Breaking the 4th Wall - The Sage Gets Upstaged

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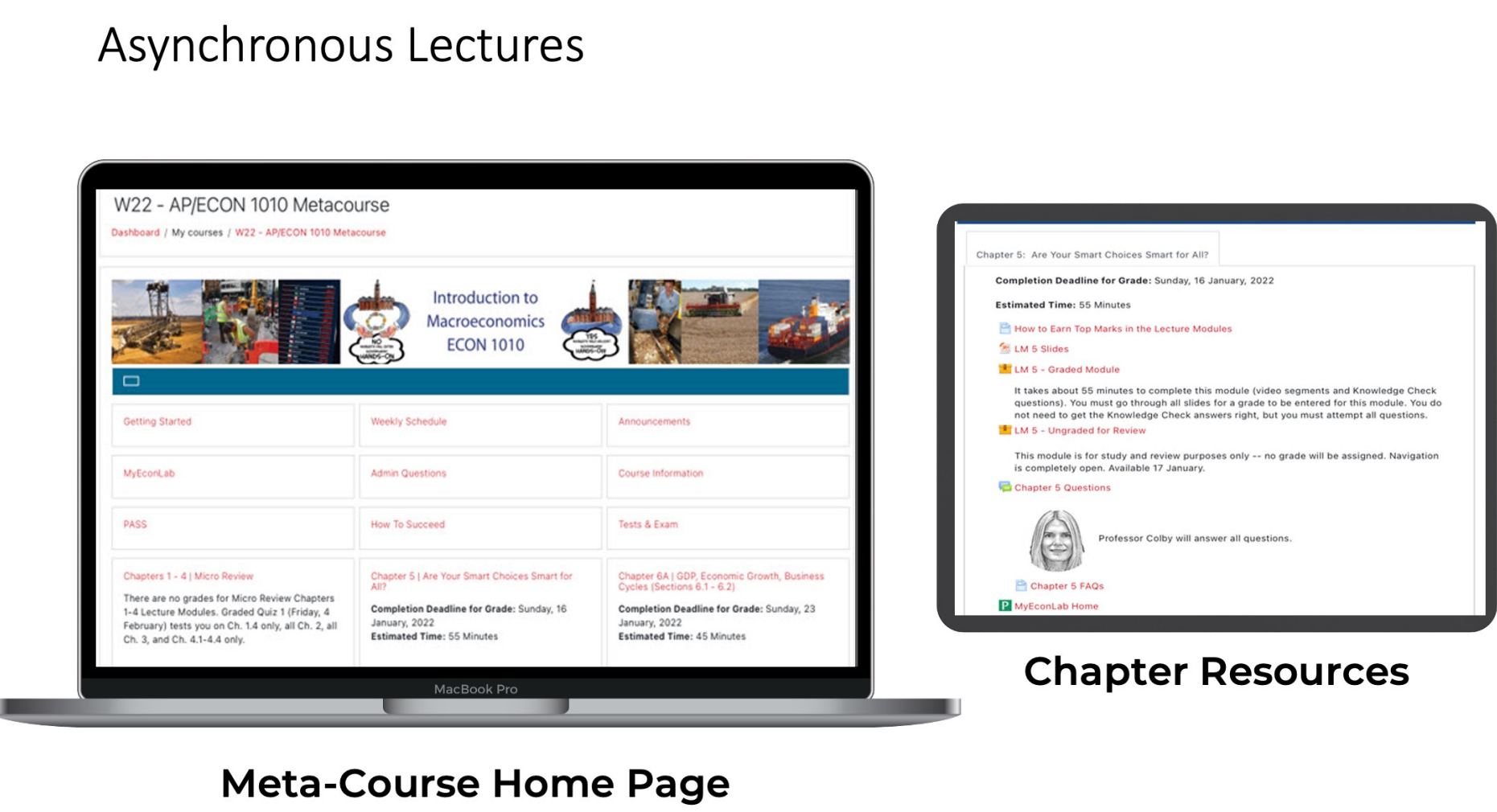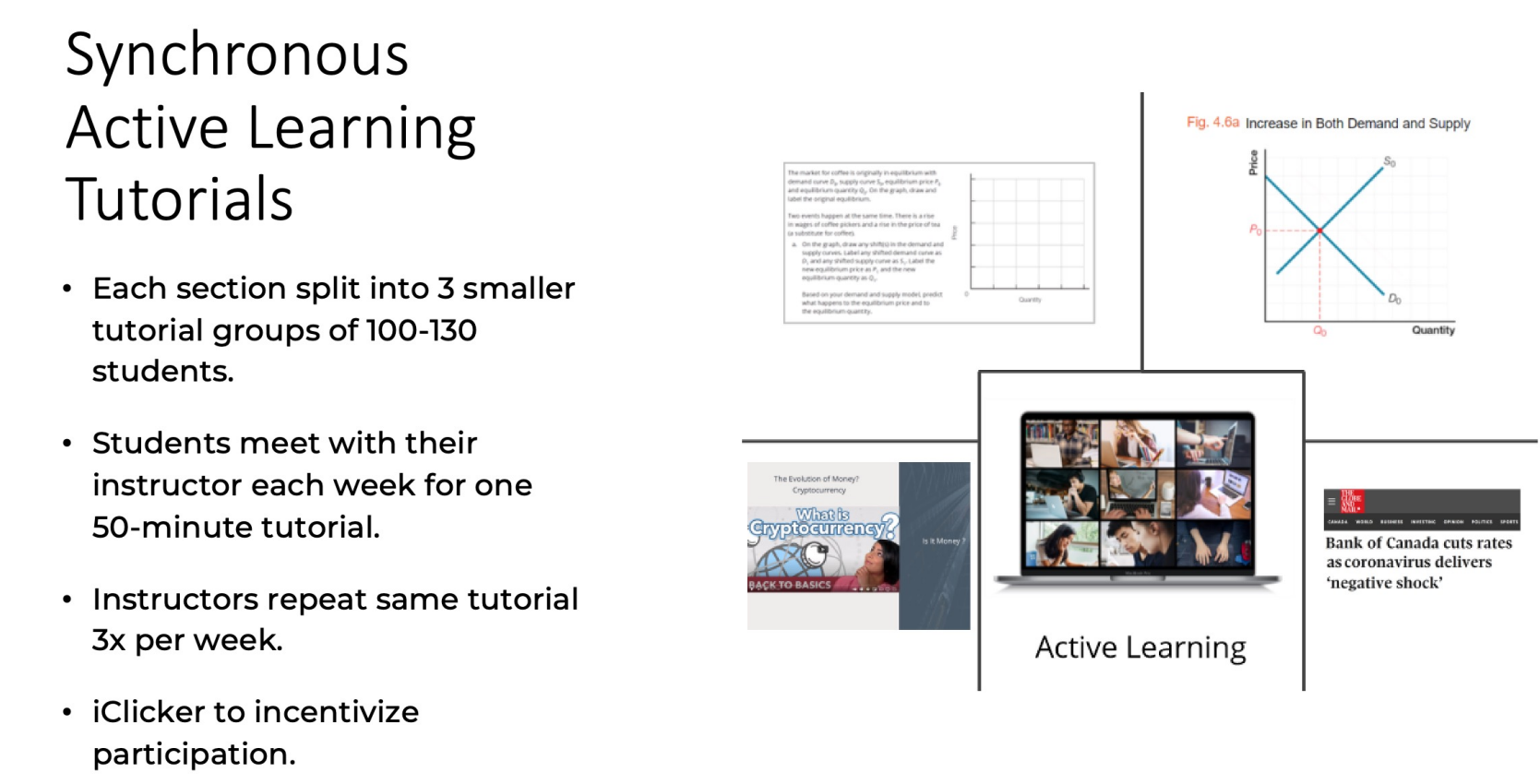## Pre-transformation

