

Interactive Learning, online and in-person



IAP Symposium on Innovative Leadership:
Transforming Higher Education in the Digital Age
June 21, 2021



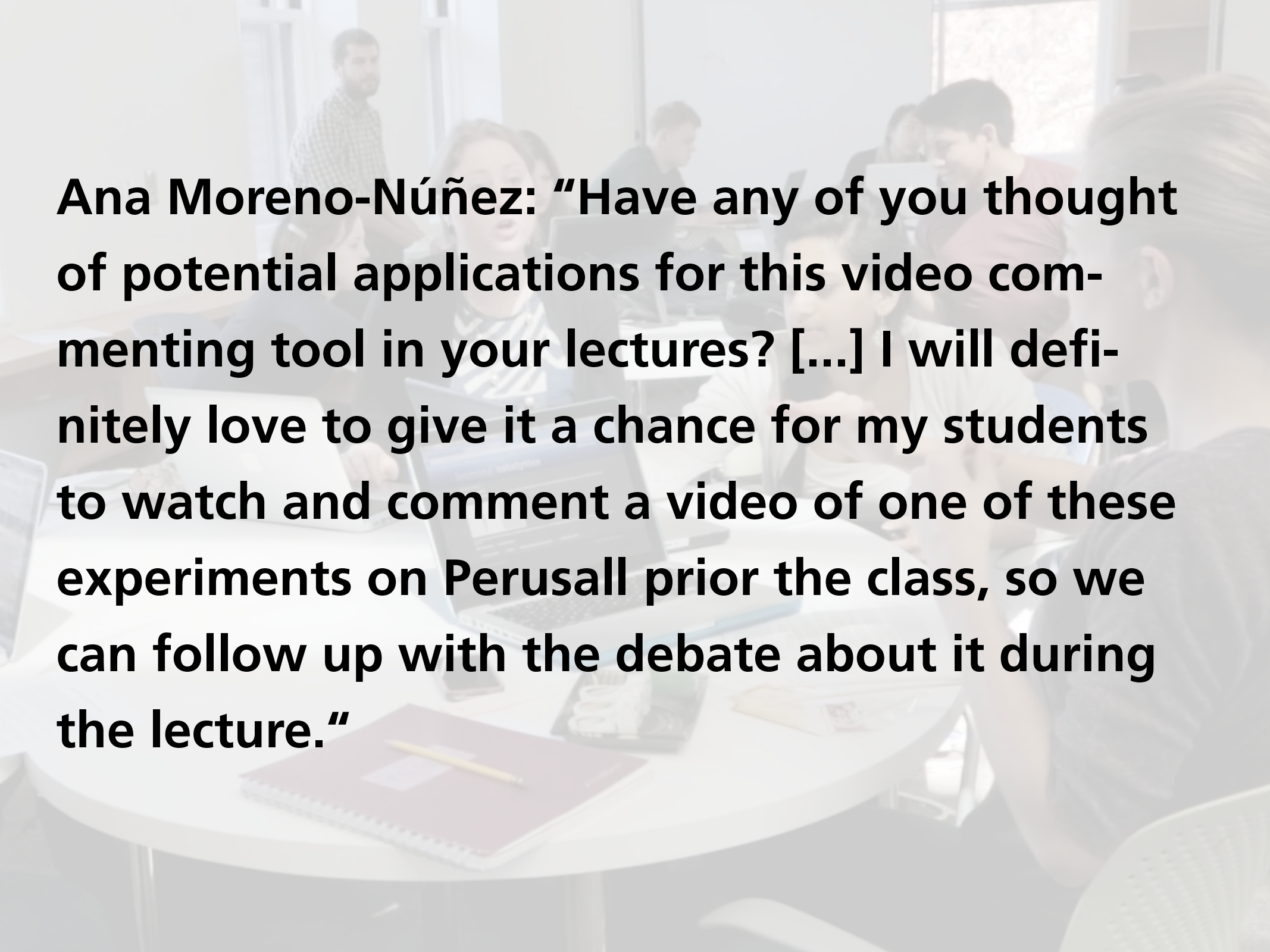
Interactive Learning, online and in-person



@eric_mazur

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Ana Moreno-Núñez: “Have any of you thought of potential applications for this video commenting tool in your lectures? [...] I will definitely love to give it a chance for my students to watch and comment a video of one of these experiments on Perusall prior the class, so we can follow up with the debate about it during the lecture.”



