



Faculty of Design, sLAB (Strategic Innovation Lab)

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## Change the world through OERs (we're not kidding)! Inclusive design, accessibility, diversity, and how difference makes us stronger

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# Changing Our World...



Jutta Treviranus  
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# Last Year....

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- “Salad dressing, pendula, navels, scraped knees and future-friendly learning”
- (the importance of the edge)



“Change the world through OERs (we’re not kidding)!  
Inclusive design, accessibility, diversity, and how difference makes us stronger”

Humbly...

# “The Other IDRC”

## The Inclusive Design Research Centre



- inclusive design of emerging information and communication systems, policies and practices
- or... **digital inclusion** and **designing for diversity**
- since 1993
- **open source, open access, open standards, open data**
- over 96 research partner organizations globally
- Inclusive Design Institute -
  - inclusive infrastructure



*inclusive design*  
INSTITUTE

In our schools diversity has been regarded as an issue to be tackled, not an asset.

However, our connected society and technology-disrupted economy requires diversified, collaborative life-long learners.

Education plays a crucial role in fostering social cohesion.

Can our education systems gain the skills and knowledge needed to support our quickly evolving social and economic reality?

Last year... edge cases

# This year....

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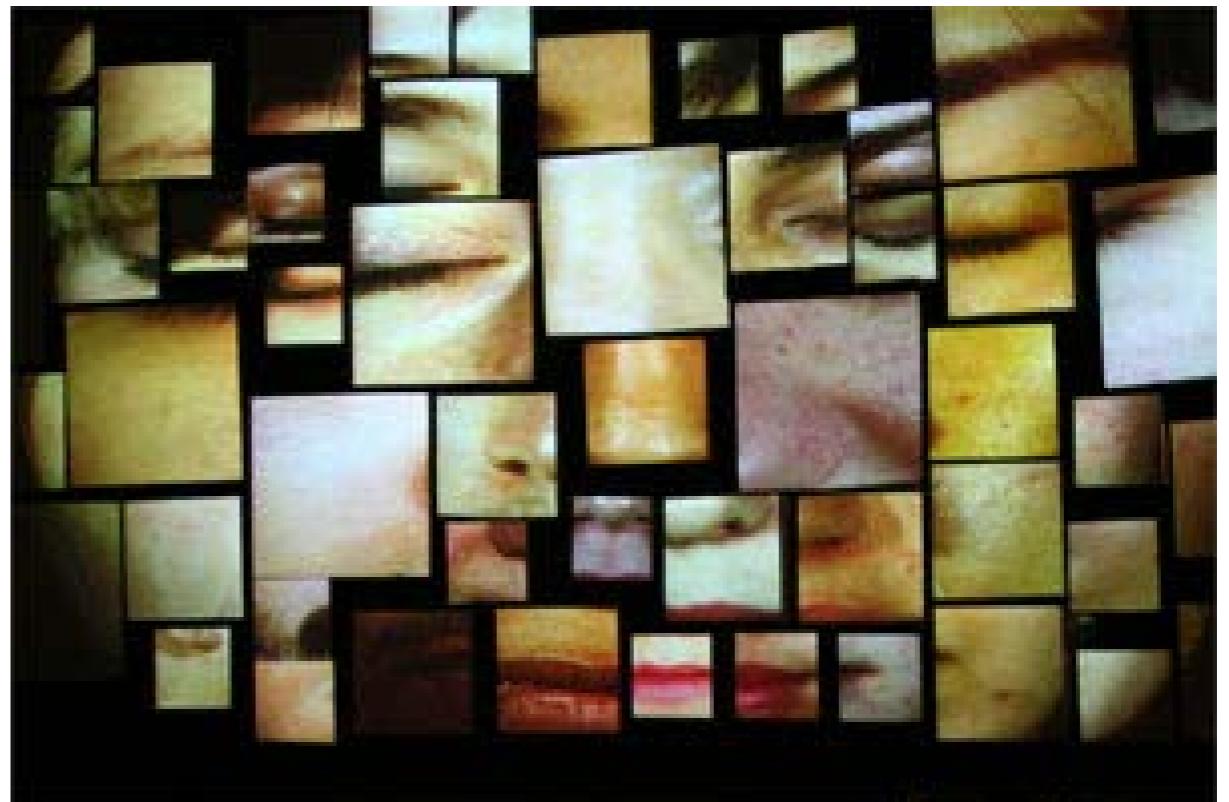
- Gnarly problems
- Navigating complexity



**“Learning to Navigate Complexity  
with our Simplicity Loving Minds”**

# Inclusive Design

- Design that considers the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference
- Designing for Diversity



