

January 16, 2020

Bridging the Gap between Consumers and Products in Rehabilitation
Medicine - Deborah E. Kenney, MS, OTR/L



ENGR110/210

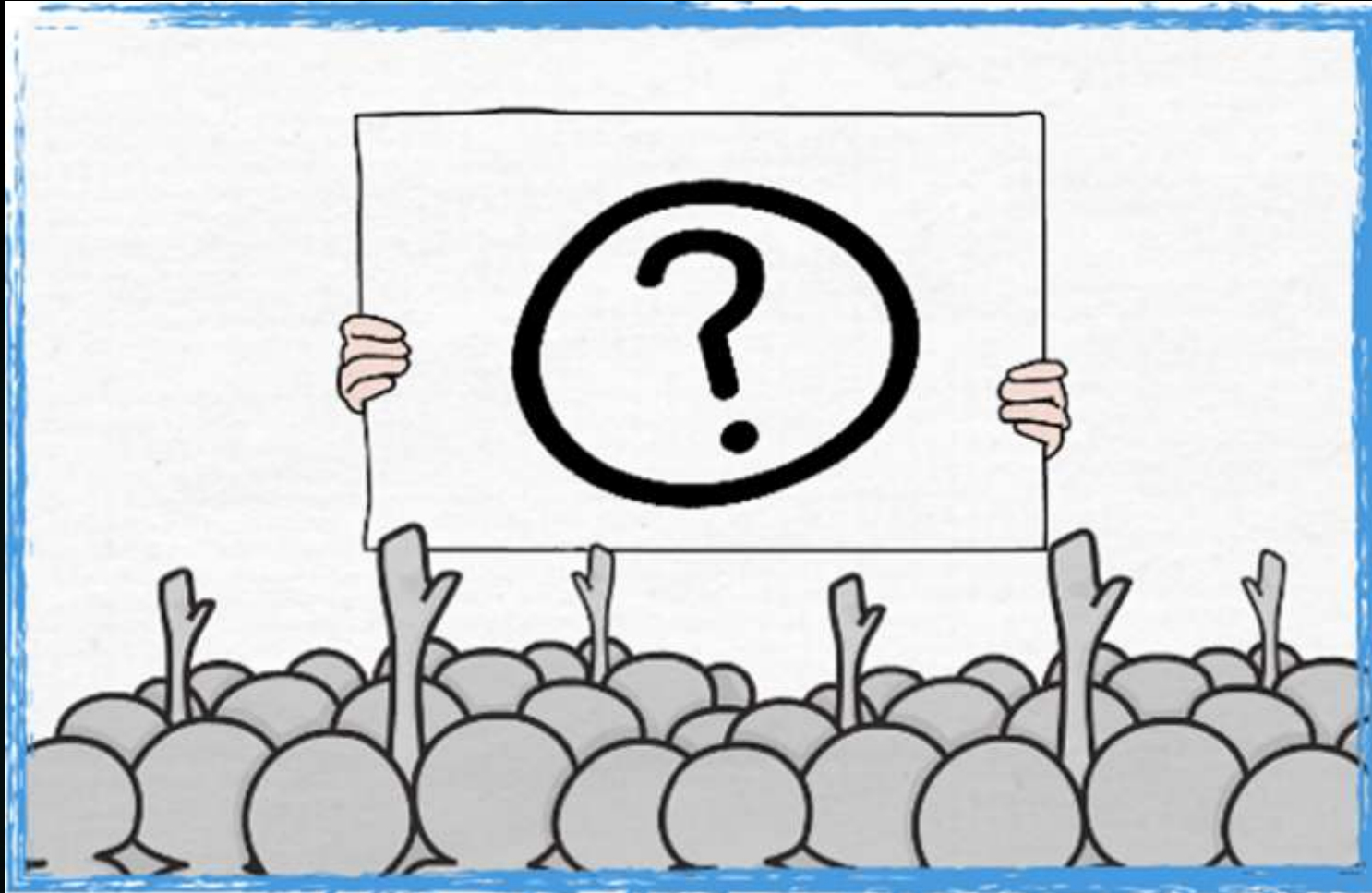
Perspectives in Assistive Technology



David L. Jaffe, MS
Instructor

14
Years

Questions?