Goal of this session

**demonstrate how to integrate Perusall
in your teaching approach**



**information
transfer**

sense-making

Perusall Feedback — Pedagogy

- **motivating students**
- **instructor involvement**



Motivating students

Pedro Ruiz: "Most of my colleagues that do not want to embrace flipped classroom always complain that students do not work in advance. What are your experiences on this?"

Rocío Gómez: "I agree, What would be the consequences for the student if he/she doesn't complete the assignment before class? I guess they won't be allowed to participate in the lecture, but how can we control it?"



Motivating students

Silvia Lavandera Ponce: “Every student ready for every class”. How are we sure about it? In Peru during Pandemia I realized that students are not ready for this kind of methodology.”



Motivating students

César Cáceres: “The worst mistake I made one day many students didn’t do it before was to explain in class the things they should have worked in advance... There is no turning back from there ”

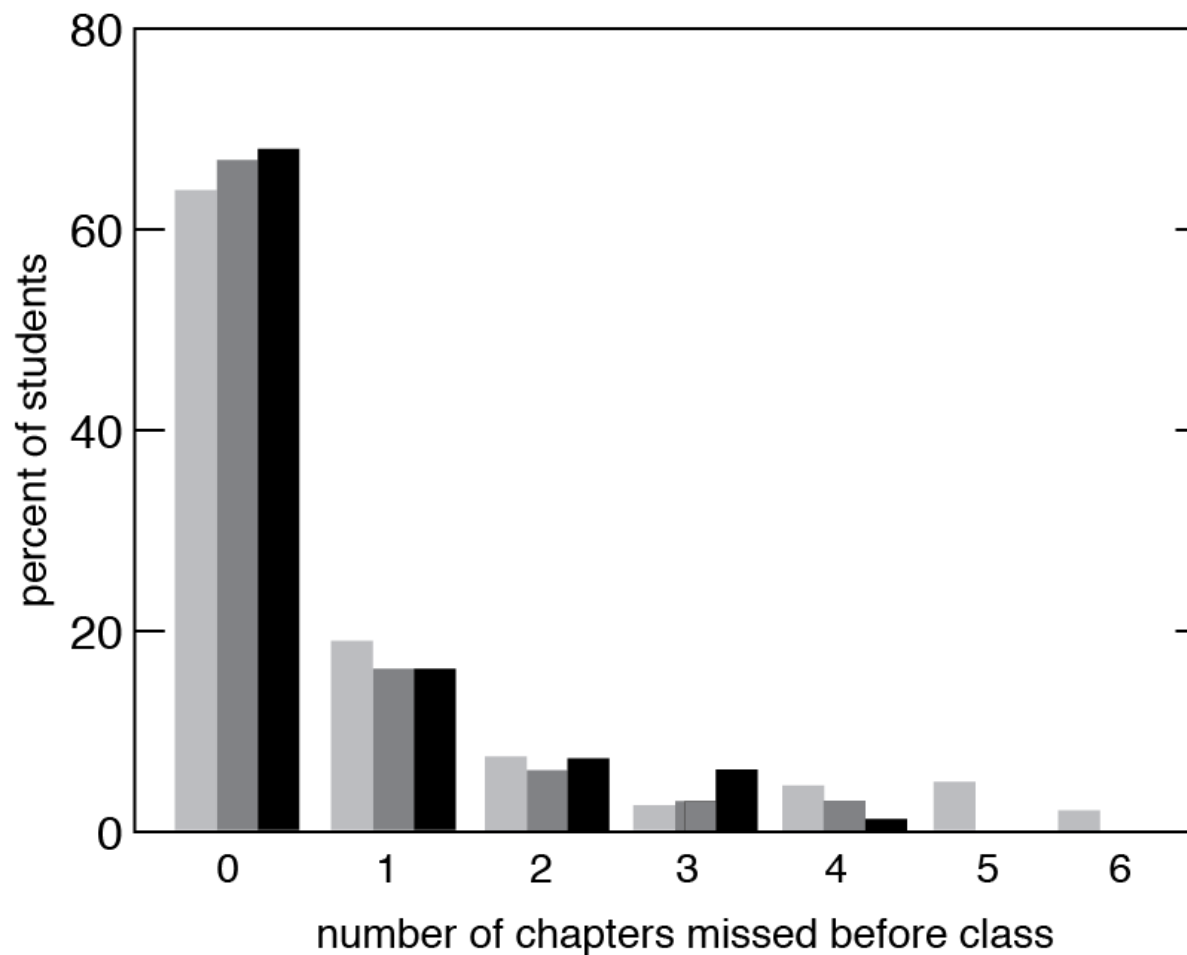