# 3 Dimensions of Inclusive Design...

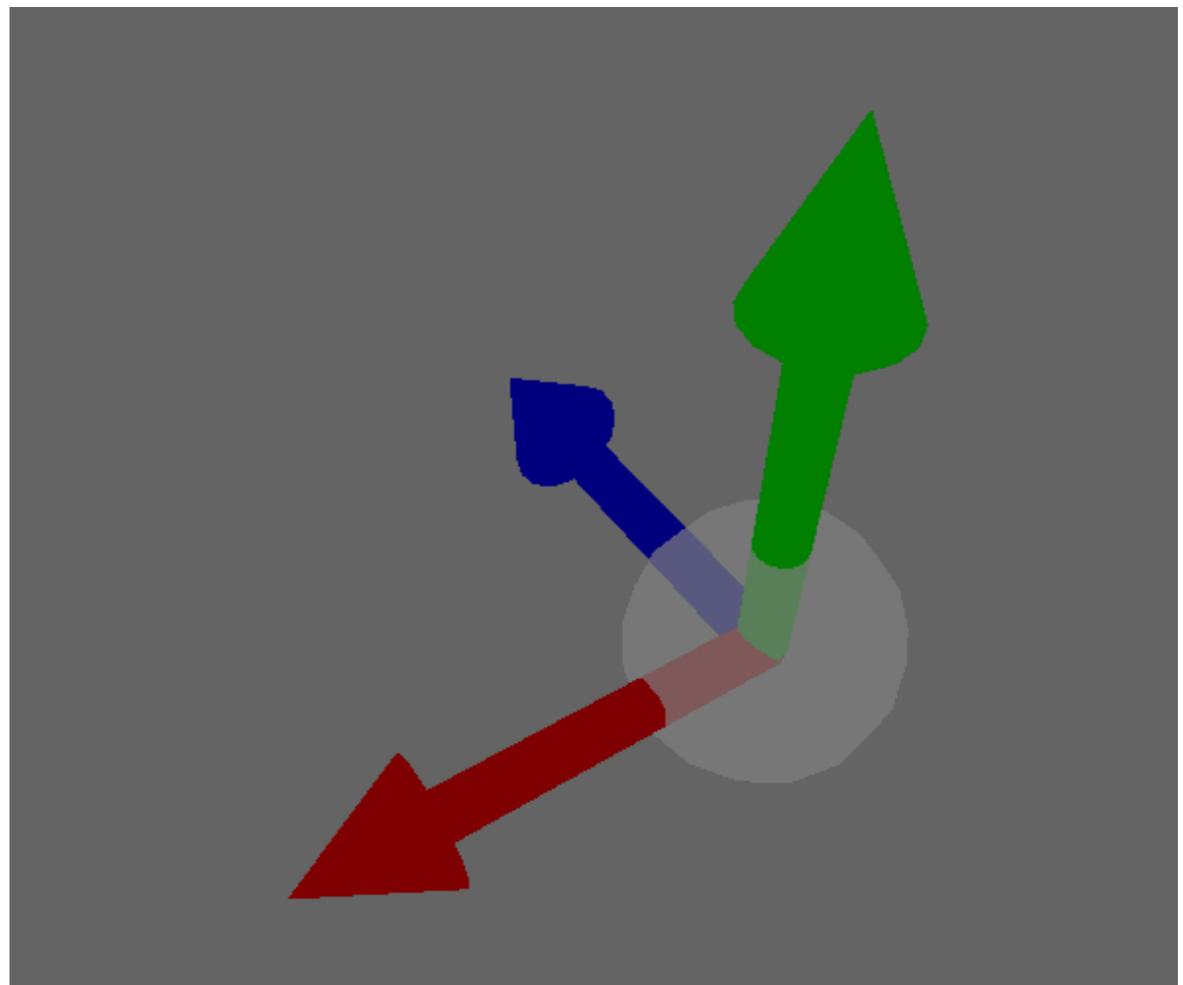
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- **Personal**

- support diversity
- foster self-knowledge
- integrate don't segregate

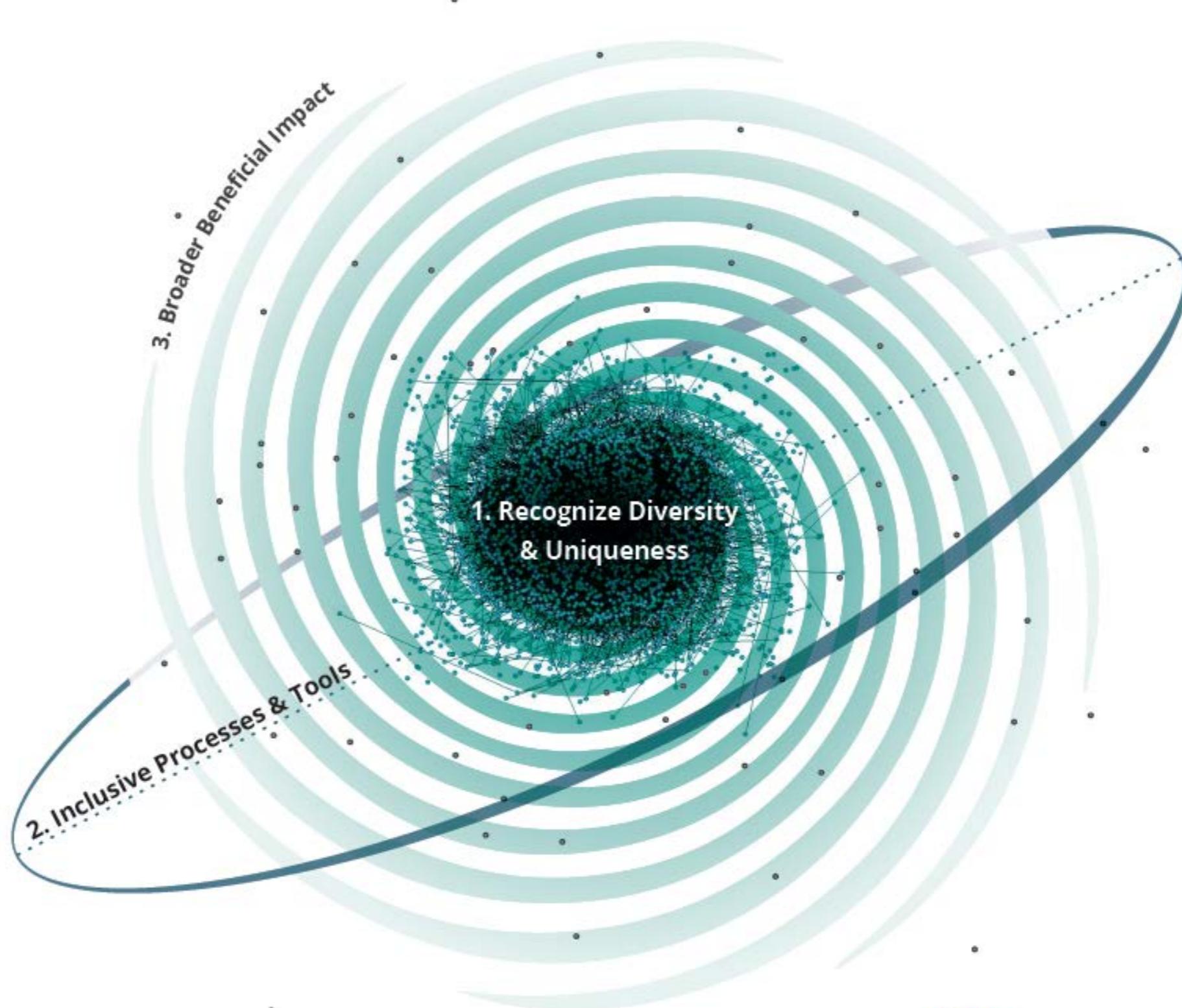
- **Participatory**

- “nothing about us without us”
- **accessible tools & process**
- learners as co-creators
- **Systemic** - cognizant of context and larger impact, supporting virtuous cycles



