



TOOLS & TECHNOLOGIES TO SUPPORT EXPERIENTIAL LEARNING

Educational technologies can facilitate:

- » Collaboration
- » Production
- » Assessment

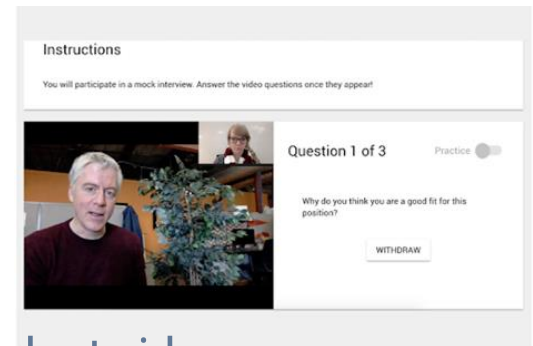
Let's look through each of these and explore some tools and technologies that support each approach



COLLABORATION

BONGO

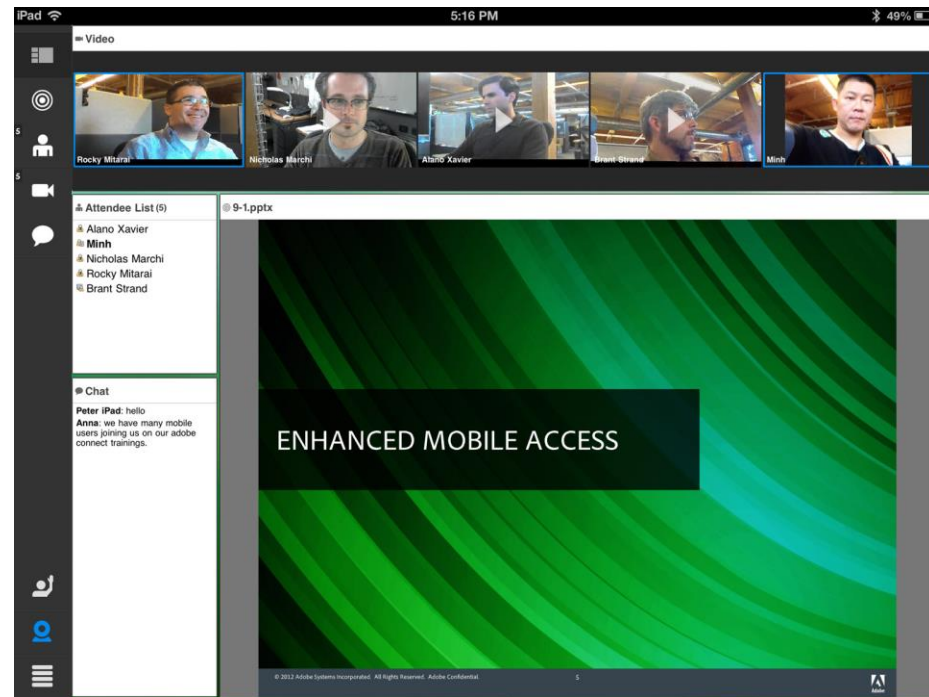
- » Emphasis on soft-skill development through student video recording and peer feedback
 - » Video assignments
 - » Structured, asynchronous workflows with personalized coaching and feedback
 - » Q&A
 - » Limited time response to questions embedded in video content
 - » Individual and group projects



Scenario: students conduct practice interviews for co-op positions and receive personalized feedback from TAs

WebEX/Adobe Connect

- » Virtual team collaboration
- » Virtual field trips
- » Connect with people you otherwise could not

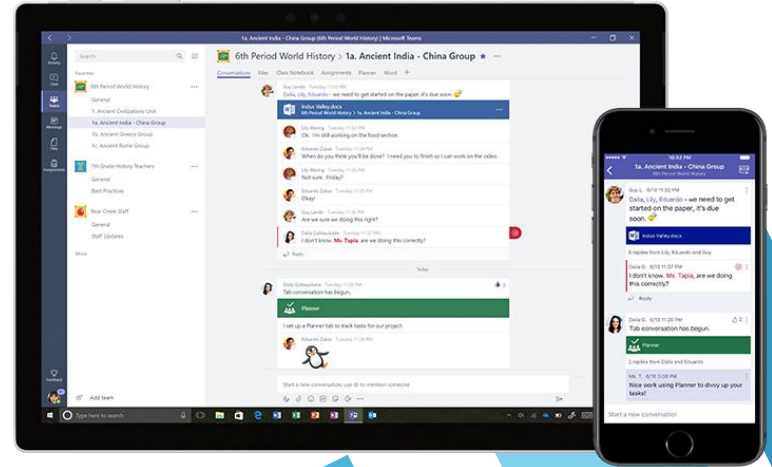


Scenario: connect with an organization and do a virtual field trip, allowing students to see how the company operates and ask questions, leading to an analysis of the company

Office 365 – Microsoft Teams

- » Heavy emphasis on collaboration
 - » Between individual peers, groups
- » Co-edit Word, Excel, PPT files

Scenario: students in a foreign language class translate a text together for a Wikipedia entry and offer feedback to one another on their translation choices



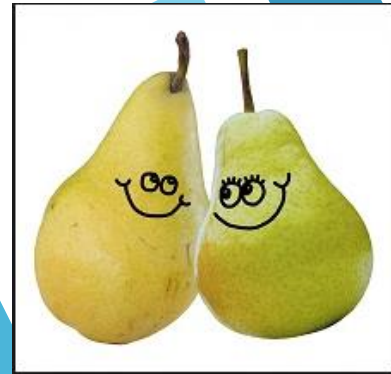


ASSESSMENT

PEAR (peer assessment, evaluation, and review)