class test results

(b) Multiply magnitude of \vec{F} by r_{\perp} .

\vec{F}

Reference point

The lever arm distances must now be determined relative to the left end of the rod. The lever arm distance of force \vec{F}_1 to this



On the very left, we see th...

It's interesting that the white ...

a reference frame i... 2

does force affect ... 2

curious about this, t... 3

understand partially w... 3

class, we always emp... 2

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just means the net... 3

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important to note that... 2

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small is small? As ... 3

it would be slightly ... 3

I believe I underst... 3

(a) The change in rotation... 3

As we saw earlier in the chap... 3

Objects executing motion ar... 3

Generally, for rotating bod... 2

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Eric Mazur

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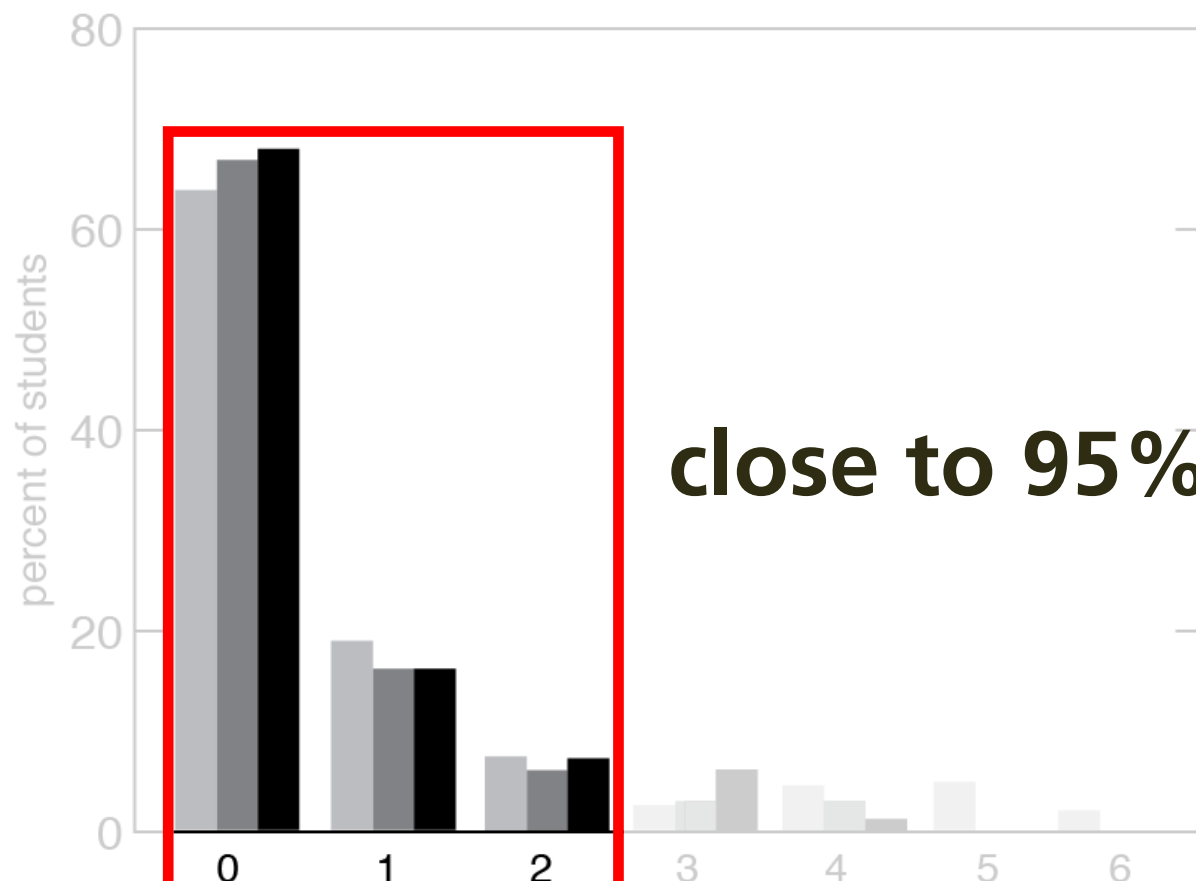
(a) The change in rotationa...