# INCLUSIVE DESIGN

3 Dimensions

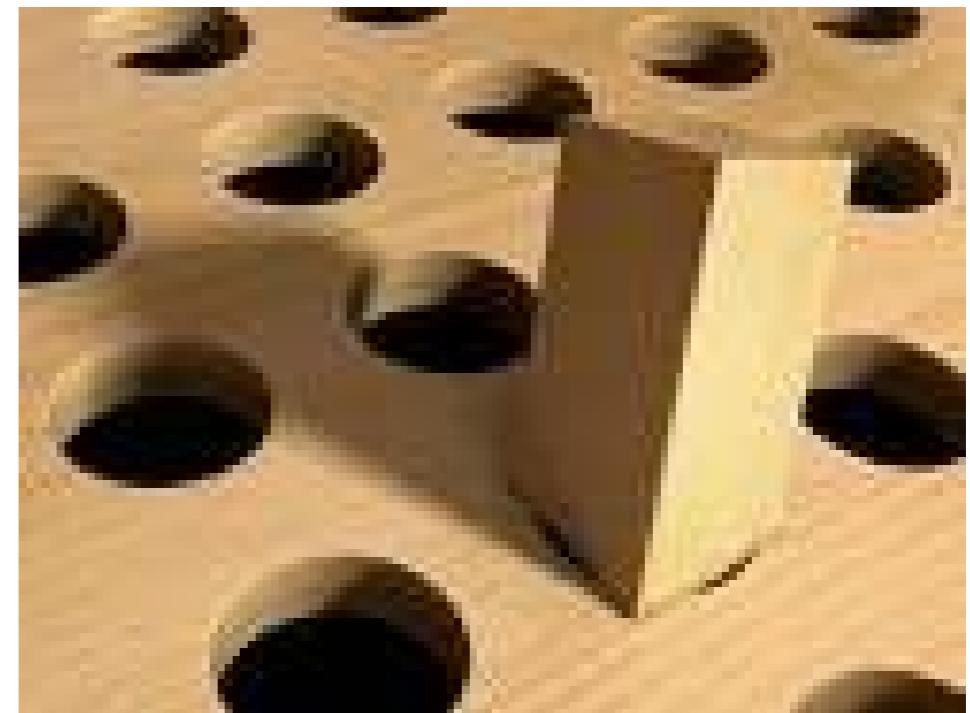


inclusive design institute

# We all experience learning barriers...

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- **Disability** = a mismatch between the needs of the individual and the learning experience offered
- **Accessibility** = the ability of the learning system to match the needs of the individual
- **Mismatches can be addressed by design**



# Discover...

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- 3 interesting things you have in **common**
- 3 interesting ways in which you are **different**
- 1 way in which each of you is **unlike anyone else** in the room

# Interplay of Diversity & Commonality

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- The more we make room for diversity the more likely we are to uncover deeper, more genuine commonality
- Other commonalities
  - Stereotypes
  - Conformity & peer pressure



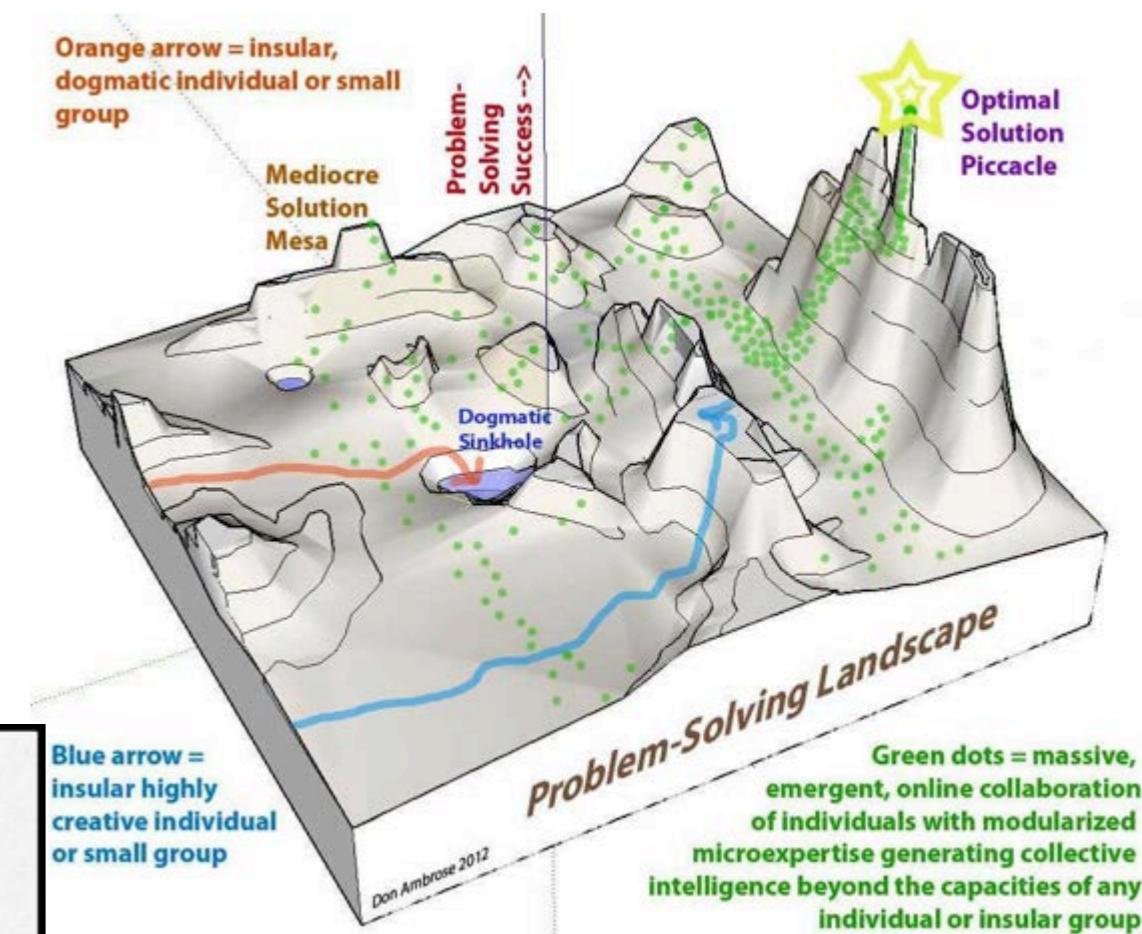
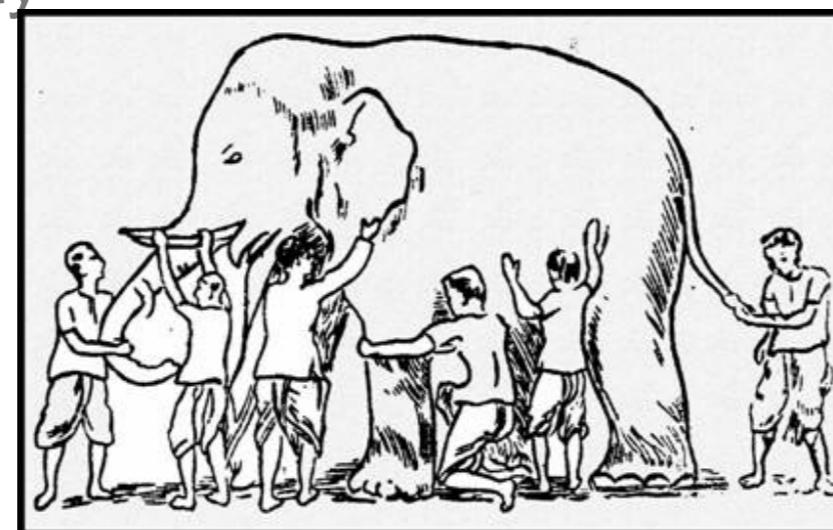
# The Power of Diverse Perspectives



