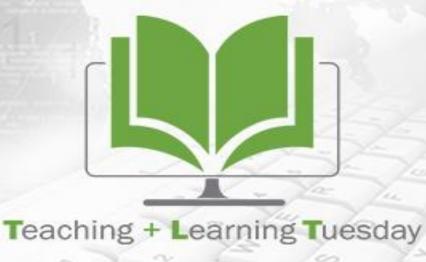
Welcome to Teaching + Learning Tuesdays

August 21, 2018

2:30PM

Please adjust your audio using the Audio Setup option under the Meeting menu.







Failure is per an Option: Smart Phones, Brain Science, & Gamification in an OER Design

Designing Learning to Encourage Persistence

Allison Haughton Martin, Director IEI, Bossier Parish Community College, Bossier City, LA



What Do Game Designers Know That We Don't?

Rethinking
Strategies
to
Engage & Retain
an Audience







What you'll learn...

Non-academic Metacognitive Applications

Deep Game Structure

Retail Engagement & Retention

Brain Science of Learning

Short-term/Long-term Memory

Repetition, Retrieval, & Spacing

Translating into an Academic Model

BPCC's OER Design

Evidence for Success



Post-Graduate (ABD)

Computer-Mediated Communication (Linguistics): Punctuated Language Equilibrium (University of Leicester, England)

OPEN CE CAMPUS

Graduate

Hypertext Theory & Game/Play Applications to Literature (Louisiana State University-Shreveport)



Higher Ed Instruction

Professor of English & Humanities F2F/Online Design/Instruction (14 years)

Administration

Director, Institutional Effectiveness Initiatives OER Online Mobile Design: *Open Campus™* Applications (6 years)

BPCC's Open Campus™ Project Nationally Recognized as a Best-practice Model



- -AAUA's Khaladjan International Award
- -NCIA's Exemplary Initiatives
- -Wharton School's Reimagine Education Shortlist
- -UPCEA'S Strategic Innovation in Online Education

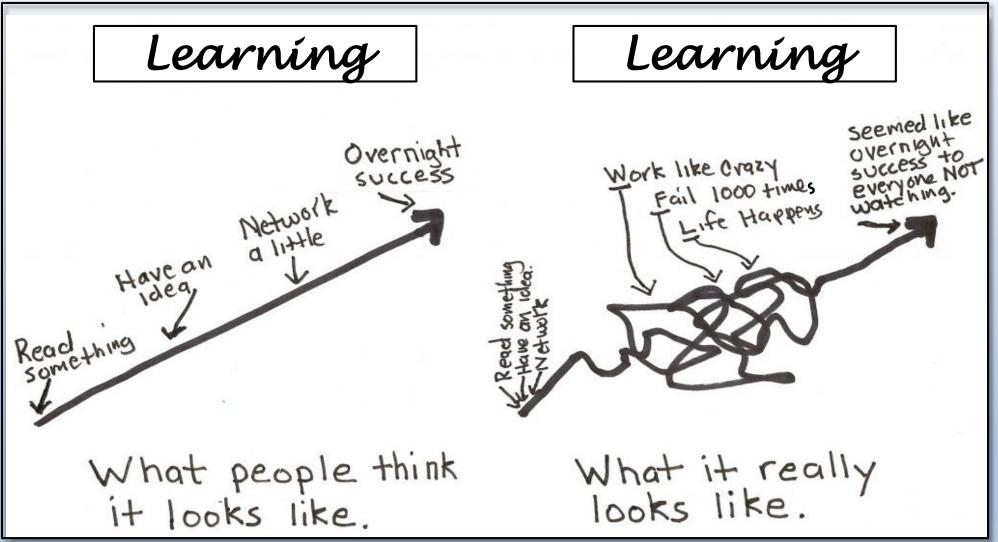
CAMPU

- -University Business Models of Excellence
- -NCSD's Terry O'Banion Exemplary Practice
- -Community College Futures Assembly
 3-time Bellwether Top-ten Finalist
- -\$1.8M DoE First in the World Grant

IN A CURATED WORLD...



Profound life lessons often come to US in the form of failure...