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close to 95%!

number of chapters missed before class

Example 12.2 Torques on lever

Three forces are exerted on the lever of Figure 12.7. Forces \vec{F}_1 and \vec{F}_3 are equal in magnitude, and the magnitude of \vec{F}_2 is half as great. Force \vec{F}_1 is horizontal, \vec{F}_2 and \vec{F}_3 are vertical, and the lever makes an angle of 45° with the horizontal. Do these forces cause the lever to rotate about the pivot? If so, in which direction?

(a) The change in rotationa...

As we saw earlier in the chap...

Objects executing motion ar...

Generally, for rotating bod... 2

Does torque have the s... 3

A background image showing a group of students in a classroom or study hall. They are sitting at round tables, some using laptops. The image is faded to serve as a background for the text.

Motivating students

Margarita Billon: “Do your students receive additional written instructions about the tool, apart from those you provide in the video, at the beginning of the course?”

Announcements

Syllabus

Modules

Assignments

Slack

Grades

People

Perusall

Manage Course

Library Reserves

Academic Integrity
Policy

Support Resources

Panopto

Collaborations

Outcomes

Rubrics

Files

Pages

Discussions

Quizzes

Settings

Reading Assignment Overview

Because there are no lectures in AP50, you will be using *Perusall* to familiarize yourself interactively with the basic content of the course. You will do so by reading one chapter per week from a textbook that evolved from a set of lecture notes for an introductory physics course. The textbook, *Principles and Practice of Physics* (Eric Mazur, Pearson 2015) is available at no cost in Perusall. If you want a printed copy, you can purchase the book via one of the many online textbook vendors, but this is neither required nor necessary.

The *Perusall* platform permits you to interact asynchronously with other students in the class and help each other build a deeper understanding by annotating and discussing the material within the context of the text you are reading.

If you haven't yet done so, watch this [short introductory video](#) about *Perusall* before proceeding.

Purpose of the reading assignments

The goal of the reading is to gain sufficient knowledge to be able to participate in subsequent activities in a meaningful way — just as a lecture would (but now you can do it at your own convenience and pace, and you can interact with others). The goal is not to master every little detail — the other activities are designed to reinforce your understanding of the important principles before you begin to apply them in the projects. There is no need to memorize any of the information in the text, as you will always have access to it. Therefore you can focus on understanding, rather than memorizing.

Fostering a community of learners in *Perusall*

Perusall is **your space** and provides a good opportunity to create happenstance encounters and build an online community of learners. The teaching team will **not** participate in the discussions in Perusall, although to help facilitate and bootstrap both the conversation and your critical thinking about the material, we will pre-annotate the chapters in Perusall with a number of questions that students in previous years have asked. The [Perusall Curators Program](#), however, permits some of the most burning lingering questions or points of confusion to be transferred to the #persuall-loose-ends channel on Slack, where everyone, including members of the teaching team, can join in on a conversation.

