Investigating InfoLit Teaching with Lego and crayons:

a co-design project from the Department of Engineering, University of Cambridge

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Audience activity!

Take a handful of Lego bricks.

In the space of **30 seconds**, either alone or with others, **build the tallest tower you can!**

...Then during this talk, use your bricks to create a representation of one thing from today you found interesting.

Tweet your creations with the **#USTLG** hashtag!

Background

The Engineering Department is the largest single Department in Cambridge, with about **1,200 undergraduates**, **850 postgraduates** and **300 post-docs**.

The Library is very involved in InfoLit teaching for all students, at all stages, with a research support team focused on the needs of our grads.

We have sessions embedded into the curriculum, which have been successful…

…but we knew we could do even more!

Approach

Rather than teach postgraduates what we think they should know, we wanted to find out what **they felt they needed to know**;

So we asked them!

But not with a survey, because everyone uses surveys...

...being engineers, we figured they might like to build their answers with Lego!
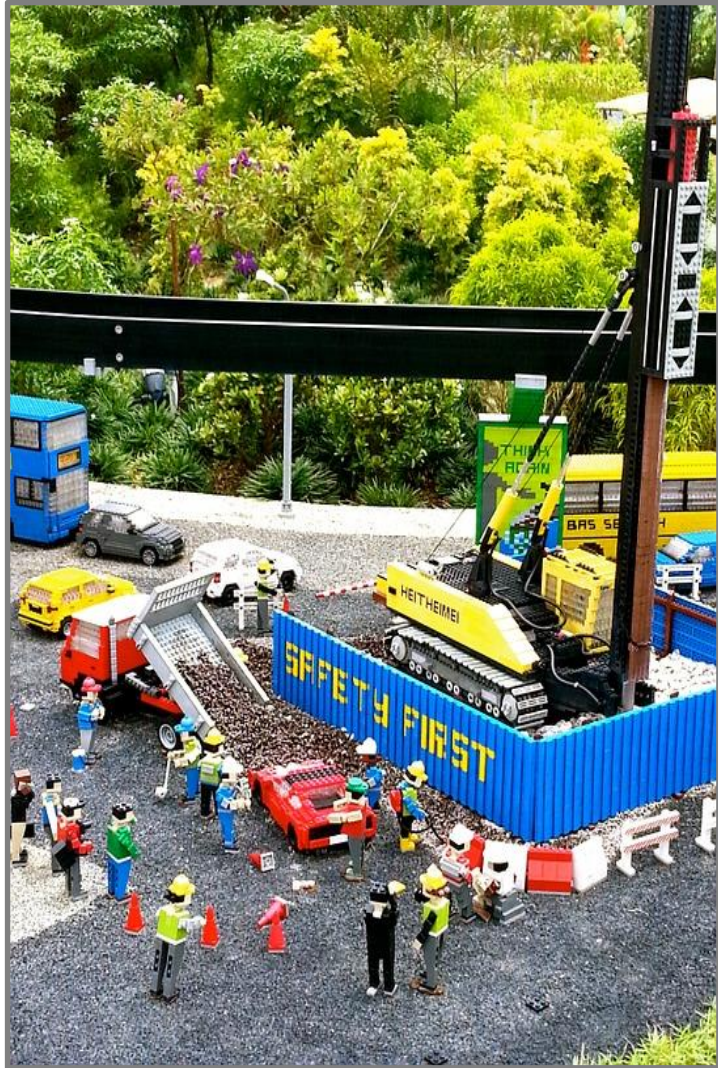
Why co-design?

Co-design is a form of Action Research: **working with users to solve a problem together**.

Two co-design workshops were planned and a question script drawn up…

…and friendly PhD students recruited by email, social media, posters and word of mouth.

What did we do?

Workshop A used Lego, getting people to build models of their thoughts and experiences.

Workshop B used collaborative prototyping, involving students in the design process for new resources.

