Need-finding & experience prototyping

Team Mission Impossible
Our Team

David E. ‘21
Pau A. ‘21
Jake W. ‘21
Elena W. ‘22
We are interested in increasing collaboration and providing organization in asynchronous learning for both students and educators.

David Estrada-Arias, Elena Wagenmans, Jacob Wagner, & Paulina Anzaldo
POV + HMW
A freshman at MIT, attending classes virtually.

We were amazed to realize how much he prefers working on his own than scheduling a time with friends.

It would be game-changing to make studying less of a solitary activity.
How might we encourage students to prefer studying with friends over studying in solitude?
A college senior who falls behind in asynchronous classes.

We found that she does not always pay attention while watching lectures and easily distracts herself.

It would be game changing to balance efficiency with presence in the classroom.
How might we...

bring engagement and accountability to asynchronous classes?
A technically capable yet frustrated high school chemistry teacher.

We were amazed to hear that he spent around 16 hours to record an hour-long lab.

It would be game-changing if we could give this teacher hours back every week.
How might we consolidate resources in order to streamline lab and lesson creation?
Experience
Prototypes
Prototype no. 1
Marriage study pact

Sent out a form for study partner-matching, asking for a variety of pertinent details.

Used Google Forms, shared in mailing lists (e.g. WiCS), and followed-up via email.

Recorded the number of responses and number of pairs who made plans to meet.
Marriage study pact

18 responses in 1 day
Matched manually
Quick responses to the form
Small sample size; single population (WiCS); algorithmic matching
Prototype no. 2
Lecture party: Communal watching of recorded lectures

We scheduled one pair and one individual to watch the same recorded lecture and complete its accompanying tasks.

The group used Zoom and screen-shared the lecture.

Recorded data such as the number of pauses and the duration/Attempts of each lecture quiz.
Lecture party: Communal watching of recorded lectures
Lecture party: Communal watching of recorded lectures

- Zoom screen-sharing
- Quiz attempts
- Group paused fewer times than the individual
- Small sample size; whole point of async courses is flexibility while watching
Prototype no. 3
“Strava” for educators

Posted a question on several Reddit threads specifically aimed at teachers, asking for advice on teaching materials for various science labs.

Monitored metrics such as responses, upvotes, and direct messages to see the general interest among a free-formed community of teachers.
“Strava” for educators
“Strava” for educators

Access to Reddit communities; 18+ upvotes and 14 comments

Not huge numbers of interaction relative to size of subreddit

One teacher offered to share lesson plans

Number of members in subreddit is not indicative of active users; we would need to migrate teachers/users to new platform
Thank you!

We welcome feedback, ideas, thoughts, criticism, and anything in between!