STUDENT PERCEPTIONS OF LEARNING

Deep Structure of Gamification/Game Design Building Player Persistence



- *Chunking Content
- *Repetition
- *Retrieval Practice
- *Spacing

Learning via "Small Dose" Delivery:

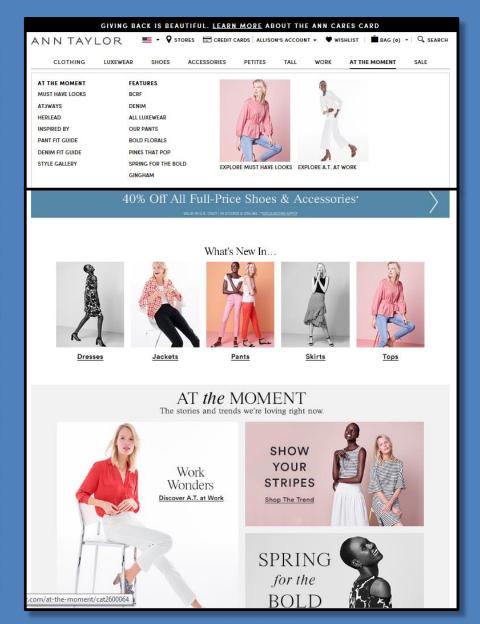
brief challenges/assessments: small rewards/penalties,

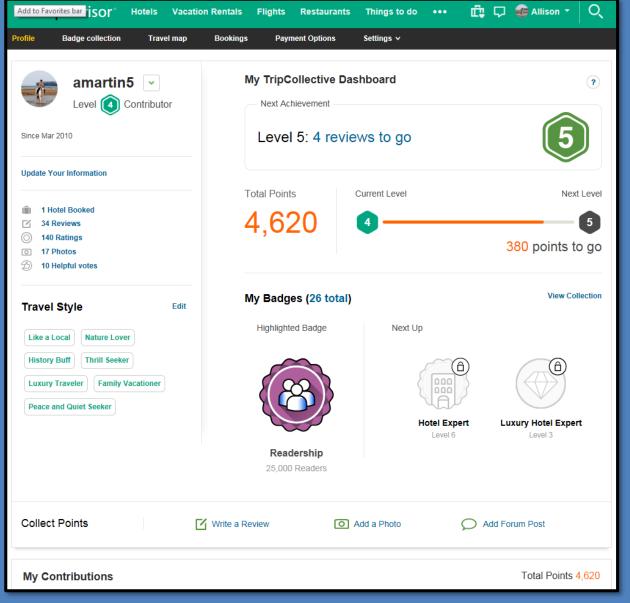
self-evaluation: levels/counters,

identity: avatar/player & navigation: "frictionless"

Players instinctively understand Failure is essential in learning to WIN







Adult brains can process +/-7 items (chunks) of information at one time. (Miller, 1956)

The Brain Science...

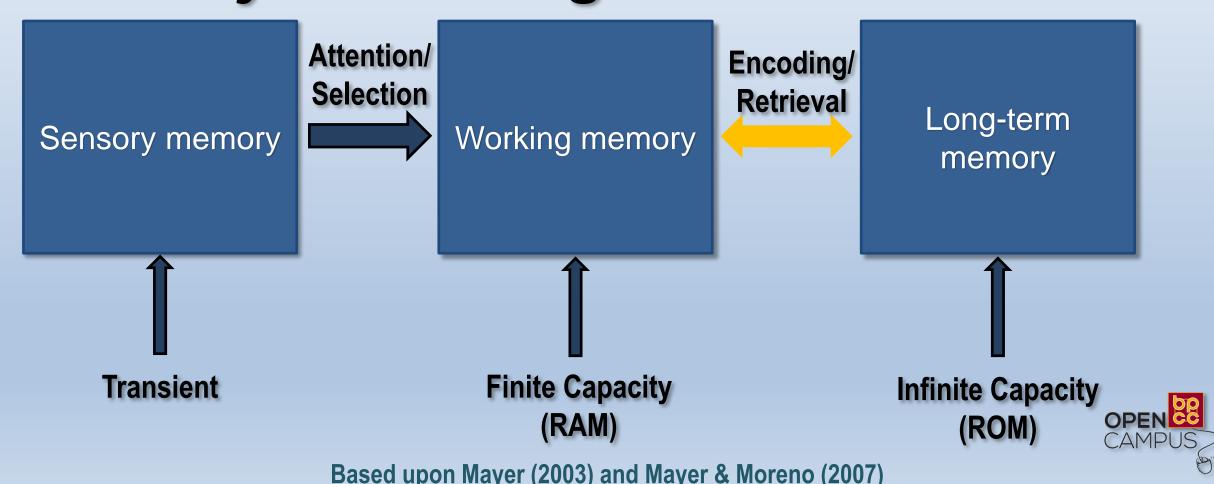
Key Cognitive Principles Applied to Learning