Each workshop was run twice, and some activities done separately, with a total of **12 PhD students** participating.

Lego workshops

The Lego workshops all began with the tower exercise that you did at the start of this talk.

Then participants built their answers to a range of questions, **moving from the general to the specific**:

"Build a model to show what you think a PhD is like"

"Build a model showing what success looks like to you"

"Build a model of something you wish you knew when you started your research"

What does a PhD look like?
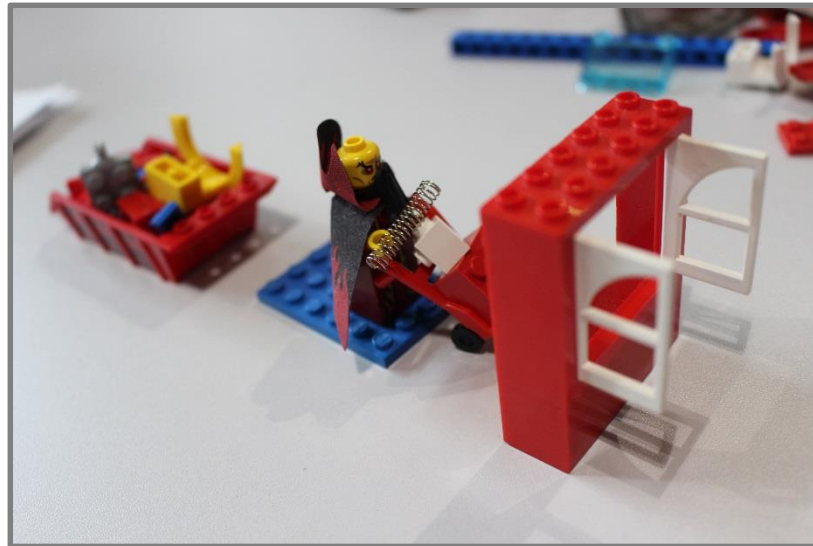
What does success look like to you?

What they said…

"At the beginning, I imagined I could do everything, but I needed to learn how to focus"

"Success as a researcher for me is when people from other disciplines recognise your contribution to your field"

"Community can keep you on track, so any times when you can get together with other PhD students are really useful!

"You need to learn to distinguish between what is useful and what's "nice to know" but irrelevant to your project"

"For everyone a PhD is unique but we all face similar challenges"

Design workshops
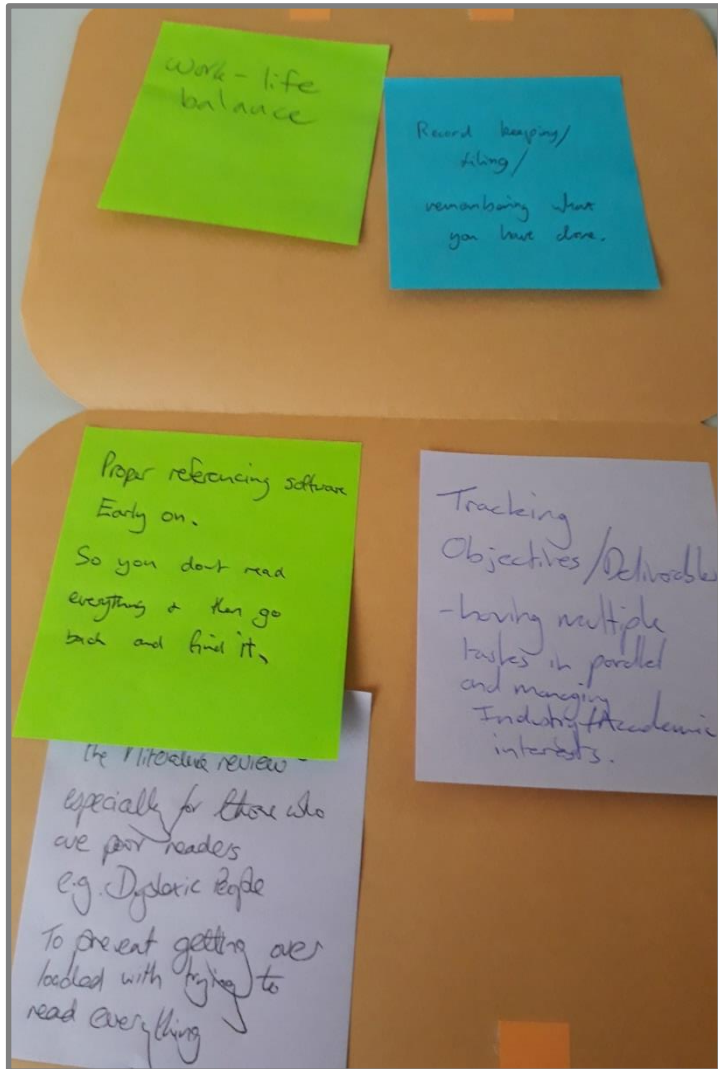
In these workshops, students were asked to **design resources and concepts**, such as:

"What would your ideal homepage look like for a site on literature searching?"
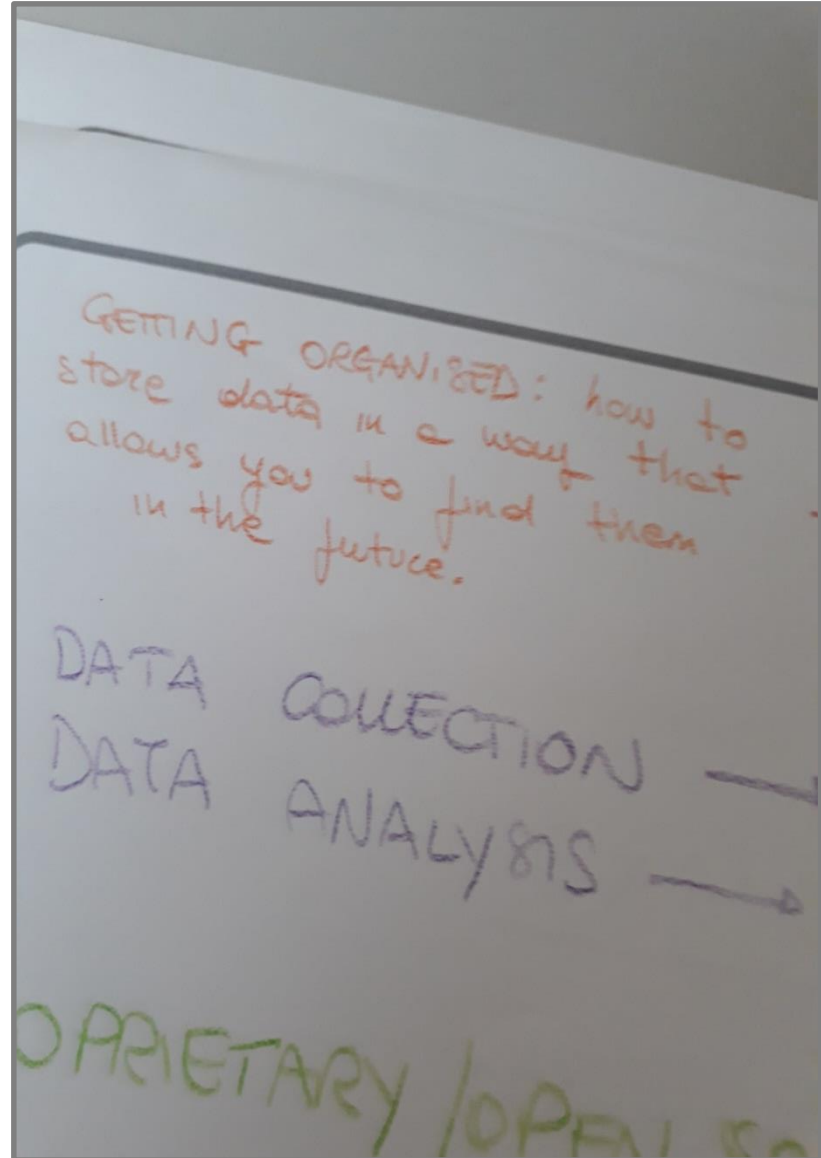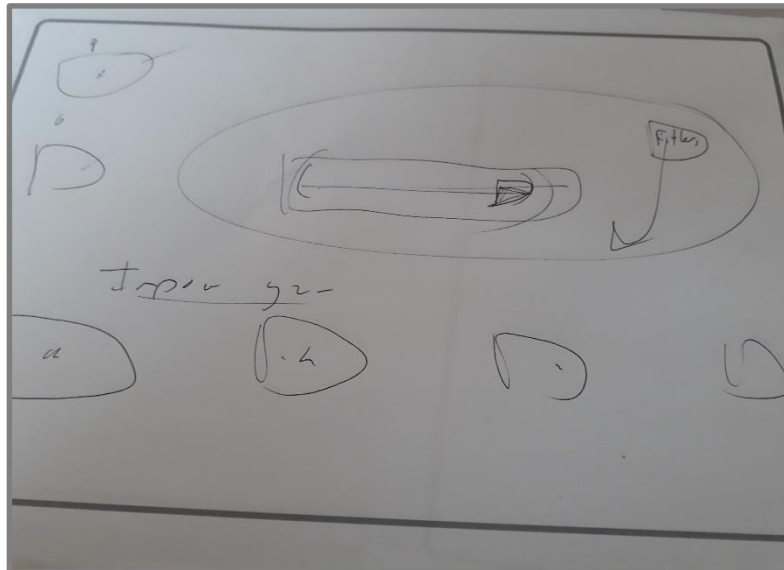