Traditional Lecture Format
- Over 9000 enrolments per year
- 27 sections
- 300-400 students per section
- Attendance rates <40%
- High drop/failure rates

Transformation – Key Components

Team-Teaching Model

Separate Silos to Meta-Course

WELCOME TO Economics 1000 &1010

Blended Format with Asynchronous Lectures

Asynchronous Lectures

Introduction to Macroeconomics
ECON 1010

Meta-Course Home Page

Chapter Resources

Synchronous Active-Learning Tutorials

Synchronous Active Learning Tutorials
- Each section split into 3 smaller tutorial groups of 100-130 students.
- Students meet with their instructor each week for one 50-minute tutorial.
- Instructors repeat same tutorial 3x per week.
- iClicker to incentivize participation.

Active Learning

Scan the QR code to download the Working Paper.

We radically transformed our principles courses from a conventional multi-section, large-lecture, passive learning format, to a single meta-course for 3000 students that exploits economies of scale for a richer, more flexible, engaging, student experience.

Meta-Course Evaluation

Task	% of Course Grade	Date	Notes
Lecture Modules/Knowledge Check Questions	7%	Weekly	Best 11 of 12
MyEconLab Quizzes	15%	7 throughout course	Best 6 of 7; Prerequisites of Study Plan Mastery Points
Test 1	15%	Sun, 23 October 2022, 9:00 AM – 10:00 AM Online	30 MC (25 common); 1.5 minutes/question; 6 rough work No going back; randomized
Test 2	15%	Sun, 20 November 2022, 9:00 AM – 10:00 AM Online	30 MC (25 common); 1.5 minutes/question; 6 rough work No going back; randomized
Tutorials (iClicker Questions)	15%	12 throughout course (Tutorials 0 & 1, Practice only)	Best 9 of 10 Must answer all but 1 iClicker questions for participation mark
Final Exam	33%	Dec 8 – 23, 2022 90 minutes In-person	60 MC (50 common); 1.5 minutes/question; 6 rough work
Totals	100%		

There are only two possible scores for each Lecture Module, either 1 (100%) or 0.

To earn a score of 1, you must watch all videos and answer all Knowledge Check questions. Those questions are designed to help you learn, as well as do better on tests and exams. You do not need to get the Knowledge Check answers right, but you must attempt all questions.