- CHunking Content to encourage...
- Repetition
- Practice Retrieval (RP)
- Spacing/Interleaving



See: Scholarship of Teaching & Learning

Teaching Students Cognitive Load Why Cramming Doesn't Work



Retrieval "...creates coherent and integrated mental representations of complex concepts, the kind of deep learning necessary to solve new problems and draw new inferences" (Karpicke 2016).



Testing: Forces you to remember information on the spot

Studying: Using Flashcards, reading, highlighting, taking notes



Failure in Test-taking

- + Brief Assessments
- + Repeated Attempts
- + Time Intervals

Highly Effective Learning

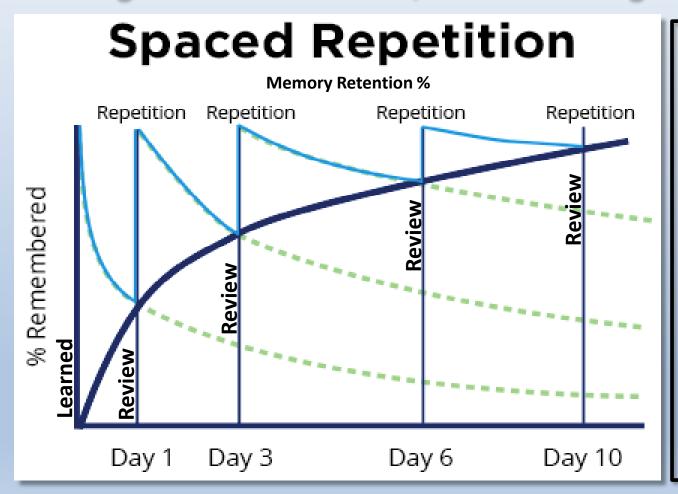
"Students who make unsuccessful attempts to answer test questions before receiving correct answers remember material better than if they studied the information."

Richland, et al. (2009)



Spacing/Interleaving

Spending time learning one "chunk"...pausing to learn a second "chunk" before having mastered the first, then returning to the first, then moving to a third.



Cognitive Load-balancing

- Switching brain cells "on" (during learning) and "off" again (during breaks)
- Unconscious has time to internalize the knowledge
- Repetition results in long-term memories
- Opposite? Blocked practice: mastering one thing before moving to the next

*CHUNKING CONTENT

Compartmentalized experiences

*REPETITION

Multiple views/attempts



*PRACTICE RETRIEVAL

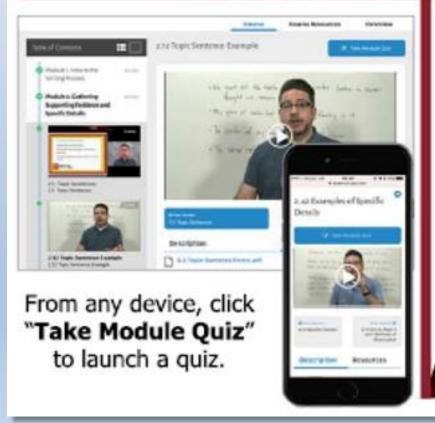
Quizzes: brief wins/losses

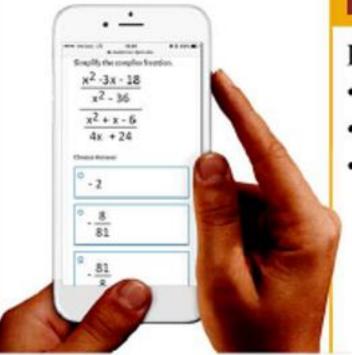
*SPACING/INTERLEAVING

Modules w/ Outcomes



Practicing with QUIZZES can help you learn faster!