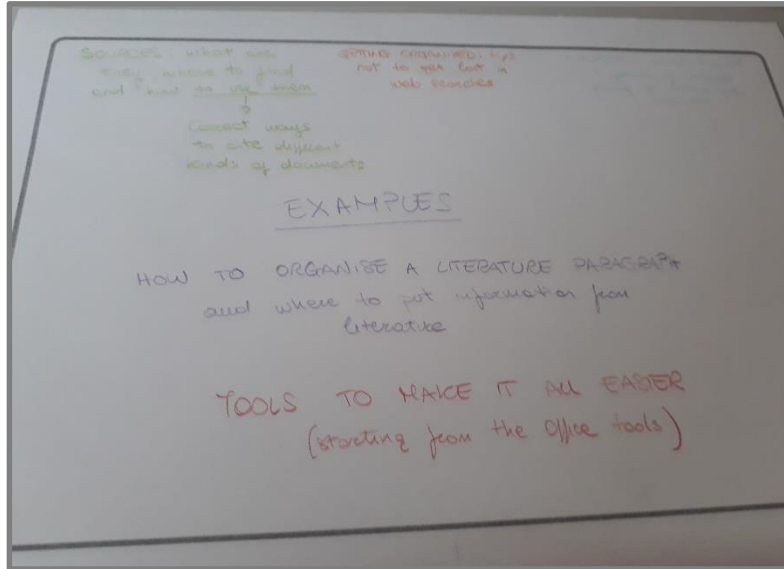
"What do you think would be a useful classroom activity to develop research skills?"

