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.learn.cs.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) Preferences Geoff

Preferences 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?

Yes!

Number of students expressing semester preference

None

Instructor A

Instructor B
Do Students Arrive With Preferences?

<table>
<thead>
<tr>
<th>Preference</th>
<th>Number of students expressing initial preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>235 (43.5%)</td>
</tr>
<tr>
<td>Instructor A</td>
<td>211 (39.1%)</td>
</tr>
<tr>
<td>Instructor B</td>
<td>94 (17.4%)</td>
</tr>
</tbody>
</table>

Yes!
Do Student Preferences Change?

Yes!
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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