The key is practice!

Each module

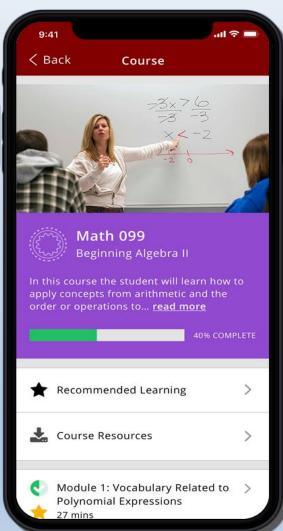
- 1 quiz
- 10 items
- · unlimited attempts

Choosing a wrong answer can often help you remember more

USER ACCEPTANCE/INFORMATION SYSTEMS CONTINUANCE THEORY

Perceived Usefulness and Ease of Use





"PROMPTING FLOW" or "FRICTIONLESS" CONTENT ACQUISITION"

- The "medium" is not the
 - "message" Were McLuhan and Ong Wrong?
- Course design: simplistic, intuitive, predictable
- Every module, every course tracks identically



SOCIAL PRESENCE THEORY: MULTIPLE, NON-VERBAL CUES



The degree to which a person is perceived as a 'real person' in mediated communication... Gunawardena, 1995

Establishing Closeness and Connection

Face = Trust

BPCC instructors, not 3rd party participants

- Authenticity/Imperfections
- "Meet Your Instructor" tab
- Instructor bio/credentials/interests

More about Social Presence Theory:



Initial trust was found to be enhanced for websites employing photographs and video clips... Khalid Aldiri, et al. (2008)



The Human Face of E-Business: Engendering Consumer Initial Trust Through the Use of Images of Sales Personnel on E-Commerce Web Sites

Khalid Aldiri (University of Bradford, UK), Dave Hobbs (University of Bradford, UK) and Rami Qahwaji (University of Bradford, UK)

Source Title: International Journal of E-Business Research (IJEBR) 4(4)

Copyright: © 2008 | Pages: 21

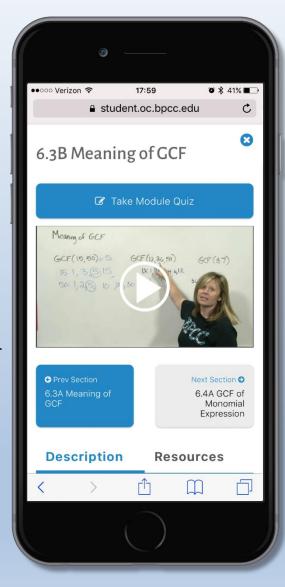
DOI: 10.4018/jebr.2008100105



Open Campus Mobile Phase

developed under grant #P116F150084 assume endorsement contents do not necessarily represent not the policy of the U.S. Department of Education, and you should Federal Government. Open Campus™ Mobile were from the U.S. Department of Education. However, by the l The contents of BPCC

ADULT LEARNING THEORY: ENCOURAGING SELF-EFFICACY



Based upon factors adult learners prefer...

Perceived best use of time

24/7 access: front-loaded learning outcomes

Practical, how-to demonstrations

Unlimited views: lectures/sequential steps

Immediate feedback/just-in-time support

Immediate quiz responses

More about Adult Learning Theory:

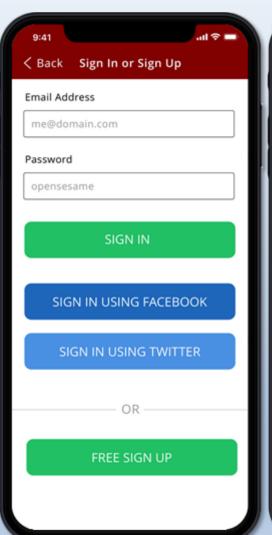


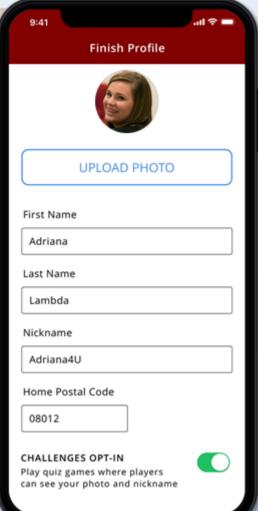
Open Campus™ Mobile-Responsive LMS Hybrid Design



