Session Outline

- Greetings and Introductions – Yvonne Belanger & team
- Vision and Goals of The Adaptive Learning Market Acceleration Project (ALMAP) - Yvonne Belanger
- ALMAP Evaluation Portfolio Description – Louise Yarnall
- Moderated Overview of Two Grantee Implementations
  – Louise Yarnall (Moderator), Jo Jorgenson & Douglas Walcerz
- ALMAP Portfolio Evaluation Insights – Louise Yarnall
- Moderated Reflection on Adaptive Learning Experience
  – Louise Yarnall (Moderator) Jo Jorgenson & Douglas Walcerz
- Audience Q&A
Introductions

- Yvonne Belanger – Sr. Program Officer, Measurement and Evaluation, The Bill & Melinda Gates Foundation, WA
- Louise Yarnall – Sr. Researcher, SRI International; ALMAP Portfolio Evaluator, CA
- Jo Jorgenson – Dean, Instruction & Community Development, Rio Salado College, AZ; ALMAP Grantee
- Douglas Walcerz – Vice President, Planning, Research, & Assessment, Essex County College, NJ; ALMAP Grantee
ADAPTIVE LEARNING MARKET ACCELERATION GRANT PROGRAM (ALMAP)

14 Grants involving
17 colleges, universities
9 Adaptive Learning Platforms
22 Courses
44% Average % of Pell eligible students at grantees
21,644 Total Students Enrolled (across 3 terms)
699 instructors
Adaptive technology personalizes instruction & learning

Courseware provides customized feedback to students on learning gaps

Courseware tracks progress for instructor support
ALMAP Vision & Goals

- Expand and build understanding of how U.S. higher education programs are using adaptive courseware to support student success and completion.
ALMAP Evaluation Portfolio

- 14 grantees conducted QED student impact evaluations
  - Collected instructor/student survey data and cost data
  - Collected over 3 academic terms (Summer 2013-Winter 2015)

- Grantee studies featured 3 different types of comparisons:
  - Lecture vs. Blended Adaptive
  - Online vs. Online Adaptive
  - Blended vs. Blended Adaptive

- Evaluator checked rigor of local designs, extracted insights across portfolio
Paint a picture of using adaptive courseware on your campus: what did you do and why?

How well did the adaptive courseware meet your expectations?
ALMAP Portfolio Evaluation
Research Questions

- What student impacts are noted and in what HE contexts/disciplines?

- How does using adaptive courseware affect the costs of instruction?

- How are students and instructors experiencing adaptive courseware?
ALMAP Evidence of Impacts

- Significant positive course grade gains noted when adaptivity was:
  - Part of course redesign (lecture ➔ blended) OR
  - Added to online courses BUT
  - NOT when replacing another blended technology
ALMAP Evidence of Impacts

- Product features linked with learning gains:
  - Progress dashboards
  - Regular quizzes/feedback
  - Referrals to remedial content and study tips
  - Spaced memorization practice
  - Vendor content
    - But 1 supported memorization of faculty content
ALMAP Evidence of Impacts

- Course disciplines showing more learning gains:
  - 50% of psychology courses
  - 42% of mathematics courses
  - 25% of biology courses
  - 16% of English courses
Instructor Experience

- 78% of instructors* reported satisfaction
- 57% devoted 1-9 hours to courseware training

Instructor concerns:
- Changing practice
- Convincing students to use the courseware
- Aligning vendor content to their courses and schedules, and
- Investing time in creating content

* 61% instructor response rate
Student Experience

- Most students** reported positive learning gains
  - 77% of associate’s students
  - 51% of bachelor’s students

- Students reported different levels of engagement
  - 56% of associate’s students
  - 33% of bachelor’s students

**22% of all student participants surveyed + responded
Courseware based on instructor content had 8% to 19% higher development and training costs

- Sometimes such higher costs persisted across 2-3 terms

Most cost reductions occurred when adding adaptivity during course redesign, so cannot attribute to courseware

Replacing existing blended technology with adaptive may reduce instructional labor costs*

* Based on one term of data, 2 courses
ALMAP Recommendations for Higher Ed Evaluation Practice

- HEIs can learn more via rigorous evaluation
  - Establish baseline equivalence by gathering data on student characteristics (e.g., pretest, entry exam scores)
  - Use common learning assessments between comparison conditions rather than just course grades
  - Ensure you have samples sizes > 10

- To understand implementation, HEIs may also:
  - Study learner courseware usage data to measure engagement
  - Conduct classroom observations and interviews
  - Gather time logs from instructors for more precise cost data
How did you change your use of adaptive learning products over time and why?

"Memphis in Front of Me, Arkansas in Back of Me." Gary Bridgman,
What guidance and tips would you like to share other educators?

"CTA loop junction" by I, Daniel Schwen.
Further Information

- Bill & Melinda Gates Foundation ALMAP Report
  Release Information:
  November 2015: postsecondarysuccess.gatesfoundation.org

- Essex Information:
  E-Literate TV YouTube Channel – Essex County College
  • Video 1: https://www.youtube.com/watch?v=QajSjOGQsg
  • Video 2: https://www.youtube.com/watch?v=Wy5a68jgtM

- Rio Salado Information:
  Completing Assignments And Tracking Your Progress:
  https://www.youtube.com/watch?v=AB6A_u1WZjo
  Overviews and animations:
  https://www.youtube.com/watch?v=HJiYoAkBtkY