

Going beyond access to success in asynchronous online physics: early results show how instructor engagement matters to non-traditional adult learners (NALs).

#2422432: *Connecting Contextual Factors to Academic Outcomes in Asynchronous Online Physics Courses*

RQ1: Barriers & Enablers to Success?

Instructor Engagement

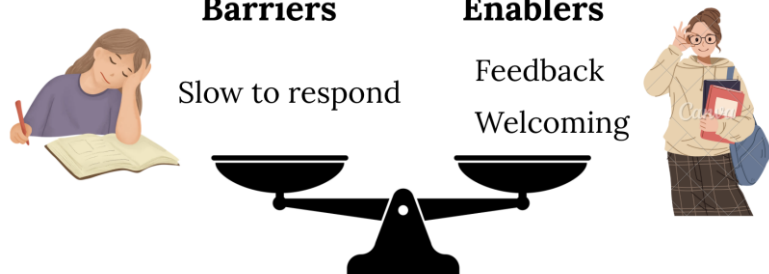
Barriers

Slow to respond

Enablers

Feedback

Welcoming



Barrier: It's a balancing act: managing work, life, and school.

Enabler: Community of peers serve learning, emotional, and belonging functions for **non-traditional adult learners NALs**.

Multi-site study: example course structure

7 weeks

Asynchronous

Separate Lab

Mastering
Physics

Honorlock

Ed
Discussion

Canvas

RQ2: Experience of Integrity and AI?



In our sample, last year, proctoring was trusted overall although cheating was mentioned

it's very easy to [...] just hide an iPad under the table [...] and then pull it out later.

it tracks, like, your eye movement and stuff, [...] I'm, like, a little afraid, so I don't mess with it.

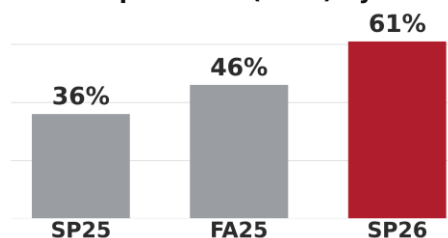
Jessica

Peter

Evidence of cheating led some instructors to change their assessments format **with consequences**.

E.g. New oral exams + stricter Honorlock settings, DWF [↑]

Did-not-pass rate (DWF) by semester



How do we give NALs **access with success and integrity?**

Methods

Interviews

Thematic Analysis

- Collected interviews from 24 students.
- Majority NALs: age >25, employment/family care
- Iterative process: regular meetings, coding scheme updates, memoing, thematic analysis.

Challenges

Evolving AI Landscape

- Hard to convince NALs to interview.
- AI is evolving very quickly, and students' opinions are already 'out of date'.
- Manage qualitative research with 24 students.



← Website

Louis Leblond, Ashlyn Leary, Bryan Henderson,
Molly Simon, Jude Sullivan

✉ lul29@psu.edu