Event at Magical Bridge Playground



MAGICAL BRIDGE
FOUNDATION



Let's Get Rolling

Join us for *fun hands-on S.T.E.A.M. activities*
themed about *Wheelchairs & Mobility Devices*



Featuring: *Wheelchair Test Drives*
Make-and-Take Activities
Storytime and Q&A with Ms. Wheelchair California

Saturday: Noon to 2pm - Mitchell Park, Palo Alto

Miscellaneous

- ▶ Use a pen to fill out evaluation forms
- ▶ Weblinks and photos linked from lecture webpages
- ▶ Meet with Dave Signup Sheet
 - ▶ Individual project approval
 - ▶ Project updates
- ▶ Microphone used with camcorder



Engineering Design Process



- ▶ Understand the problem
 - ▶ Interview the user / project suggestor
 - ▶ Realize that the user / suggestor may not have all the answers
 - ▶ Research what has already been done: articles, research, and products
 - ▶ Consult with experts
 - ▶ Determine why current devices haven't adequately solved the problem
 - ▶ Survey technology
- ▶ Determine the need (a judgment)
- ▶ Brainstorm many possible design concepts
- ▶ Select top concepts
- ▶ Fabricate, test, analyze, redesign, **quickly** repeat
- ▶ Work closely with user / suggestor in testing phase
- ▶ Report and demonstrate your results
- ▶ Reflect on your project experience

Work with Diligence

- ▶ Time is your team's most precious resource
- ▶ 7 weeks of class left to work on your projects
- ▶ Mid-term team presentations Tue of Week 6
- ▶ Get your PRL Safety Training & Shop Pass



Discussion Topic Preferences Results



- 33 - Assistive Robotics - Robotic technology benefitting people with disabilities and older adults
- 28 - In the News
- 24 - Ten Commandments of Making - Adam Savage's Maker Faire video
- 23 - Ethical / Moral Dilemmas Related to Disability
- 22 - Product Pricing
- 21 - Overview of Accessibility - How this design feature relates to products, with many examples
- 21 - The Upside of Failure - Learning from prototypes that didn't work
- 16 - Vintage Assistive Technology - Products and devices from the past
- 16 - Video Theatre - Watch and discuss videos of new products and prototypes
- 14 - Who is Disabled? - Making a determination with limited information
- 10 - Innovative Marketing Metrics - How we use words to measure and advertise
- 7 - Famous people with disabilities - Focus on TV characters

Discussion Topic Preferences Results



Student Suggestions:

- Past student projects
- Low resource accessibility projects
- Description of disabilities in media / television
- Games / entertainment



Social Model Animation



[Play
video](#)

Tuesday, January 21st



Perspectives of Stanford Students with a Disability

Benjamin S. Woodford, Sylvia Colt-Lacayo, Gene Sung-Ho Kim

Today



Bridging the Gap between Consumers and Products in Rehabilitation Medicine

Deborah E. Kenney, MS, OTR/L

Stanford University

VA Palo Alto Health Care System

Foothill College

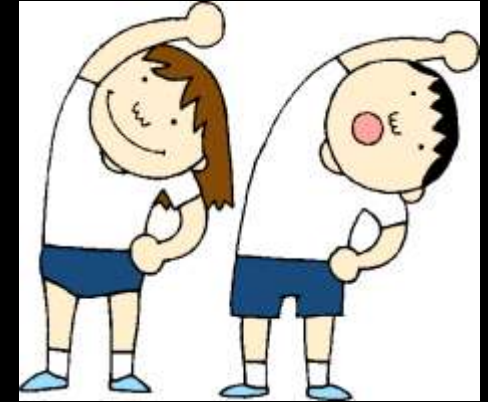
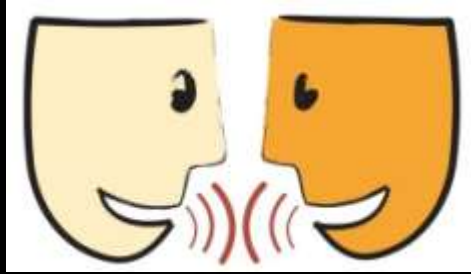


Short Break



Break Activities

- ▶ Attendance sheet
- ▶ Stand up and stretch
- ▶ Take a bio-break
- ▶ Text message
- ▶ Web-surf
- ▶ Respond to email
- ▶ Talk with classmates
- ▶ Reflect on what was presented in class



THANK YOU FOR



YOUR ATTENTION.

