Adaptive Tools for High-Enrollment Online Courses: Lumen Learning Lightening Talk

Josh Baron
Executive Director for Partnerships
Lumen Learning
lumen learning mission:
Enable Unprecedented Learning for All Students
Ready-to-Teach Courseware
Interactive textbook, assessments, supplemental materials

Plus:
Digital tools to strengthen learning

Personalized Learning Courseware
✓ OER
✓ Outcome alignment
✓ Frequent practice & feedback
✓ Personalization
✓ Faculty-student connection
✓ Data-driven improvements

Online Homework System
✓ OER
✓ Outcome alignment
✓ Frequent practice & feedback

Note: Comparable to MyLabs Math or WebAssign

Waymaker

OHM

$30 per student/term standard pricing any course

Seamless integration with all major Learning Management Systems (LMS)
Looking at Waymaker Through the Lens of COVID-19 and Online Learning

- **STRUCTURE**: Provide students with clear structure and routines
- **ACTIVE LEARNING**: Design courses using active learning strategies to increase student engagement
- **ADAPTIVE**: Leverage courseware tools to provide more personalized feedback as well as identify struggling students
- **AFFORDABILITY**: Use high-quality and affordable digital learning tools and content and ensure “day one” access to students
- **PROFESSIONAL DEVELOPMENT**: Provide professional development and support for all faculty, including adjuncts

Adaptive Tools for High-enrollment Online Courses: Meet the Courseware with Lumen Learning

Julie Manley
Professor
Psychology, Counseling and Behavioral Health
Coppin State University

Josh Baron
Executive Director (NY)
Lumen Learning

Julie Curtis
VP Strategy and Communication, Lumen Learning
Lead, Lumen Circles
Meet the Courseware with Lumen Learning

July 16, 2020

- Introduction to Lumen Courseware
- Waymaker Demonstration
- Faculty Spotlight: Julie Manley
- Research Findings on Student Impact
- Lumen Circles
- Q&A (use Chat room)
What’s different about Lumen?

- Evidence-based learning design
- Built for accessibility
- Seamlessly embedded in LMS
- Continuously improving OER content
- Outstanding faculty support and PD

Simple to Adopt
Digital Courseware

See Waymaker Overview linked in the Agenda of a full list of course offerings.
Improving the COVID-19 Learning Experience for Students & Faculty

- **STRUCTURE**: Provide clear structure and routines for students
- **ACTIVE LEARNING**: Design courses using active learning strategies to engage students (real world examples, applied practice problems)
- **ADAPTIVE**: Leverage digital courseware to identify struggling students and provide more personalized feedback and interventions
- **AFFORDABILITY**: Leverage high-quality and affordable digital learning tools and content that provide “day one” access
- **PROFESSIONAL DEVELOPMENT**: Provide professional development and support for all faculty, including adjuncts

Coppin State University

- General Psychology
- PSYC 201
- Course Redesign
- Open Educational Resources
- 5 Sections: 1 Evening Course; 2 Day Courses; 2 Online Courses
Structured Approach
Active Learning

Why It Matters: Psychological Disorders

In this module, we will clarify what psychological disorders are, how they are diagnosed and classified, their symptoms, and insights into their causes. There are many myths surrounding mental illness, so let’s begin by addressing a few of them.

Mental Health Myths

Myth: Mental health problems don’t affect me.
Fact: Mental health problems are actually very common. In 2004, about:

- One in five American adults experienced a mental health issue
Engagement

- Christiana, that was outstanding work on the Learning Quiz! You're really learning a lot! JManley
- Destiny, that was fantastic work on the Psychological Disorders Quiz! Keep up the good work! JManley
- Thank you so much for your encouragement. Christiana W.
- Thank you for your support! Destiny W.
- Thank you for your support! I am a psychology major so I hope to have another class with you in the future. Have a great summer! Sarah R.
- Thanks for the positive feedback! I love the material and find it super interesting. Justin D.
- Thank you! I always appreciate your encouraging words after I take a quiz and test. Kayla H.
- Thank you! I'm trying it's hard to concentrate with all that's going on, so this was a break for me. Lisa G.
Interventions

View individual student histories

Download Student Grades

- Student Name
- Quizzes Completed
- Average Quiz Score
- Average Participation Score
- Automated Messages Sent
- Personalized Messages Sent

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Quizzes Completed</th>
<th>Average Quiz Score</th>
<th>Average Participation Score</th>
<th>Automated Messages Sent</th>
<th>Personalized Messages Sent</th>
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<td>Adriane Bates</td>
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<td>Melissa Toddley</td>
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<td>92%</td>
<td>97%</td>
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</tbody>
</table>

Primary Learning Outcome | Quiz Score | Quiz Attempts | Participation Score | Messages Sent
---|-------------|--------------|---------------------|----------------------|
| Psychological Foundations | 82%        | 1            | 100%                | 1                    |
| Psychological Research   | 87%        | 1            | 100%                | 0                    |
| Biopsychology            | 77%        | 1            | 100%                | 0                    |
| States of Consciousness  | 59%        | 1            | 100%                | 0                    |
| Sensation and Perception | 58%        | 1            | 100%                | 0                    |
| Thinking and Intelligence| 0%         | 0            | 0%                  | 0                    |
| Memory                  | 90%        | 1            | 100%                | 0                    |
| Learning                | 100%       | 1            | 100%                | 0                    |
| Lifespan Development    | 73%        | 1            | 100%                | 0                    |
| Social Psychology       | 78%        | 1            | 100%                | 0                    |
| Personality             | 92%        | 1            | 100%                | 0                    |
| Motivation and Emotion  | 0%         | 0            | 0%                  | 0                    |
| Psychological Disorders | 0%         | 0            | 67%                 | 0                    |

GOALS
- Fulfill a degree requirement
- Fulfill a general education requirement
- Learn something I can apply to advance my career
- Get an A

CONCERNS
"I am very worried about keeping up because this seems like a fast-paced course and I have to stay on track and remember every assignment and get it done on time."
Students pay Lumen’s $30 low-cost support fees via 1 of the following:

• Purchase an activation code through the campus bookstore

• Pay with a credit card inside the courseware
If a friend ask should he/she take this course, would you recommend it; what would you tell them to do in order to be successful?