- » Facilitates all steps of the peer-review process (as per the name)
- » Supports assessment of group members
- » Allows for multi-stage peer-review assignments

Scenario: after producing a draft marketing plan in an upper-year Economics class as a group, students assess each others' contributions and provide anonymous peer feedback on the marketing plans created by their fellow groups





Riipen

- » Connects students with employers/organizations, giving students the opportunity to complete short-term, authentic projects and receive feedback from the organization itself

Scenario: class partners with an organization to produce a brochure for their business, groups of 5 each produce a brochure and get feedback directly from the organization

Sorted by recently updated

	Engineering Design Capstone University of Waterloo Waterloo, ON, Canada	May 2019
	Organizational Consulting Competition University of Waterloo Waterloo, ON, Canada	Oct 2019

< 1 >

[Riipen](#) [Help](#) [Terms of Service](#)

Engineering Design Capstone

[Sign up to Participate](#)[View course](#)

University of Waterloo - Waterloo, ON, Canada



📖 4th year level students 👤 Teams of 4 ⌚ 200 hours of student effort

Categories [engineering](#) [information technology](#) [operations & project management](#)

Summary

Student-consultant groups will address an open-ended engineering design problem your organization faces under the guidance of a faculty member with specific expertise in the problem area.

Project Examples

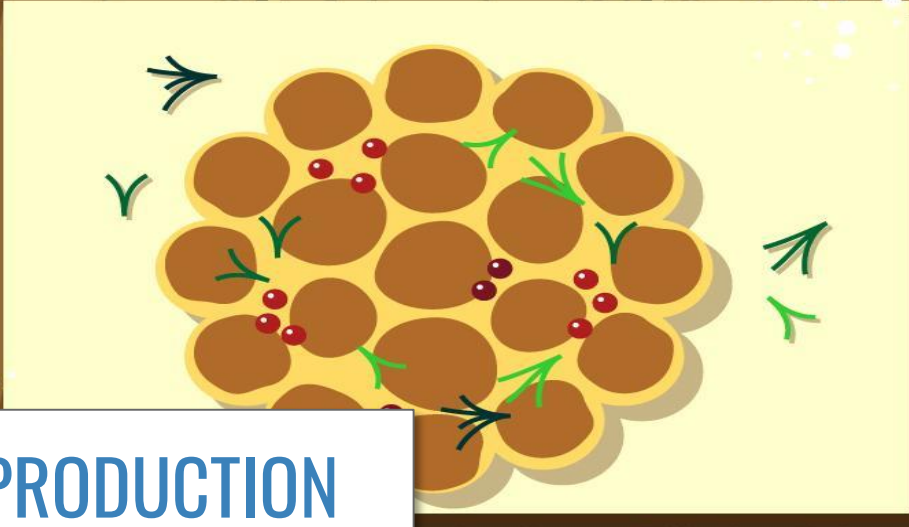
Beginning this May, Engineering students in their final year will spend over 800 cumulative hours per team collaborating with you to solve a design problem that your organization faces.

Simulations

- » Virtual simulations that mirror real-life experiences but are done in a controlled environment
- » Challenge is to find a good platform that has access to these simulations for your discipline

Scenario: nursing students working with patients in a virtual environment, practicing technique repeatedly until truly understood and able to demonstrate





PRODUCTION



Lynda.com


- » Free, online courses that focus on the development of skills that contribute to professional and personal goals

Scenario: encourage students in computer science course to further develop coding skills outside of class



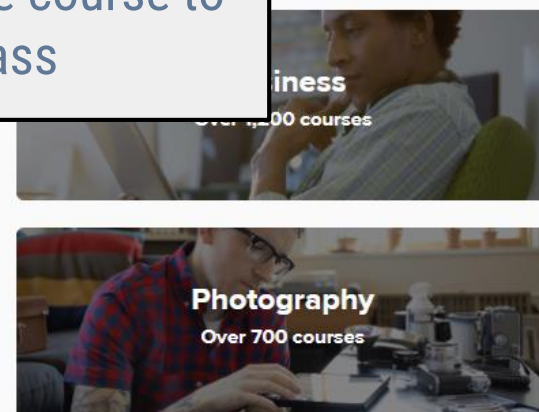
Software Development

Over 600 courses



Web Development

Over 700 courses



Photography

Over 700 courses

PebblePad

- » UW's new eportfolio platform
- » Sharable beyond UW, with community partners and industry
- » Virtual space to reflect and document what you are learning and share with others

Scenario: giving learners their own digital space to provide evidence for competencies they are learning, and then share with co-op employers

The screenshot displays the PebblePad eportfolio platform. At the top, there is a blue button labeled "ADD CONTENT". Below it, a large image shows a person holding a camera, with the text "sh Williams portfolio" and "Digital Media & Photography Graduate" overlaid. A sharing menu is open, showing options: "I would like to share...", "With People", and "For Assessment". Below the main image, there is a search bar with the text "Search images..." and a "Search" button. A "Banner image gallery" is visible, showing several image thumbnails. The interface includes various navigation and editing options, such as "Block", "Page", and "Portfolio" tabs, and a "Show more banners options" button at the bottom of the gallery.

Lightboard

- » Make lecturing using whiteboard more interactive and personal
- » Facilitate blended or flipped learning by creating online content



Scenario: authentic demonstration of how you as an instructor solve real-world problems

Game-based learning



- » Commercially-available games that integrate disciplinary content into an engaging and playful environment
- » Games might not help students learn, but create a motivating experience where students will want to learn to play and play to learn

Scenario: students in a sustainability course play SimCity, build their own city, and reflect on which societal factors contribute to a sustainable future

Happy experimenting!

More information available
on the handout in the ExL
Google Drive