put together, a role-playing activity, or even a storyboard. Ideally you bias toward something a user can experience. Walking someone through a scenario with a storyboard is good, but having them role-play through a physical environment that you have created will likely bring out more emotions and responses from that person.

Source: Stanford d.school Process Guide

"Testing is an opportunity to learn about your solution and your user."

WHAT is the Test mode

The Test mode is when you solicit feedback, about the prototypes you have created, from your users and have another opportunity to gain empathy for the people you are designing for. Testing is another opportunity to understand your user, but unlike your initial empathy mode, you have now likely done more framing of the problem and created prototypes to test. Both these things tend to focus the interaction with users, but don't reduce your "testing" work to asking whether or not people like your solution. Instead, continue to ask "Why?", and focus on what you can learn about the person and the problem as well as your potential solutions.

Ideally you can test within a real context of the user's life. For a physical object, ask people to take it with them and use it within their normal routines. For an experience, try to create a scenario in a location that would capture the real situation. If testing a prototype in situ is not possible, frame a more realistic situation by having users take on a role or task when approaching your prototype. A rule of thumb: always prototype as if you know you're right, but test as if you know you're wrong—testing is the chance to refine your solutions and make them better.

Source: Stanford d.school Process Guide

At its heart, human-centered design is a creative approach to problem-solving. It consists of a set of tools that focus on empathy for the end-user.

“What people say and what people do and what they say they do are entirely different things.”

-Margaret Mead, Anthropologist

What are these people doing?

How are they doing it?

Why are they doing it?

…and what we think people do.

"What people say and what people do and what they say they do are entirely different things."

-Margaret Mead, Anthropologist

Human-Centered Design

MINDSETS

TOOLS

MINDSET: EMPATHY

OTHER MINDSETS

Human-Centered Design is built on thinking and acting differently in order to gain a deep understanding of our customers and the challenges facing them. First and foremost, it requires a high degree of curiosity and empathy. A few other behaviors that support this are:

BE OPEN-MINDED

BE COLLABORATIVE

BE ADAPTIVE

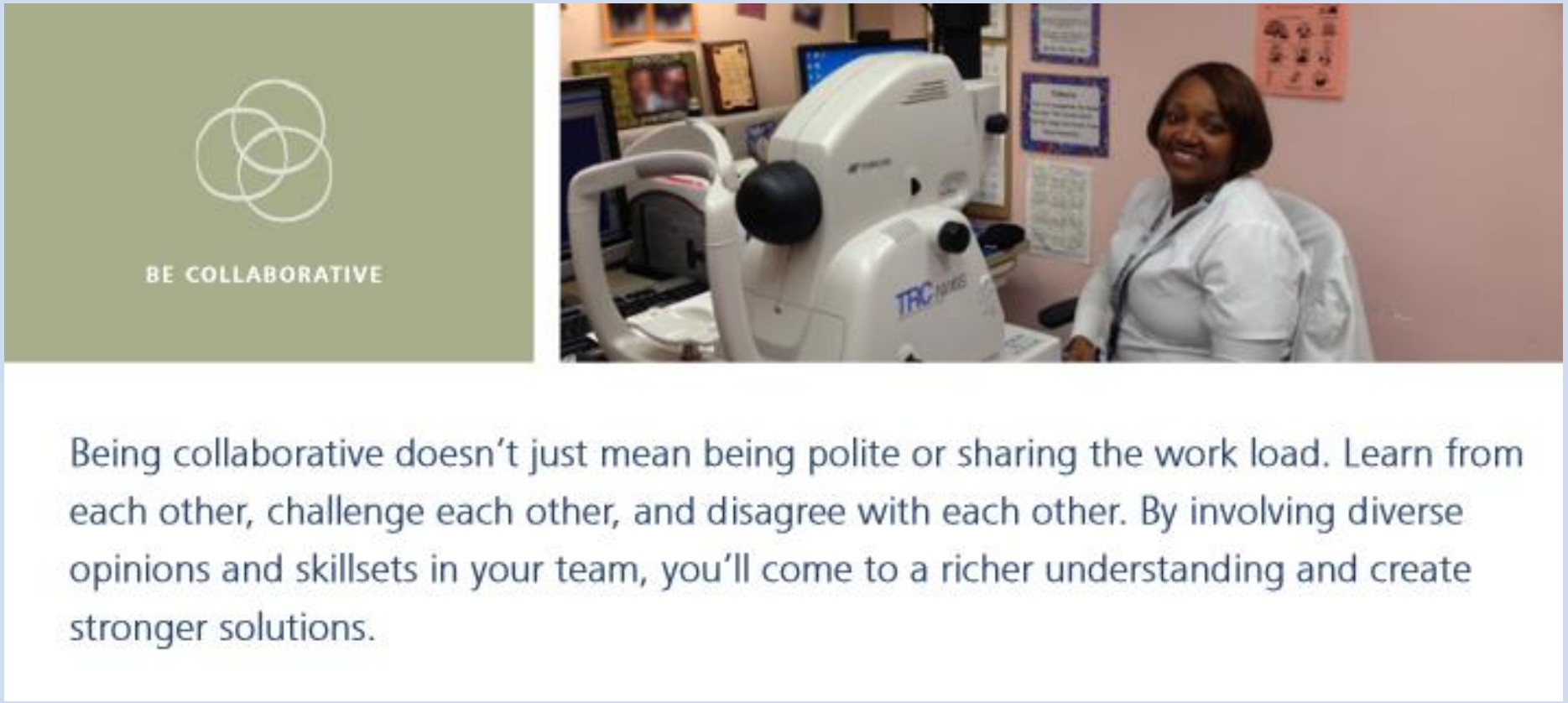
Designing for Veterans: A Toolkit for Human-Centered Design October 2015

MINDSET

We all see and make sense of the world based on our past experiences, but it's important when tackling complex problems to be open-minded. Confront your assumptions. As Einstein put it: we cannot solve our problems with the same thinking we used when we created them.