**THE DIFFERENCE**

HOW THE POWER OF DIVERSITY  
CREATES BETTER GROUPS, FIRMS,  
SCHOOLS, AND SOCIETIES

- “Diversity Trumps Ability”  
~Scott Page
- more successful planning
- more accurate prediction
- greater creativity



# Cautions...

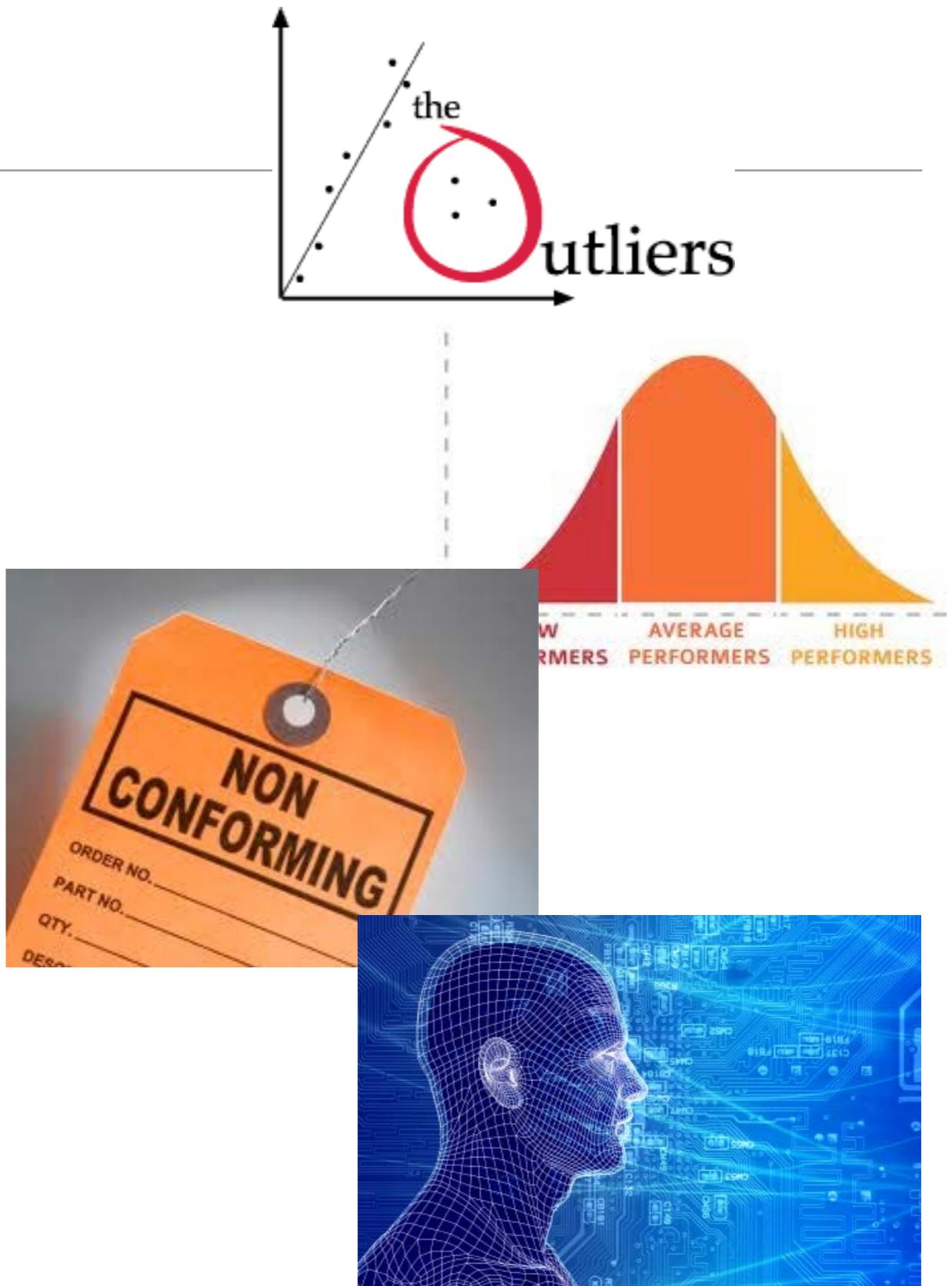
# Designing the Table...



