

Day 3: Equity

CMSC 33231 - Diana Franklin

Readings for Today

A simple nod of the head: The effect of minimal robot movements on children's perception of a low-anthropomorphic robot
Investigating the Effects of Testing Frequency on Programming Performance and Students' Behavior

But first!!!! Let's explore ideas

Equity means treating everyone the same

Philosophical counter arguments

Concrete examples where this would not be true

What happens at the extreme (of this or your counter claim)

Product design
(robot design)

Educational
design

Employment

Interpersonal
Relations

Equity means treating everyone the same: Product Design

Philosophical arguments / counter-arguments

Customized on a per-person basis is prohibitively expensive

Designing something for only one set of needs won't fit with many people

Concrete examples

Affordances chair example - only fits people of a certain size

Can be deadly - air bags killed many short women and a few kids when they were first used

What is the middle ground, and how do we find it?

Useful for most, harmful to none, needed by some

How many is "some", and do profits outweigh design expense

Equity means treating everyone the same: Educational Design / Decisions

Designing educational interventions

Should there be honors programs? How should we choose students for selective enrollment schools?

Components that affect education (learning, testing, behavior)

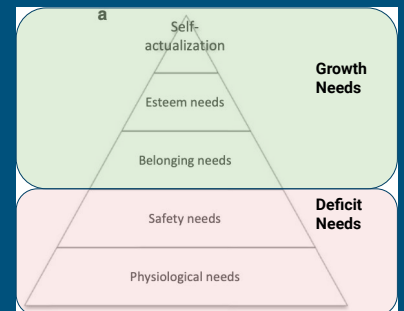
- School resources, teacher quality
- Difference in technical knowledge
- Poverty: Hunger, fear, embarrassment
- Self-confidence, belonging, identity
- Difference in time priorities after school
- What skills a society finds valuable
- Some cultures revere teachers - won't advocate for their children
- Cultural norms for behavior are different
- Discrimination

Potential Solutions

- Family involvement in schools
- Teacher awareness of student needs and backgrounds
- Identifying potential stressors (e.g. public speaking), provide alternatives and providing supportive development of public speaking
- Provide more opportunities for students to express themselves
- Have honors classes in each school rather than a magnet school
- Allow students to choose to enroll in honors classes, just go back down if they don't do well, also testing, take into account someone's rank in their school

Potential Solutions

- Combination of testing, rank in school
- Take into account other factors such as income, zip code, etc.
- Provide extra academic support (HW time, study skills)
- Provide laundry machine, assistance for signing up for social programs, prom dress swap, book swap



Employment

Interpersonal Relations

Presentation: Robotic Gaze

Paper Discussion

Discuss papers

What was their idea?

How did they analyze it?

What do you think about it? Do you think it would have worked for you? (why or why not)

In groups, you answer the following question

In what ways did the paper use CS Ed theory?

What are the limitations in the research design?

What are next research steps?

Presentation: Testing Frequency

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