

The Dynamic Evolution of Student Preferences Towards Instructors in a CS1 Course

A Clickstream Data Analysis

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Link to these slides: bit.ly/3X7Jf8t

Interactive Walkthroughs (Demo)

<https://www.learncs.online/lessons/java/simpleconditionals>



White

Male

Cisgender

Heterosexual

Well-Paid

Able

INTJ

Ultimate frisbee player

...etc

Course + Colleen Lewis (Fall 2021)



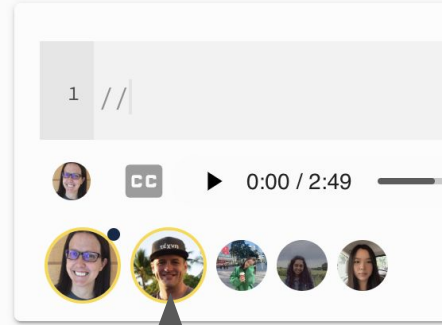
Colleoff?
Geoffeen?

Natural Experiment

- Two complete explanations for Java content (80% of students)
- Stable assignment on first arrival at lesson
- Students can always choose either instructor

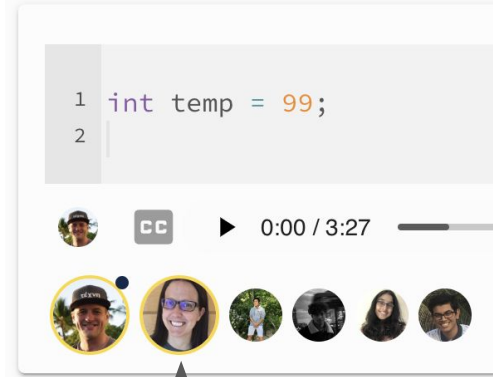
(First Click)

Now that we can store data in
superpower: *math*. Computer
the operations that we can pe



Prefers Geoff

Computers are great at storing
number in a Java program:



Prefers Colleen

Research Questions

- Do students develop instructor preferences?
- Do students arrive with initial preferences?
- Do student preferences change over time?
- Do student preferences align with aspects of student identity?

**This is not a competition
between instructors!**

Do Students Develop Preferences?



Number of students expressing
semester preference

None

Instructor A

Instructor B

Do Students Arrive With Preferences?



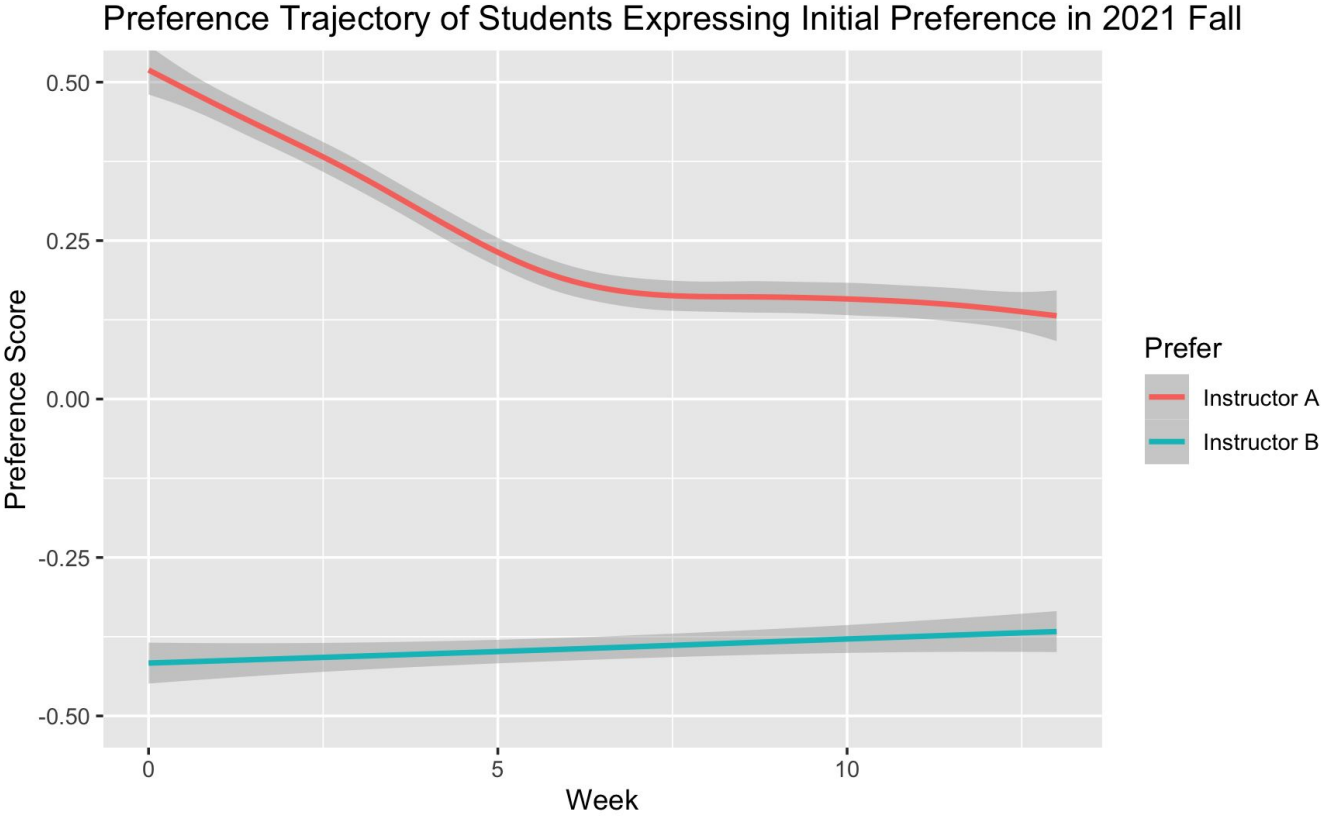
Number of students expressing
initial preference

