

January 16, 2025

Bridging the Gap between Consumers and Products in Rehabilitation Medicine



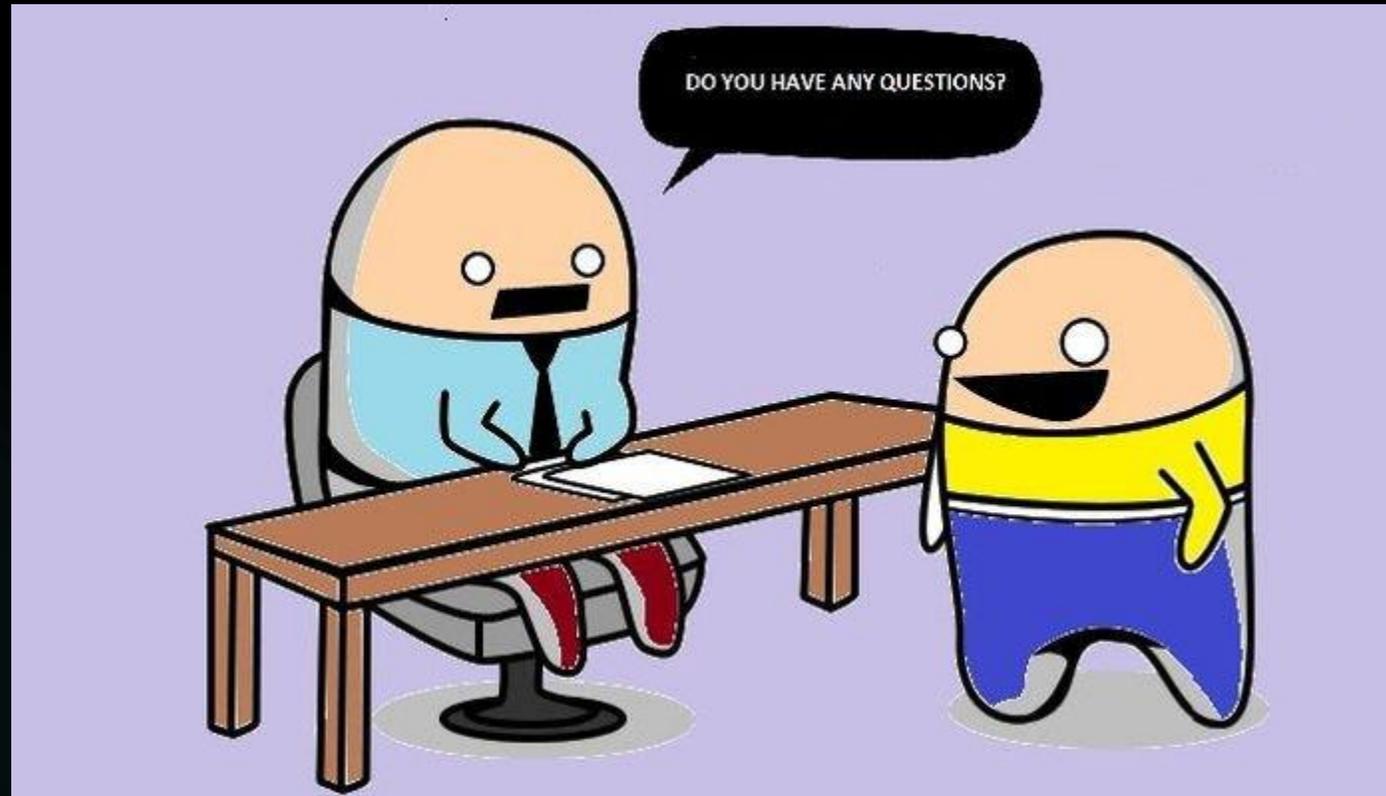
ENGR110/210

Perspectives in Assistive Technology



Deborah E. Kenney, MS, OTR/L
Guest Speaker

Any Questions?



