January 17, 2019
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

13 Years
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 in 4 weeks
- Get your PRL Safety Training & Shop Pass
Discussion Topic Preferences Results

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

- Disabilities in sports
- What kind of jobs / companies are out there for assistive tech engineers and the education level needed
- Connecting with companies that do great work in the space of assistive design or notable company profiles
Formed Project Team

- The Hide-Away Lap Tray
- The First Team with No Name
  - Tita Kanjanapas
  - Ashley Lau
  - Lynee Turek-Hankins
Formed Project Team

- Elevator Button Pusher
- Elevator Pitch
  - Lindsie Jeffries
  - Jessica Hsueh
  - Jenny Park
Formed Project Team

- Lap Extender
- The PRL Tray-Iblazers
  - Andrea Banuet
  - Marissa Luna
  - Annie Sinclair
Formed Project Team

- Lap Tray for Danny
- **Travola**
  - Arkira Chantaratananond
  - Tony Hua
  - Jenny Kim
Formed Project Team

- WHILL Recharging
- Mean Machine
  - Jack Barber
  - Ryan Dudzinski
  - Cameron Scarlett
Formed Project Team

- Harness for Nathan
- The Sixth Team with No Name
  - Chloe Evans
  - Winston Liao
  - Axelle Talma
Formed Project Team

- Wheelchair Storage & Backpack Projects for Abby
- The Seventh Team with No Name
  - Ariana Ortigas
  - Amanda Spyropoulos
  - Anna Usadi
Formed Project Team

- Magical Bridge Playground Along the Fence Project
- The Eighth Team with No Name
  - Vanessa Ibarra
  - Sheetal Ramsurrun
  - Jessica Rivera
Formed Project Team

- Pickup Project with Danny
- The Big Three
  - Brian Chaffin
  - Jack Dreyer
  - Austin Maihen
Imagine a town full of physically impaired people,
Tuesday, January 22nd

Perspectives of Stanford Students with a Disability

David Stentiford, Trisha Kulkarni, Zina Jawadi, Rachael Wallach, and Evan Feinberg,
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.