# Who are we missing?

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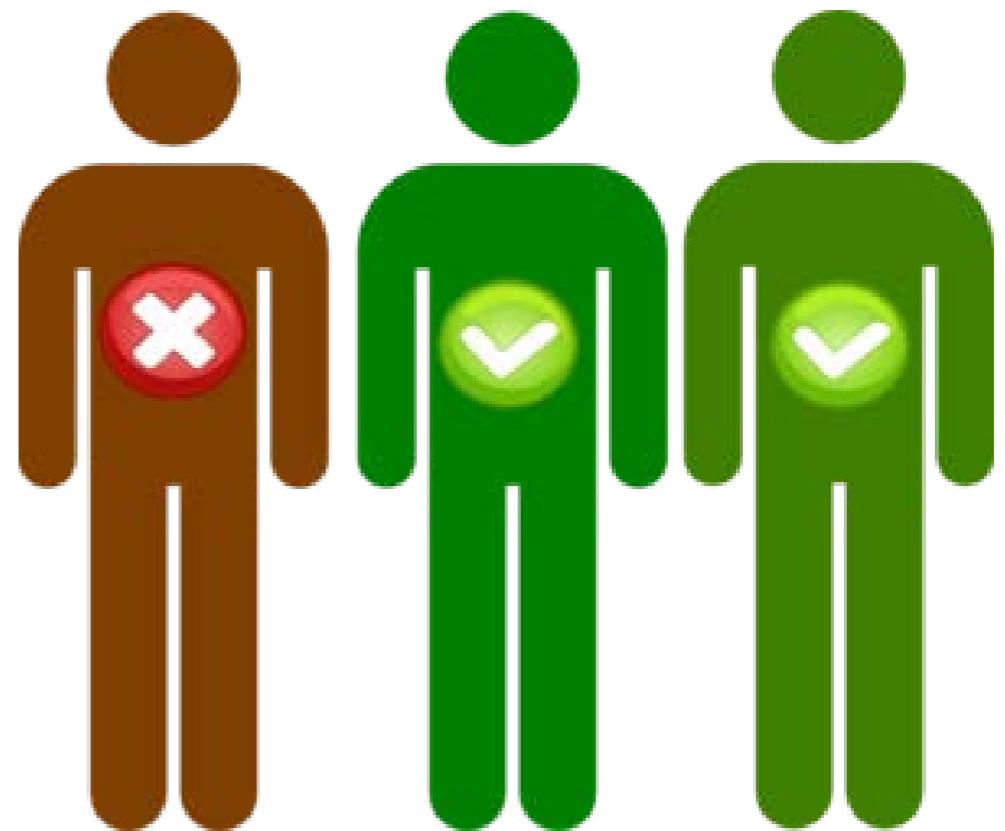
- The problem with dominant research methodologies
- Populations of one
- Timing and change
- Entanglement and context
- Society as a biased and contaminated machine learning engine



# The Problem with Solutions..

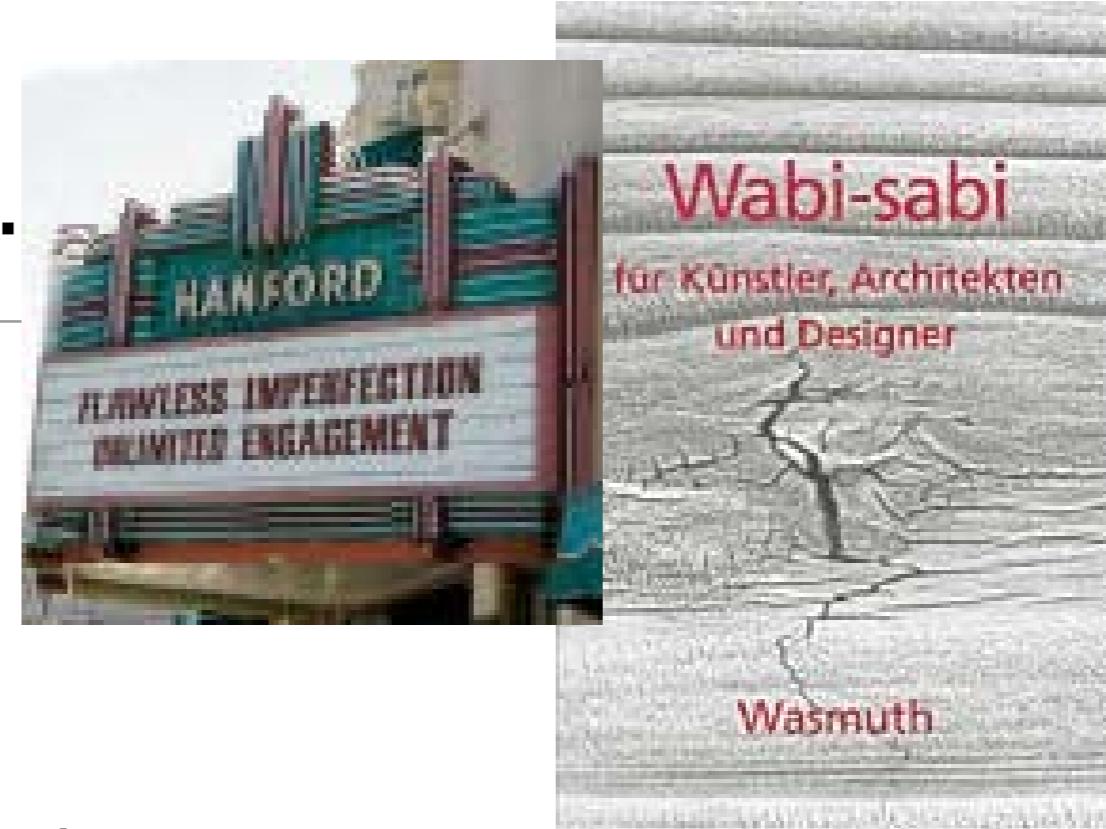
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- Leaving people stranded at the edges
- The more effort taken the less attention to the edges
- Success for one group at the expense of others
- Ignoring change



# Wabi-Sabi & The Value of Mistakes...

- incomplete invites completion,
- the broken invites fixing,
- mistakes invite correction,
- a partial collection of examples invites more examples,
- humans call forth the greatest resourcefulness and creativity when there is an immediate and urgent unsolved problem
- the best arguments and explanations arise from disagreement and debate,
- cognitive dissonance and exposure to the counterintuitive spurs growth,
- it is better to fail early and often.