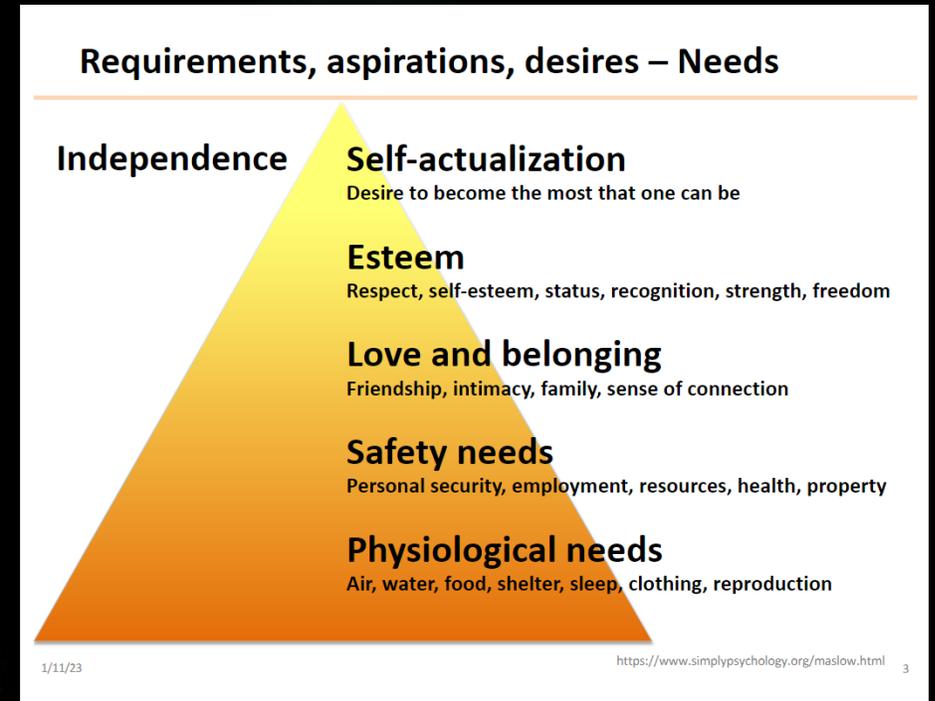
Leftovers from Tuesday

- ▶ Dave - The better an understanding of the problem, the better the solution
- ▶ Gayle - Ten things you did to get to class:
 - ▶ Activities of daily living
 - ▶ Individuals with disabilities or older adults

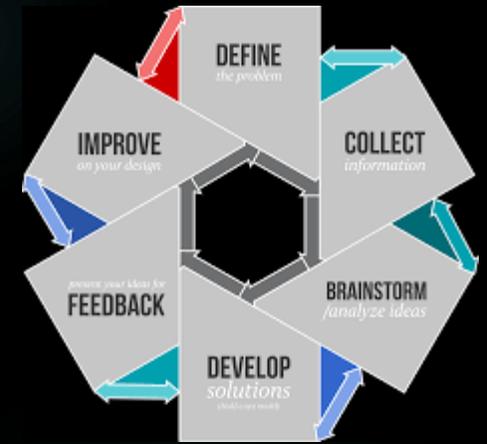


Need - Two Perspectives

- ▶ Gayle - Human needs
- ▶ Dave - What information and understanding is required to determine what is needed to address a problem / challenge?



Student Team Project Selections



Accessible and Inclusive Playground Attractions (2)

Universal Water Bottle and Phone Holder

Enhanced Visibility Project

Laptray Artwork Easel

Rain Shield Project

Laptop Storage

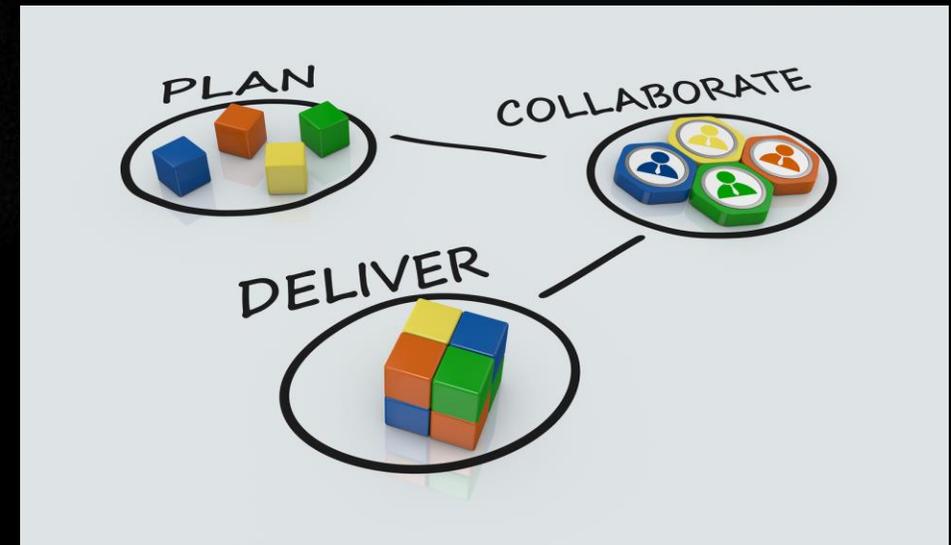
Water Bottle Opener

Poop Management

33 students working on 9 team projects

2 students working on individual projects

2 students not working on projects



Suggested Current Project Activities



- ▶ **PRL Safety Orientation** - webshop.stanford.edu
- ▶ Project Selection & Team Formation ✓
- ▶ Team Name
- ▶ Meeting with Project Suggestor
- ▶ Understanding the Problem
- ▶ Brainstorming
- ▶ Prototyping



- ▶ Students participate in all project activities

Miscellaneous

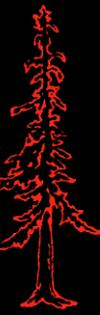


- ▶ Meet with Dave to receive project advice
- ▶ Please make up missed lecture sessions promptly
- ▶ Course will pay for Amazon & PRL purchases
- ▶ Keep track of your team's project spending
- ▶ Client vs User vs PwD vs Subject vs Project Suggestor
- ▶ The Engineering Design Process is optimized for this class
- ▶ Be proactive & self-directed!