Yes! Yes! Yes! I would recommend psychology 201/ Way Maker to a friend! I would convey to my friend, this is the best on-line course that I've encountered. It's thorough, easy to follow, and all needed materials are inclusive within Way Maker. I received prompt responses from the (Professor and TA)... through emails, text messages and returned calls. There is ample time given to complete all assignments before submission is due. I received an A on most assignments! Wow! Although the required reading can be overwhelming, I've learned valuable and comprehensive knowledge in conjunction with Psychology. You may be tempted to forgo the homework, which accompany all 12 modules, but; completing the homework is key to enhancing your chance of scoring high on upcoming chapter quizzes, test, and domains. There are 3 assigned Capstone Projects, which I found to be trouble-free. You will love this course; because, there isn't any stress, insurmountable resources at your disposal, and an A is highly probable to be placed on your college transcript, providing your commitment to each unit.

Lisa D. (Spring 2019)
Research Findings

Bill and Melinda Gates Foundation & SUNY Faculty
“Waymaker helps me identify and help students who are in trouble, and that we’re in jeopardy of losing if we don’t react quickly. Every time we add more OER, our student retention continues to go up.”

Bob Livingston
Professor of Business
Waymaker can erase performance gaps for disadvantaged learners.

**WAYMAKER CAN ERASE THE “PELL PENALTY”**

Putting Pell eligible students on equal footing with their non Pell eligible peers.

**AVERAGE FINAL GRADES**

<table>
<thead>
<tr>
<th>Group</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Pell Eligible Students</td>
<td>2.69</td>
</tr>
<tr>
<td>Pell Eligible Students Using Waymaker</td>
<td>2.67</td>
</tr>
<tr>
<td>Pell Eligible Students Not Using Waymaker</td>
<td>2.33</td>
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**LEARNING DATA DETAIL:** Study examined fall 2016 learning data for 5,622 students at 8 institutions enrolled in Introduction to Business courses. Analysis compared students’ final grades in sections using Waymaker Introduction to Business vs. those using commercial publisher or OER alternatives.
In a study comparing Waymaker OER vs Traditional OER
- 548 students in 3 different courses
- Waymaker users’ final grades were 0.48 letter grades higher
- Mixed effects linear regression model
- $p < 0.001$ (results are statistically significant)

Waymaker OER includes:
- Personalized study plans to guide students
- Tools to strengthen student-instructor connection
- Outcome-aligned course materials
- Data-driven learning design

“Thank you! I remained patient with myself after missing several questions on the pre-test and Try It sections, and carefully reviewed my mistakes to get a better grip on the material. I really like the learning module design, it is very effective at providing a deep understanding of the material via the mini quizzes and practice questions. Thanks again.”

“The emails when I was doing very good were a great confidence booster. When I had questions you always contacted me back :-()”
USM OnTrack:
Additional Support for Lumen Courseware Adoption
Effective Learners

What supports student success?

- Access and Accessibility
- Affordability
- Interactivity and engaging learning activities
- Learning by doing
- Practice with personalized feedback

Impactful Teachers

What supports faculty success?

- Course materials that support learning by doing
- Learning data to inform teaching and how to engage students
- Evidence-based teaching practices
- Applied teaching with self-reflection
- Peer sharing and feedback

A recipe for better student outcomes

- Lumen Waymaker
- Lumen OHM
- Lumen Circles
No Cost Adoption Support via OnTrack

Course Customization Services
- Use Lumen courseware
- Collaborate with Lumen learning designers to customize materials
- Implement a master course model (multiple sections/instructors)

Success Accelerator
- Virtual communities of practice
- Professional development - 2 terms
  - Engage students
  - Use learning data
  - Evidence-based teaching practices to support student success

For departments & course coordinators
For any faculty using Lumen courseware

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Waymaker
Personalized/adaptive learning & online homework

Subjects
Biology | Business & Management | College Success
| Computer Applications | Economics |
English/Composition (incl. Corequisite) | Lifespan Development | Psychology | Sociology | Spanish |
| Statistics

Coming Soon:
Accounting | Public Speaking

OHM
Flexible course-building & online homework platform for STEM

Subjects
Arithmetic | Prealgebra | Dev. Math Emporium |
| Elementary Algebra | Intermediate Algebra |
College Algebra (incl. Corequisite) | Trigonometry |
| Precalculus | Calculus I & II | Math for Liberal Arts / Quantitative Reasoning (incl. Corequisite) |
| Statistics

No Cost Adoption Support via OnTrack
Questions?

Interested in learning more?

- Visit info.lumenlearning.com/ontrack
- DM Josh in Zoom chat
- Or email josh@lumenlearning.com
Thank you.

Contact:
Josh Baron
josh@lumenlearning.com