# Terms of Agreement...

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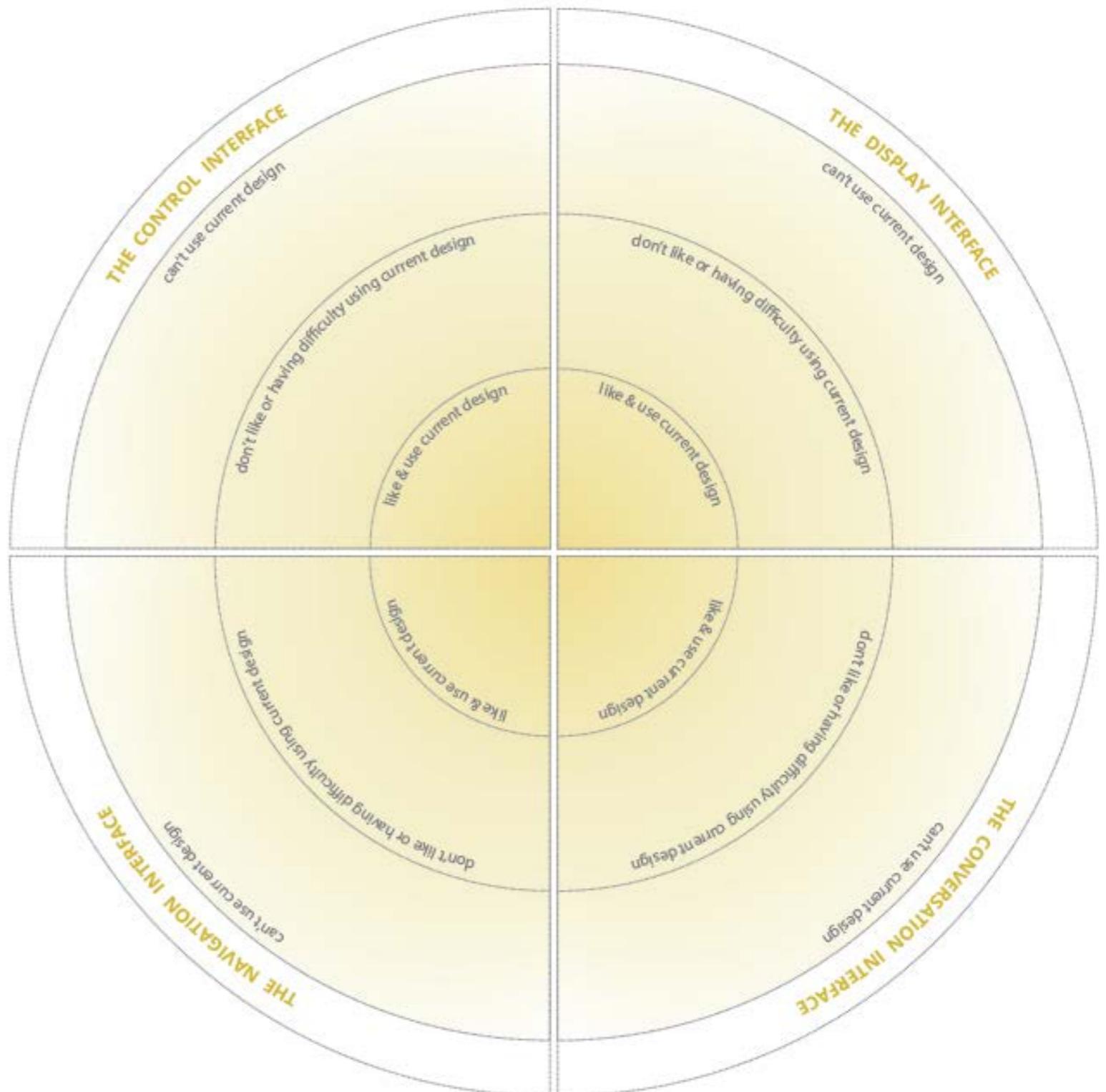
- Nothing sacred
- Everything open to respectful dissent
- Nothing static or formulaic
- Responsive and adaptive to user, goal and context
- Supportive structures that enable generative growth



# What expertise do you need....

## INCLUSIVE DESIGN MAPPING TOOL

- People that don't like or have difficulty using your design
- People that hate or can't use your design
- Inclusive Design Mapping Tool



# Education: A Complex Adaptive System

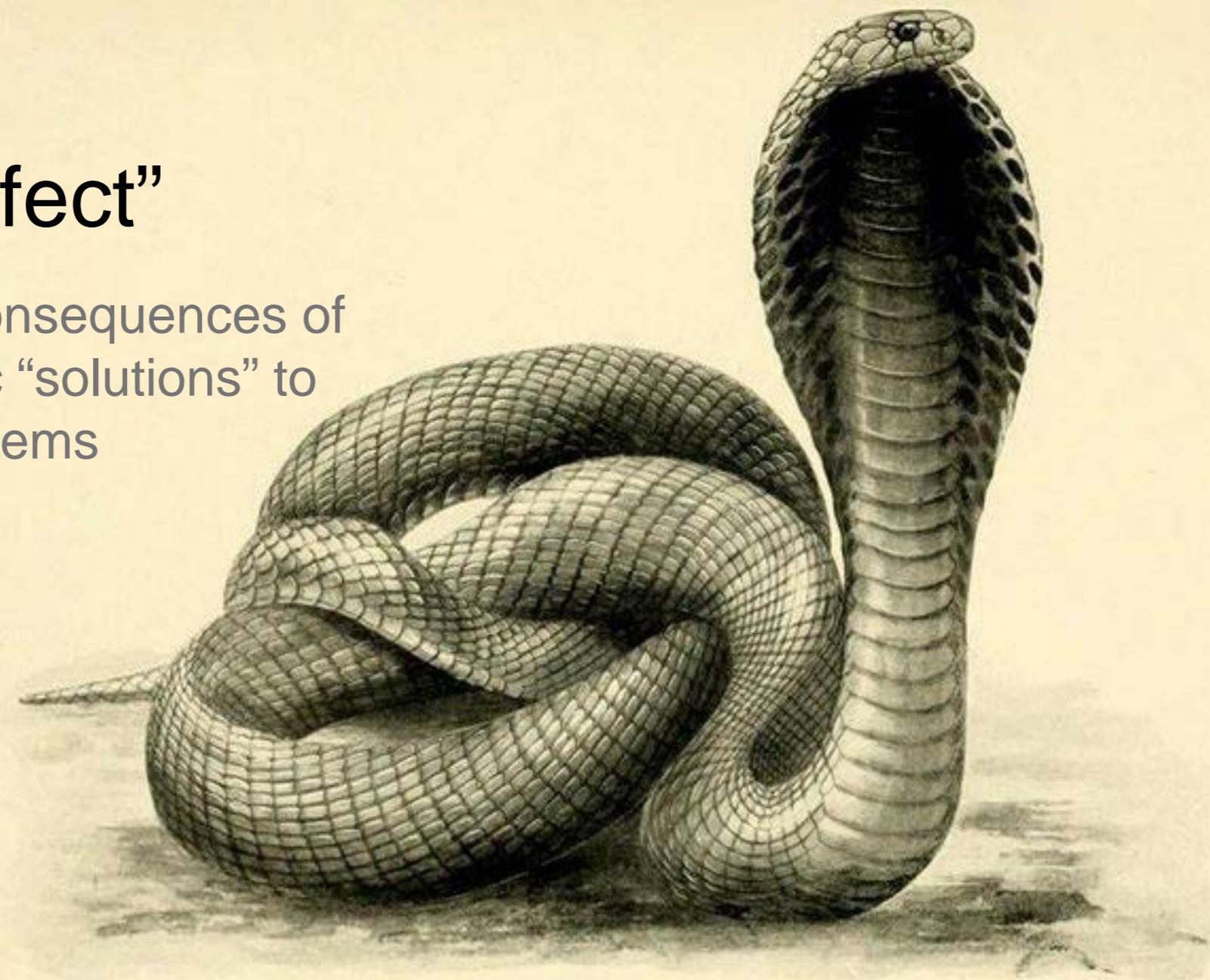
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- Politics
- Regulation
- Economics
- Families
- Communities
- Media
- Private enterprise



# “Cobra Effect”

- unintended consequences of over simplistic “solutions” to complex problems



An example....