Disrespect

Attendance Sheet, Evaluation Form, and Meet with Dave Signup



For all students:

- Sign Attendance Sheet - important to verify your attendance
- Google sign up to meet with Dave for lecture makeup and Individual or Team Project discussions / progress reports

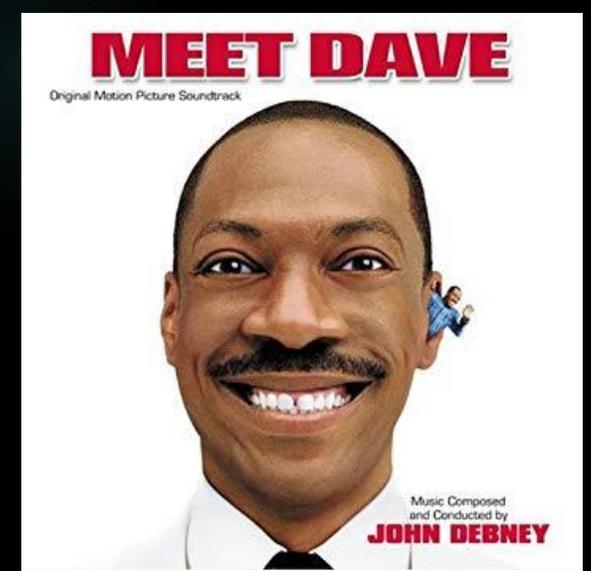
For everyone:

- Fill out Class Session Evaluation Form (**in ink**) - this provides feedback to guest speaker

Benefits of meeting with Dave

- ▶ Make up missed lectures
- ▶ Gain valuable perspectives on your project
- ▶ Optimize your course, team, and project experience

- ▶ My fortune cookie today reads:
“Many seek you out for insightful advice”



Individual Projects



- ▶ For the two students working on Individual Projects
 - ▶ Meet with me to agree on project topic
 - ▶ No mid-term presentations or reports
 - ▶ Select a project and start working on it **now**
 - ▶ End-of-term presentation ~ 15 minutes

Work with Diligence

- ▶ Time is your team's most precious resource
- ▶ 7.5 weeks of class left to work on your projects
- ▶ Mid-term presentations in 3.5 weeks!



Product Pricing



Product pricing includes much more than cost of materials

Product Pricing



- ▶ **One Time Costs** - Manufacturing equipment and equipment leases, furniture, fixtures, computers, phones, etc
- ▶ **Recurring Costs** - Property and office rent, salaries (labor) / wages / commissions, utilities (electricity, internet, water, garbage, etc)
- ▶ **Product-related Costs** - Product research, prototyping, testing, accounting, shipping, **parts**, profit, advertising (printing), packaging, vehicles
- ▶ **Business-related Costs** - Loan repayments, inventory, financing costs, damaged merchandise, operating and legal expenses, overhead, theft, insurance, membership dues, market research, advertising and promotion, office supplies and equipment, travel, recruiting
- ▶ **Production-related Costs** - Economies of scale, automation, mass production techniques
- ▶ **Scale-related Costs** - Retail price decreases with number of units manufactured & sold

Questions?



Tuesday, January 21st



Stanford Students and Employees with a Disability



Auston Stamm



Lina Hilal



David Davis



Emily Ocasio

Today



Bridging the Gap between Consumers and Products in Rehabilitation Medicine

Deborah E. Kenney, MS, OTR/L

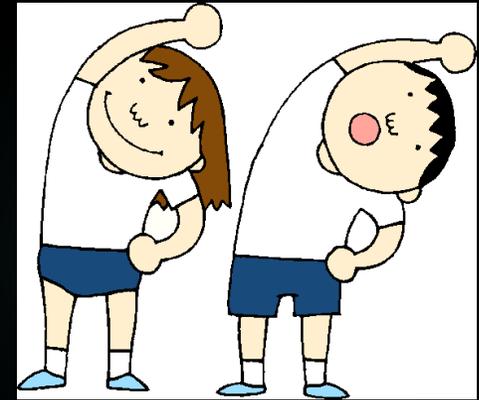
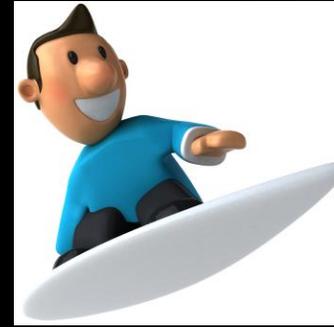
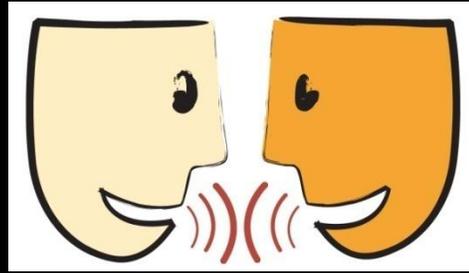
Stanford University

VA Palo Alto Health Care System

Foothill College

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



Short Break