Soft Launch: October 1, 2019

-Resizes for device: desktop, tablet, smartphone -Alternative Social Media sign-up -Simplified sign-up -Challenge optin -Slide bar navigation -Optional Precourse assessment -Progress bar, completion icons, for selfevaluation









The contents of BPCC Open Campus™ Mobile were developed under grant #P116F150084 from the U.S. Department of Education. However, contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.

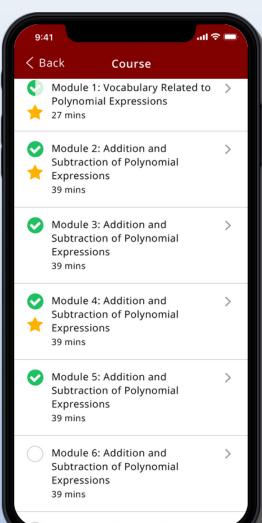
Open Campus™ Mobile-Responsive LMS Hybrid Design

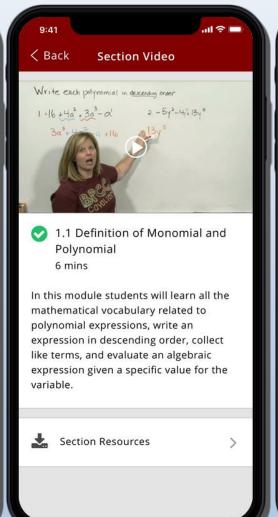


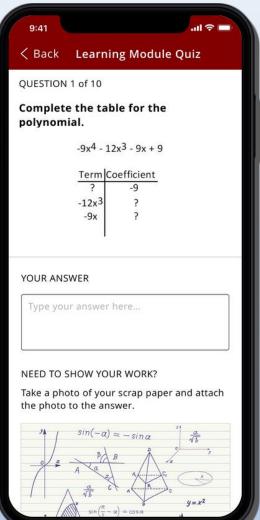
Full Public Release: January, 2019

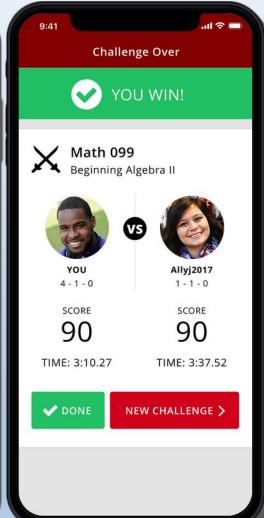
- Recommended **Learning: Starred** (pre-course assessment results) -Self-assess progress: Checks: successfully completed -Videos: <5 min. -10-item quizzes (pooled/ randomized) -Flexibility for instructor adoption/ expansion (show your work) -Challenges: "Swords Up"

meme









The contents of BPCC Open Campus™ Mobile were developed under grant #P116F150084 from the U.S. Department of Education. However, contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.

Open Campus™ Mobile-Responsive LMS Hybrid

OPEN CE CAMPUS

Badging & My Cavalier (Beta)

Badges

- -Badges reflect successful quiz completion: 70% or better
- -Images are pieces of the Cavalier: cap, feather, cape, sword, boots, etc. (badges slightly more defined than here).
- course signature color.
 -Subtle: self-evaluation
 (grayed areas for what's

-Colors correspond with

left to complete)