# Berkeley and the Department of Justice...

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- <https://www.insidehighered.com/news/2017/03/06/u-california-berkeley-delete-publicly-available-educational-content>

# The Perspectives?

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# The Perspectives?

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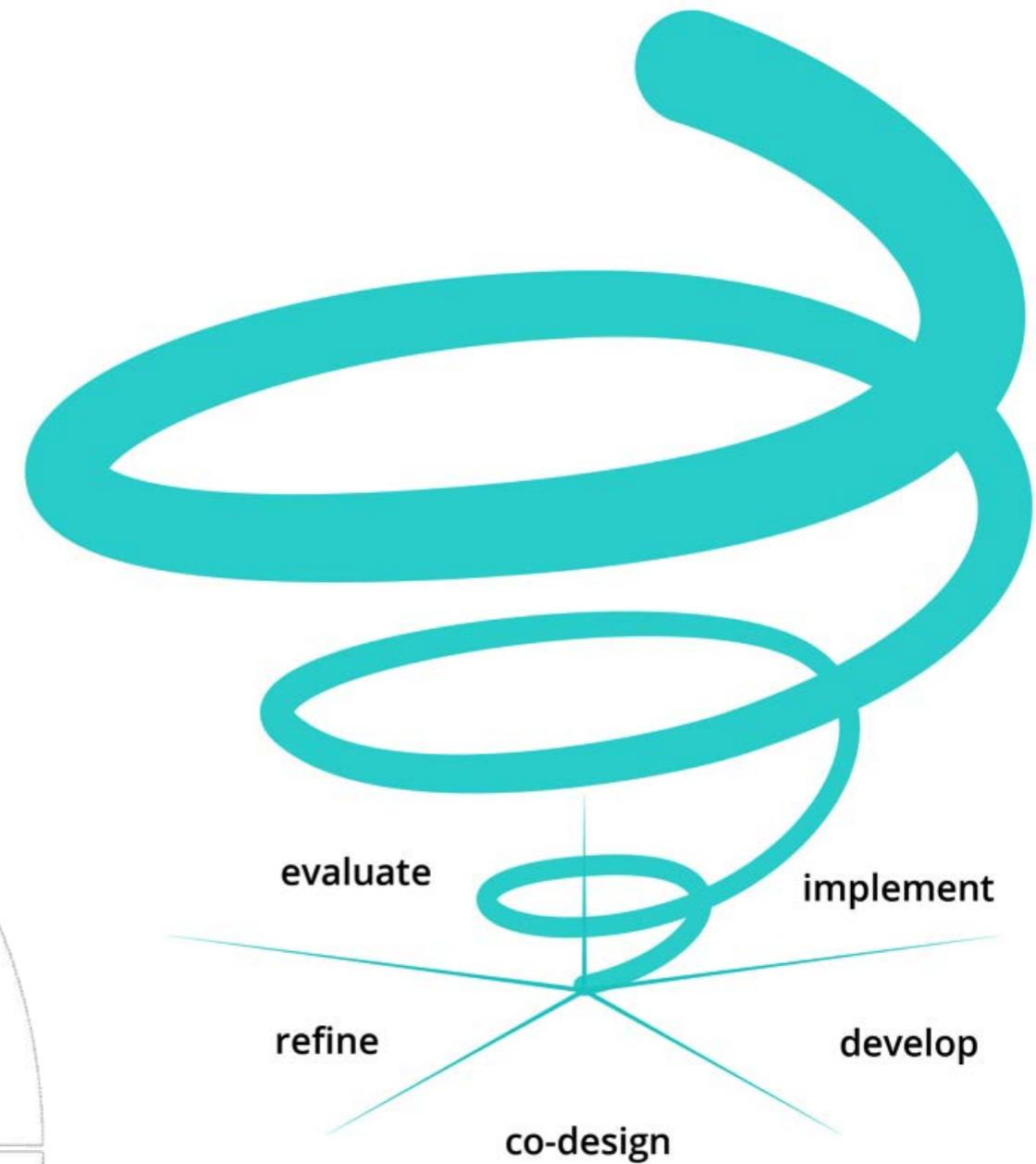
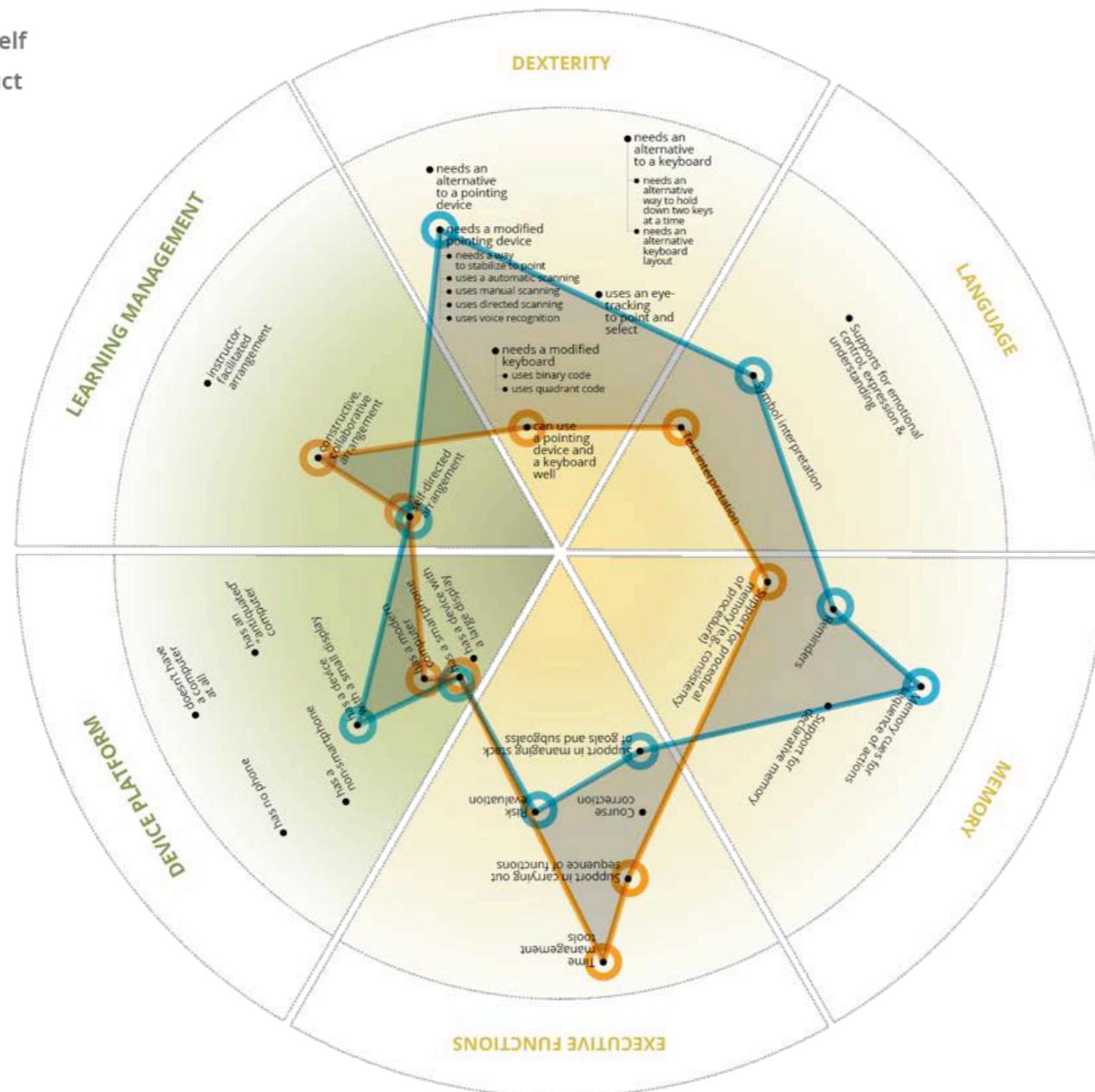
- OER community
- Accessibility community
- Professors
- Students with disabilities at Berkeley
- Students around the world
- Advocates

