PLUM: Using the Learning Management System to Empower Students in Entry-Level Math Courses

David Zeigler, PhD
Bridget Parsh, RN, EdD
Vanessa Newsome-Slade
Chevelle Newsome, PhD

Who are we?

• David Zeigler, PhD  
  Chair, Department of Mathematics
• Bridget Parsh, RN, EdD  
  Director, First Year Experience Programs
• Vanessa Newsome-Slade  
  Undergraduate Student, Math
• Chevelle Newsome, PhD  
  Dean, Graduate Studies

Executive Order 1110

Guiding Principles

• Guiding Principle in providing students an equitable opportunity to succeed academically at the university and in preparing our students for success in their future careers.
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EO 1110: changes

• Effective with this executive order, the English Placement Test (EPT) and the Entry-Level Mathematics (ELM) Test shall not be offered, and the EPT and ELM committees are discontinued.
• During the first academic year, unless the requirement has been completed, freshmen shall enroll in general education written communication and mathematics/quantitative reasoning courses appropriate to each student’s major and skill level, as demonstrated by applicable systemwide standards.

Sac State Info

• About 3900 first time college students each summer
• 8% math completion rate in the first year (2016)
• Math identified as obstacle to graduation
• English department developed online Directed Self Placement for first year English.
• >90% completion rate for English in first year

Who are today’s incoming college students?

• https://www.beloit.edu/mindset/2021/
• First class born in 2000
• Think of themselves as consumers of college ($$)
• They have never had to watch a TV show at a scheduled time
• There has always been eBay and Google
• Bill Clinton has always been Hillary’s aging husband
• Wifi is an entitlement
How does this effect engaging with them?

• They binge watch shows
  – Can’t they just binge-watch class?
• They don’t pay for music
  – Why do they have to pay for books?
• They want to ‘personalize’ their education
  – How does math apply to my major?
• They want to ‘hack’ college
  – There has to be a short cut...where is it?
• There are things you don’t know about them
  – You don’t know everything

About Sacramento State

• 300 acres on river
• 30,000 students
• 1800 faculty
• Diverse
• Public
• In capital city

2018-2019 will be an exciting year...

• Implementation of EO 1110
  – Elimination of all remedial courses / ELM
  – Multiple measures used to place students into Categories
  – New Early Start models
  – Supplemental instruction; i.e. co-requisite, “stretch”, etc.
  – Students shall enroll in their GE course within first year.
• New placement using ALEKS PPL
At Sacramento State...

- Approximately 3900 first time college students for Fall 2018
- Increasing diverse student population
  - 3x EOP applications from Fall 2017 to Fall 2018
  - Geography
    - Out of state students tripled over 2012 – 2016
    - Foreign students more than doubled 2012 – 2016
  - (Math) Preparation
    - NCLB / Common Core
- How can we guide students to the “best” pathways for them?

What is PLUM?

- Guided system, consisting of a self-inventory and a QR activity, for all students to assess and improve their QR knowledge.
- Part of our University Plan to assess student math readiness to learn
Questionnaire

• Results of questionnaire are emailed to students for Orientation.
Early Start (Optional)

- Partnered with Knewton
- Worked with faculty to develop the curriculum
- Each “class” is $17
- Average completion time: 8 – 12 hours

Early Start (Optional)

- Content for ALL students
  - Math 12, 17, 24 (College Algebra)
  - Math 26A, 29 (Precalculus)
  - Math 30 (Calculus)
- Math support with grad students
  - In-person in Math Lab
  - Online tutoring
    - Streamlabs OBS & YouTube Live
    - AWWapp.com + tablet

Step 4: Math course placement

- Are you interested in improving your math course placement and strengthening your math skills?
  - ALEKS PPL can be for you! The ALEKS PPL self-paced course to determine your readiness level for college math.
  - ALEKS PPL is an online, self-paced course that you will complete at your own pace. You will work with the system to learn new concepts while taking assessments to evaluate your understanding of the material.
  - ALEKS PPL offers the flexibility to take all or as many sessions as you need to succeed.

- How does ALEKS PPL work?
  - ALEKS PPL is an online, self-paced course that you can take at your own pace.
  - Once enrolled, you will be able to take the ALEKS PPL course at your own convenience and work at your own pace. This can be used at home, on campus, or at your workplace.
  - The ALEKS PPL self-paced course will provide you with a thorough understanding of the material, which will help you succeed in your college math course.

- Take advantage of ALEKS PPL to improve your math course placement and strengthen your math skills!
Students have completed PLUM if...
• Questionnaire is completed
• All pages are visited
• Early Start is completed (Category IV only)

• Students get different messaging based on their category.

Results
As of July 23, 2018
• 3759 students completed PLUM
• 96% of incoming class

Number of First-Year Students Who Completed the PLUM Survey Each Week (As of July 20, 2018)
Collaboration = Key

Departments involved:
• Mathematics
• First Year Experience
• IRT
• Outreach & Admissions
• First Year Orientation Team
• Center for College Readiness
• English – Writing Program
• Dean of Undergraduate Studies

Thank you

David Zeigler, PhD Zeigler@csus.edu
Bridget Parsh, RN, EdD parshb@csus.edu
Vanessa Newsome-Slade vnewsome@calpoly.edu
Chevelle Newsome, PhD cnewsome@csus.edu