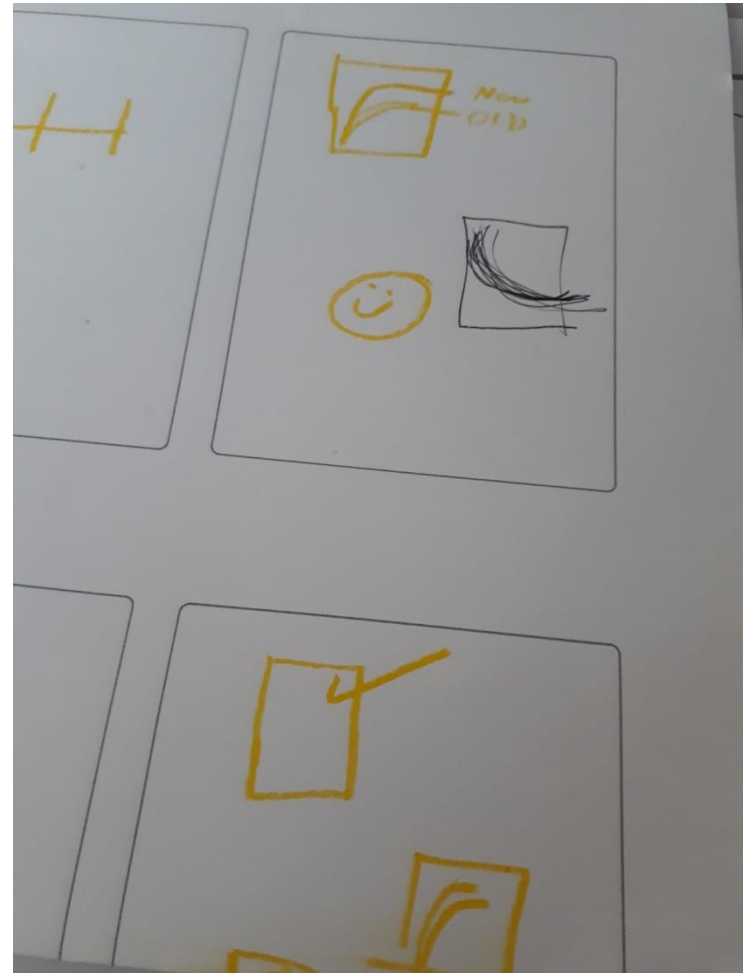*"If you could pack a suitcase of skills for a new PhD student what would you fill it with?"*