Designing for Veterans: A Toolkit for Human-Centered Design October 2015

MINDSET



Designing for Veterans: A Toolkit for Human-Centered Design October 2015

MINDSET

The HCD process moves through uncertainty and ambiguity to greater clarity. Adapting to these hurdles with your team will help provide clearer direction. By working through challenges, you'll move closer to meaningful solutions and become better and more resilient designers.

Designing for Veterans: A Toolkit for Human-Centered Design October 2015

Doug Dietz &
GE's MRI Machine

GE Healthcare

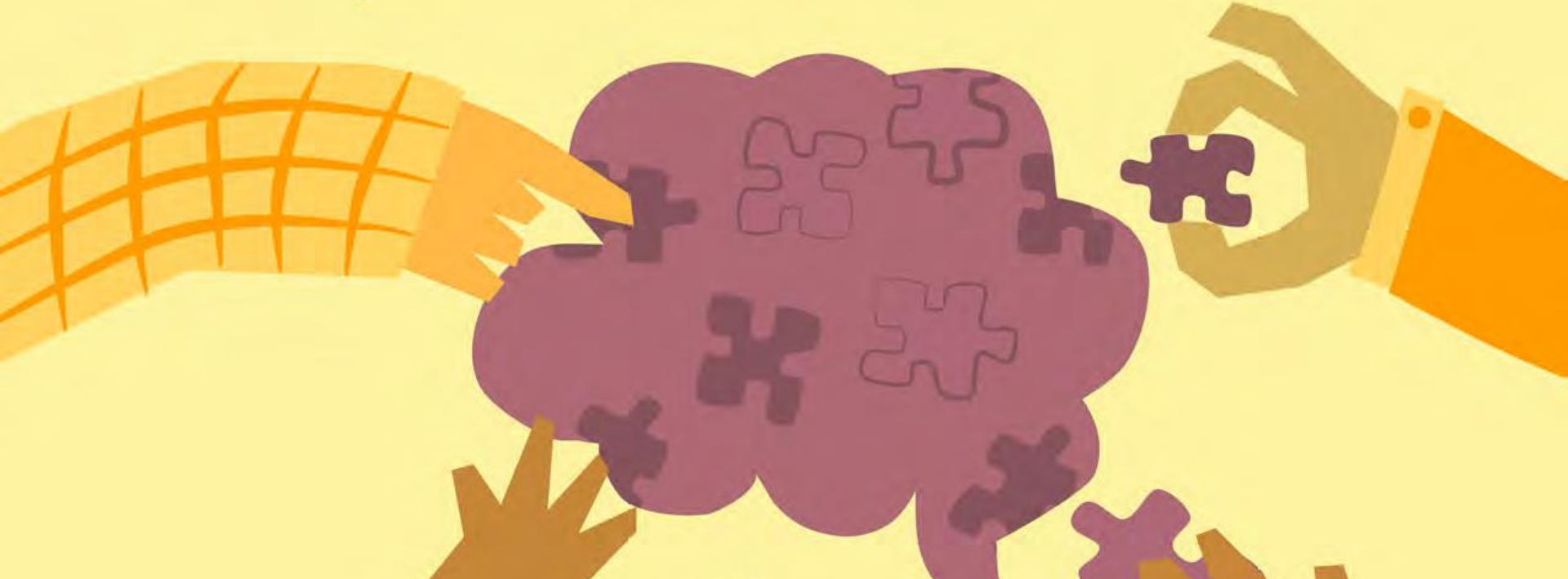
openideo.com

Doug Dietz &
GE's MRI Machine

How might we transform the country's employment system?

Creating Solutions Together:

DESIGN THINKING,
THE OFFICE OF FAMILY ASSISTANCE,
AND 3 GRANTEES.



Name:	Confederated Tribes of Siletz Indians
Location:	Siletz, Oregon
Design thinking Pilot Project:	Improve collaboration among social service providers
Pilot Leads:	Megan Hawley and Angela Ramirez
Program Website:	**www.ctsi.nsn.us**

= 40+

Interviews

= 50+

Ideas

= 3

Prototypes

TTCW
Tribal TANF–Child Welfare

PROTOTYPES:

Moving the MDT meetings from the Indian Child Welfare Office to a more neutral location (Community Center) and sitting in a cirtcle.

Bringing Tribal culture into the meetings, like prayer and smudging (native cultural practice of cleansing. It rids the room of negative energy.)

Reviewing confidentiality policies for MDT meetings and each social service program.

Q & A

Resources

Stanford d.school Process Guide:
https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=68deabe9f22d5b79bde83798d28a09327886ea4b

Designing for Veterans: A Toolkit for Human-Centered Design
https://www.vets.gov/playbook/downloads/vaci-project-toolkit.pdf

Doug Dietz's TEDx Talk on Transforming Healthcare for Children and Their Families
https://www.youtube.com/watch?v=jajduxPD6H4

Denmark's MindLab: *http://mind-lab.dk/en/*

Creating Solutions Together: Design Thinking, The Office of Family Assistance, and 3 Grantees
http://www.acf.hhs.gov/programs/ofa/resource/creating-solutions-together-design-thinking-ofa-and-3-grantees