With this space on Perusall for interacting with others also comes the responsibility of maintaining [professionalism](#). It is important to always behave respectfully, even with conflicting view points. While there is no moderation of the annotations on Perusall, **you can anonymously report an annotation** if you deem it to be inappropriate or plagiarized. Click the small 'hazard' triangle underneath the annotation and the annotation will be removed until it is reviewed by the teaching team.

If you haven't yet done so, watch his [short introductory video](#) about the Jerusalem before proceeding.

Purpose of the reading assignments

http://bit.ly/erics_course

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Instructor involvement

Cristina Gimenez Elorriaga: “Flipped class required much more effort from the teacher, right?”

Marco Antonio Garcia de Carvalho: “This requires a big change in course planning.”

A background image of a classroom or meeting room. Several people are seated around a large white table. In the foreground, a woman with dark hair is looking at a laptop screen. To her left, another woman is looking towards the camera. In the background, other people are working on laptops. The room has large windows and a modern feel.

Instructor involvement

How I prepared myself

Perusall Feedback — Technology

- grouping
- scoring
- LMS
- synchronous use
- content



Grouping

Ana Moreno-Núñez: “Are these partitions randomized, or do they follow any distribution rationale (e.g. alphabetical order by last names)?”

Pedro Ruiz: “That’s an interesting point. I guess those groups are maintained for the whole course, or is it on a per-assignment basis? ”

Scoring

Andreia Inamorato: “Although it is a great feature to have AI and machine learning reporting on students’ engagement, also helpful for grading, the flip side of it could be ‘online surveillance’ of students’ behaviour. Have you researched the ‘social pressure’ that annotated social reading can cause on students? ”

Scoring

Carmen Hidalgo Giralt: “I would like to know is the realibility of the grading algorithm has been tested? I am very surprised that students can be assessed like this. Will we have more information in the session?”

LMS

Rhona Lohan: “Can this integrated assessment tool be applied to other classroom teaching platforms? For example, in my university we use CANVAS, I know Perusall can be used through the platform but can it automatically add grades to the gradebook on CANVAS?”

Synchronous use

Rocío Gómez: “I see why students can learn with each other asynchronously. But, is it possible to make assessments to be active at certain times? as for example, that all students should log it at a certain time to discuss synchronously?”



Content

Alejandra Carina Santos: “How could it be done to test Perusall in a course that we are teaching? Is it free and free?”

Documents you can use with Perusall

- **PDF, Word, html, or ePub files (free)**
- **video—YouTube, Vimeo, Google Drive, Dropbox (free)**
- **open access material (free)**
- **source code with syntax highlighting (free)**
- **books (purchased by students or institution)**

Reflection

- asynchronous preparation
- synchronous time for discussion



Reflection

- **asynchronous preparation**
- **synchronous time for discussion**
- **dig deeper post-session**

Perusall Exchange 2021

An event for innovators in teaching

May 17-28, 2021

May 17-28

perusall.com/exchange

Perusall



Dear Eric,

Perusall adoptions have grown quickly across disciplines worldwide. Instructors have shared many creative pedagogical strategies with us so we thought it was time to provide a forum for our community to share best practices and creative solutions for engaging students in online learning. We are pleased to announce:

Perusall Exchange 2021

An event for innovators in teaching
May 17-28, 2021

The Perusall Exchange 2021 will be held within the Perusall platform to permit asynchronous discussion with and between participants. The event will also include virtual, synchronous exchanges of ideas between presenters and participants.

We are now accepting proposals at exchange@perusall.com. Our theme is Transform Teaching and Learning with Perusall. Proposals should be no more than 400 words or two minutes in length if submitted in video form. Submissions should emphasize the connection between pedagogy and Perusall: e.g., how to implement. The deadline for proposals is May 26, 2021.

Upgrading to Instructor Account

- **log in to your Perusall Account**
- **click “Enroll in Course”**
- **enter code: VVTQIBJNVK**

for a copy of this presentation:

mazur.harvard.edu

additional resources in Perusall course

also see bit.ly/fliponline

Follow me!



@eric_mazur