You must finish all material by the completion due date on the Weekly Schedule and eClass website.

Your iClicker grade for each Tutorial session is based on participation only. Full marks as long as you answer all but 1 of the iClicker questions, regardless of whether your answers are correct or not. Missing more than 1 iClicker question in a given session results in a score of 0 for that week.

Post-transformation - Results

Measurable Redesign Results
- Online Lecture Module completion rates **average 90%** (vs. <40% attendance in-person pre-pandemic).
- Tutorial participation rates **average 84%** (vs. no tutorials pre-pandemic).
- Tests and exam **grade distributions are normal**.
- ECON 1000 **retention increase 9%**
  ECON 1010 **retention increase 7%**
  Translates to **580 additional course enrolments!**
- On student evaluations, the redesigned courses have **higher satisfaction scores in every category**.
- Positive student and instructor feedback.

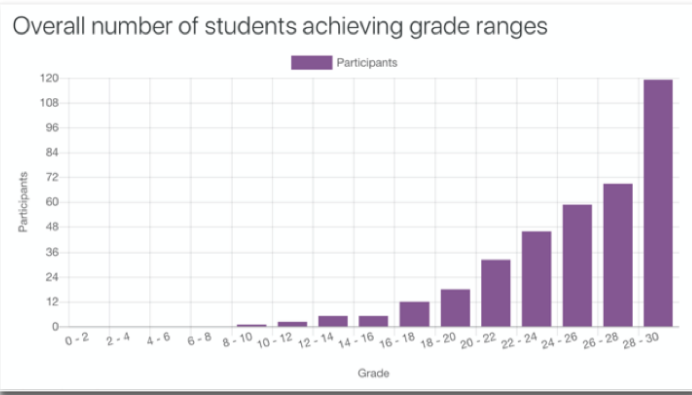**Pre-Transformation vs Meta-Course Aggregate Student Evaluations**

		1000 W		1010 W	
Question		2019	2021	2019	2021
A comprehensive roadmap of the course (i.e., a syllabus or course outline, a breakdown with topics, assignments and exams etc.) was provided.		6.32	6.66	6.31	6.58
The roadmap provided was mostly followed.		6.21	6.67	6.21	6.57
Important policies and procedures (e.g., attendance, participation, missed tests, late assignments, contacting instructors, etc.) were stated in the course outline.		6.38	6.66	6.37	6.56
The course materials (e.g., course kits, textbooks, readings, audio visual materials, lab manuals, websites, etc.) helped me achieve the course objectives.		5.97	6.38	5.93	6.23
The course activities (e.g., lectures, discussions, simulations, assignments, exercises and presentations, etc.) helped me achieve the course objectives.		5.57	6.38	5.65	6.14
The course tests/exams or final paper/essay were directly related to the course objectives.		6.04	6.23	6.08	6.09
The course helped me grow intellectually.		5.7	6.33	5.67	6.13

"This was my favourite course over the semester. I love that it was presented in a metacourse style, and love how there were ample opportunities to speak to instructors for clarification. The layout was easy to follow, interactive, and engaging, and having extra opportunities to gain marks has been super helpful throughout this pandemic."
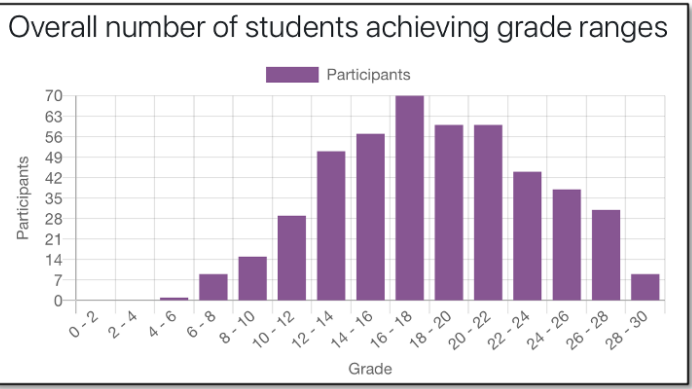
"This was a great course because of how engaging it was. We had many things to encourage us to keep working such as the practice quizzes and the seminars. I was constantly engaged."

Academic Integrity Issues Reduced

March 2020 – Typical Test 2 Distribution
Overall number of students achieving grade ranges

- Tests consisted largely of publisher test bank questions.

March 2022 – Typical Test 2 Distribution
Overall number of students achieving grade ranges

- Create new multiple-choice test questions.
- Synchronous, timed tests; question pooling; randomized order of questions and answers within questions; sequential navigation; academic honesty/rough work sheet submission requirement.
- Test distributions normal with averages in the mid 60s.

Scale Efficiencies

- Overcame Instructor Resistance
- Tutorial Content Creation
- Support of CUPE in New Role
- New Test Questions
- WELCOME TO Economics 1000 &1010
- Instructors Respond to Discussion Boards
- Coordinator & Administrator Positions
- Single Gradebook
- Increased Access to PASS