# Stretching to the Edges...

## Inclusive Design Mapping Tool

Finding the gap

- Yourself
- Product



# Your Turn...

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- Pick a gnarly problem
- Identify the perspectives
- Remember the edges
- Map your requirements
- Gentle, inclusive approach prototype
- Who are we missing?
- Checking with the toddler – grandparent conversation





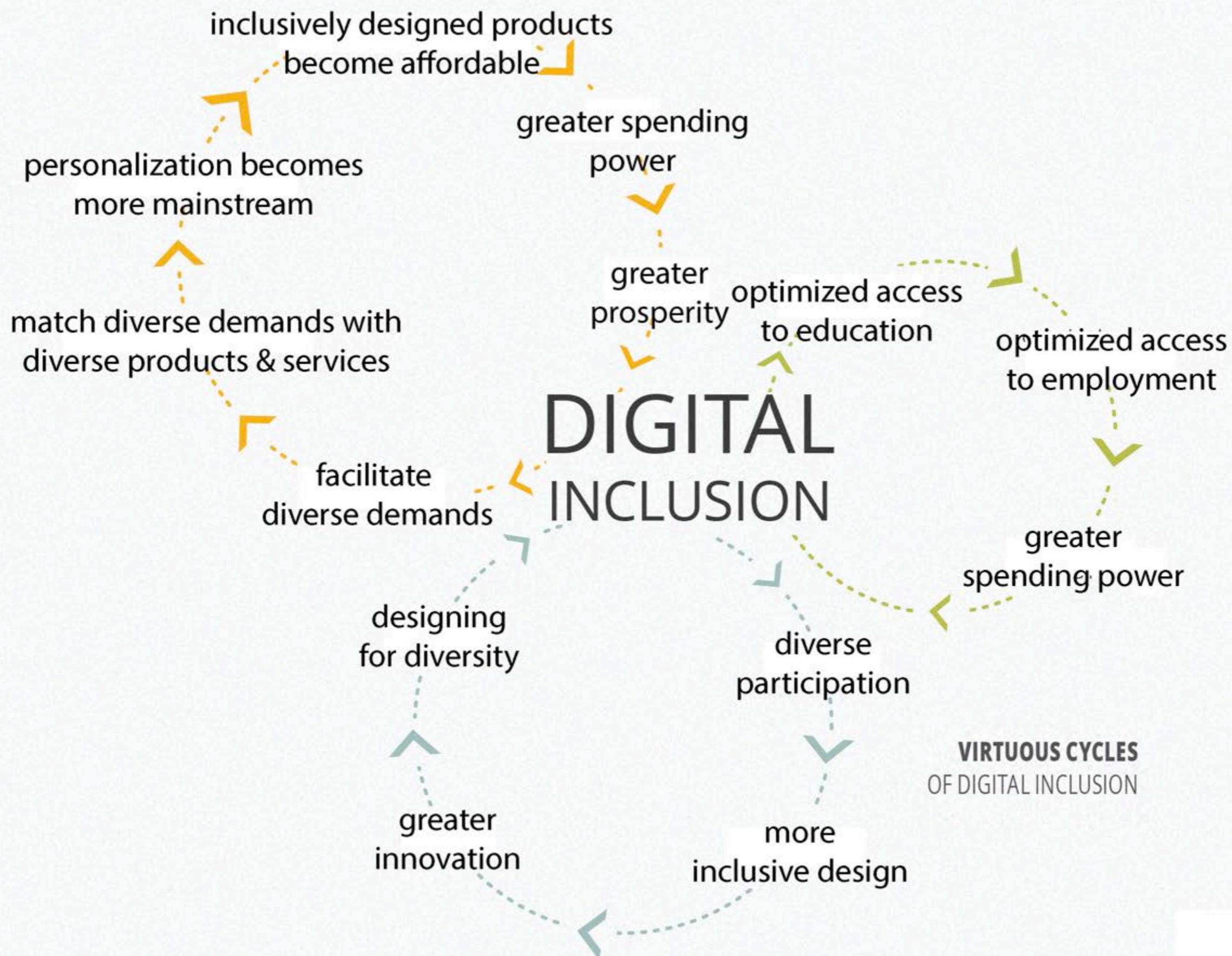
# Toddler, Grandparent Conversation..."but why"



# Education:

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1. View learning as life-long and not a staged set of age-linked grades or degrees;
2. Empower learners to assess and guide their own learning;
3. Value and recognize a diversity of skills and competencies that is potentially as diverse as the diversity of learners; and
4. Support collaboration and collective production over competition with others.



<http://guide.inclusivedesign.ca>

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