Research skills suitcase
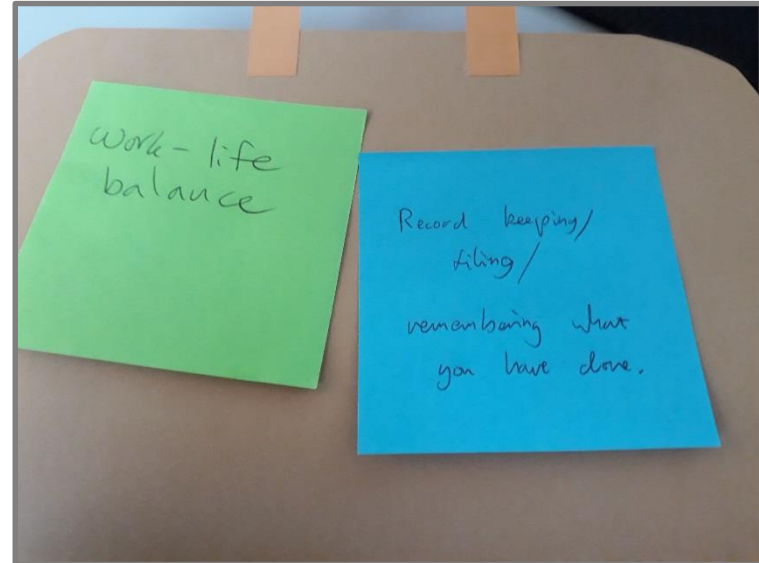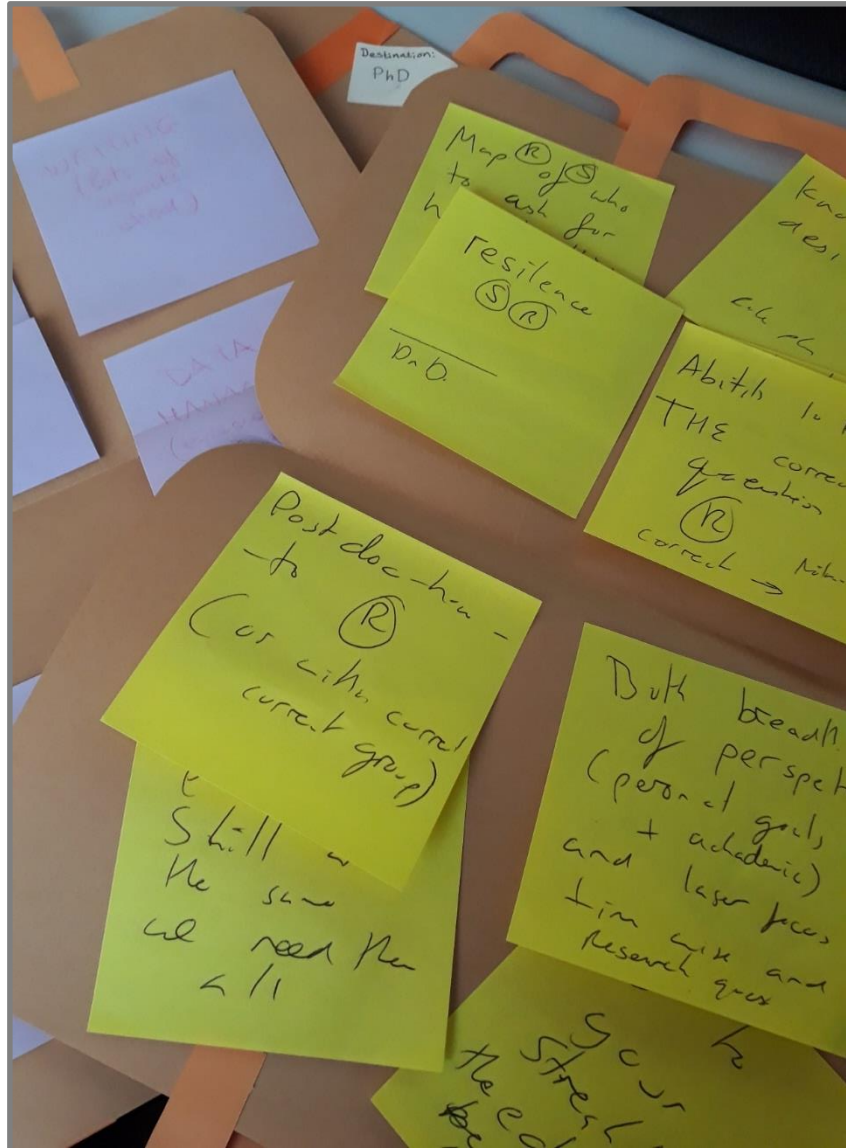
Design your own website

