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

Let’s Get Rolling

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

Featuring: Angela Piazza, Ms. Wheelchair California, 2019

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

Saturday: Noon to 2pm - Mitchell Park, Palo Alto
Attendance Sheet, Evaluation Form, and Meet with Dave Signup

For all students:

• Sign Attendance Sheet - important to verify your attendance
• Sign up to meet with Dave for lecture makeup and Individual Project approval

For everyone:

• Fill out Class Session Evaluation Form
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
Student Suggestions:

- Past student projects
- Low resource accessibility projects
- Description of disabilities in media / television
- Games / entertainment
Imagine a town full of physically impaired people,
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.