None 235 (43.5%)

Instructor A 211 (39.1%)

Instructor B 94 (17.4%)

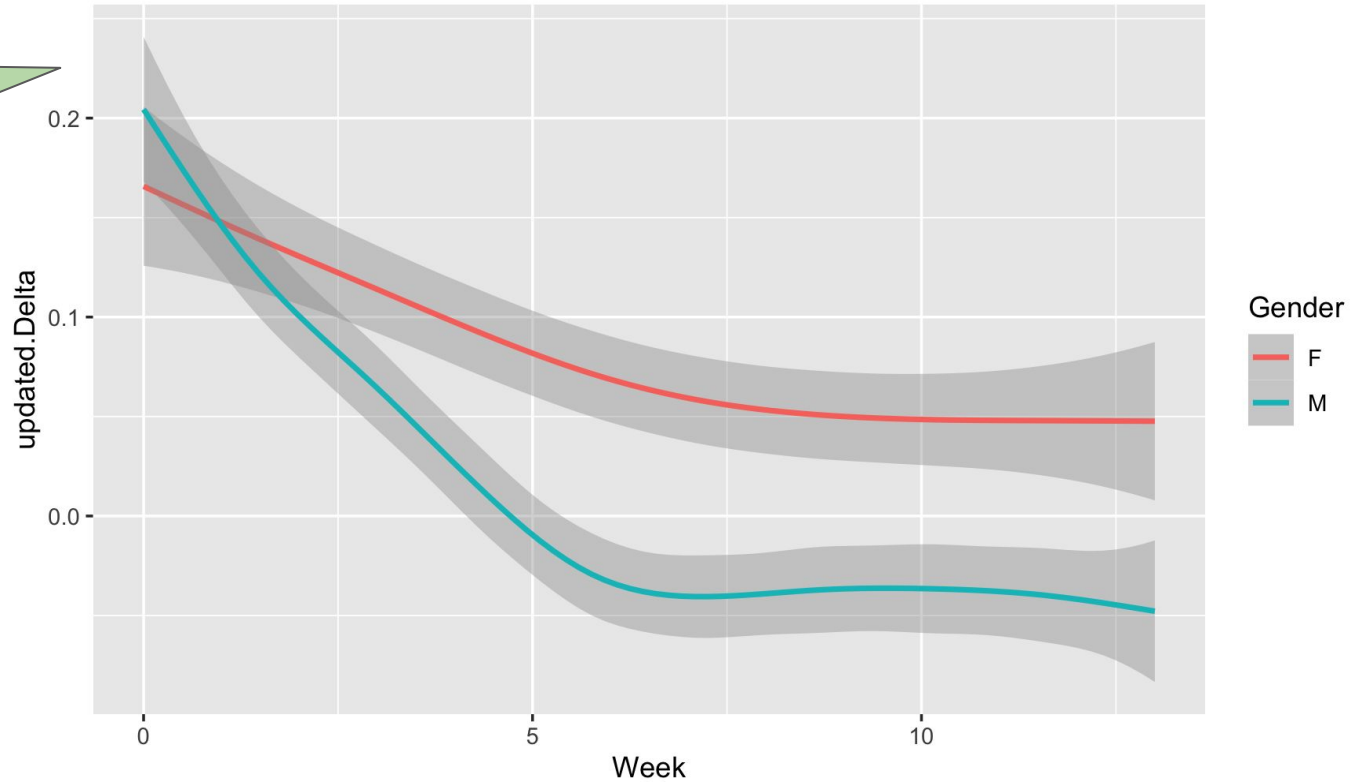
Do Student Preferences Change?



Do Student Preferences Align With Identity?

Yes!

Preference Trajectory of Students by Gender 2021 Fall



Do Students Develop Instructor Preferences?

- Students develop preferences between instructors and preferences can align with aspects of their identity
- Multiple explanations from instructors help students learn and can diversify the course's voice

Questions?

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