Some got a bit more abstract…

What they said…

"If you knew what you were doing at the start, it wouldn't be called research!"

"Resilience is a core skill to learn, and you only learn it by failing multiple times"

"Learning how to manage my time brought me the most benefits"

"If you're not organised right at the start, you're going to find yourself with a lot of data and no idea what to do with it!"

"I wouldn't do an exercise if the thing I'm exercising for isn't necessary"

Coding the data

After gathering data, we coded it into **three main themes**, that emerged independently in different workshops:

Timing (teaching at point of need)

Topics (core skills, and useful extras)

Online resources (self-directed learning)

What we did next

Based on those themes, we have since:

Remodelled our teaching programme to focus on key skills and to embed messages about resilience and wellbeing

Changed the timetable so we are teaching certain things (e.g. data management) when users need to know them
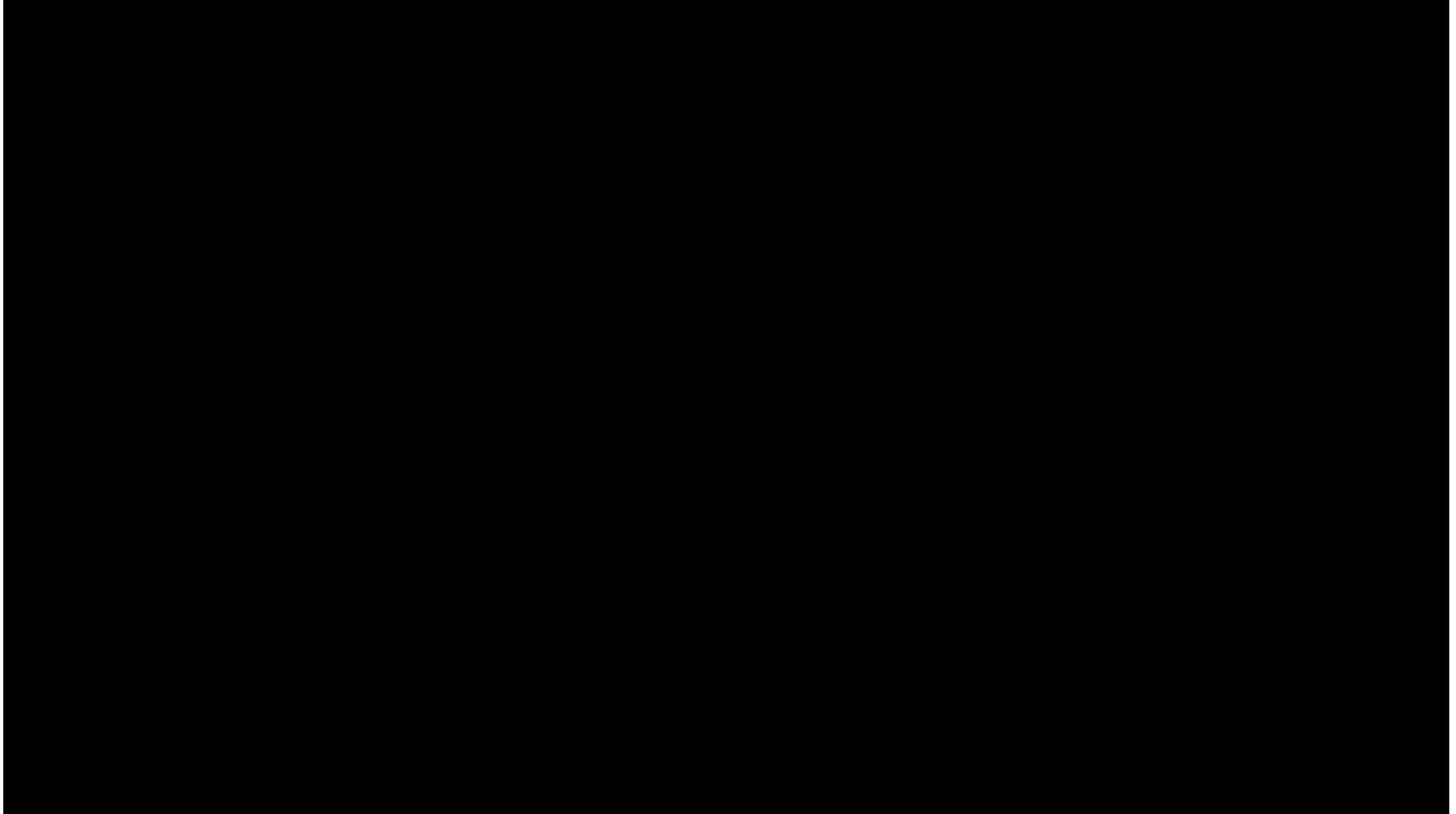
Developed a pilot online resource for literature searching

Got to know our users better!

Continual improvements

"A video with current PhD students would be cool"…

Any Questions?

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