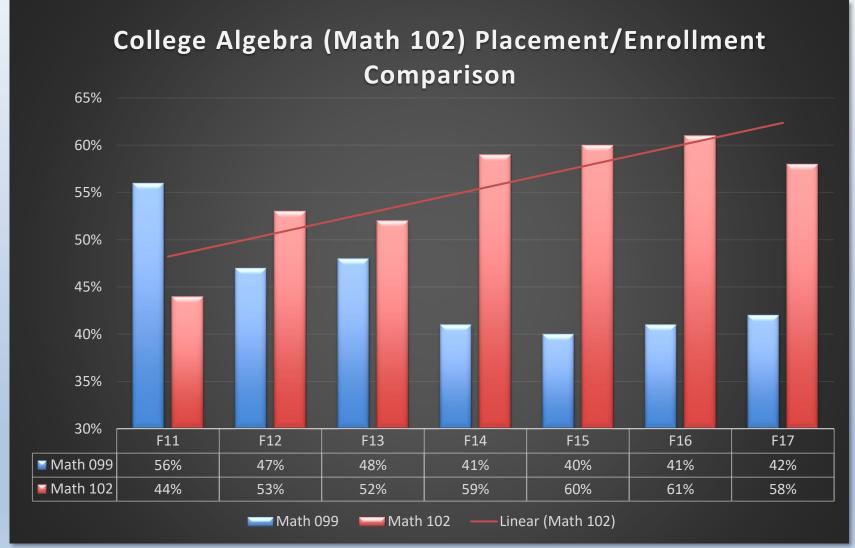




My Cavalier
-Progress of badging
reflects progress of
individual badge icons.

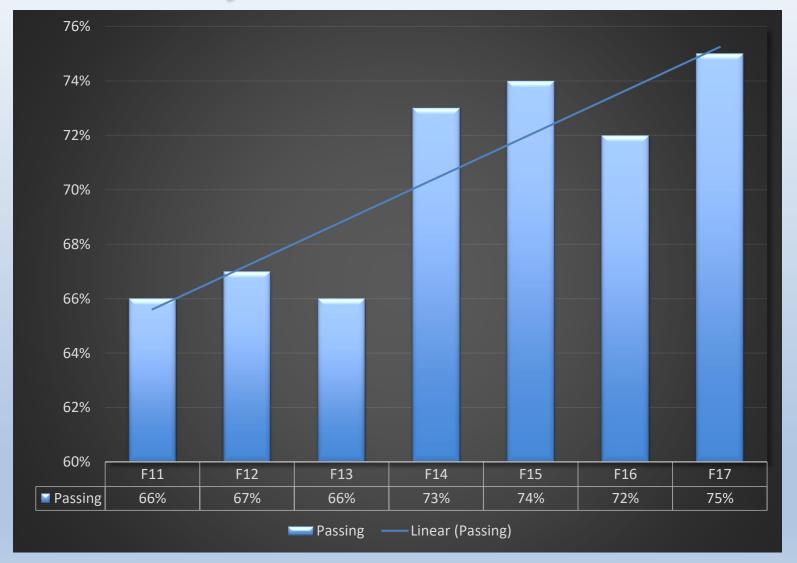
- -Students successfully pass quizzes to get badges for each article of clothing/armor (cap, feather, boots, sword, etc.) to become a full Cavalier.
- -Subtle self-evaluation: Grayed areas are wardrobe/badges yet to be earned.
- -Colors correspond to course signature color -Subtle encouragement to adopt BPCC identity

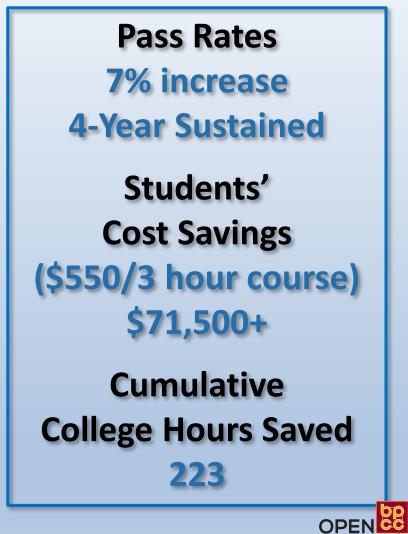
7-Year, Diachronic Data: Math 102 vs.099 Enrollment



Placement/ **Enrollment Rates** 10% increase **4-Year Sustained** Students' **Cost Savings** (\$550/3 hour course) \$139,500+ **Cumulative College Hours Saved 761**

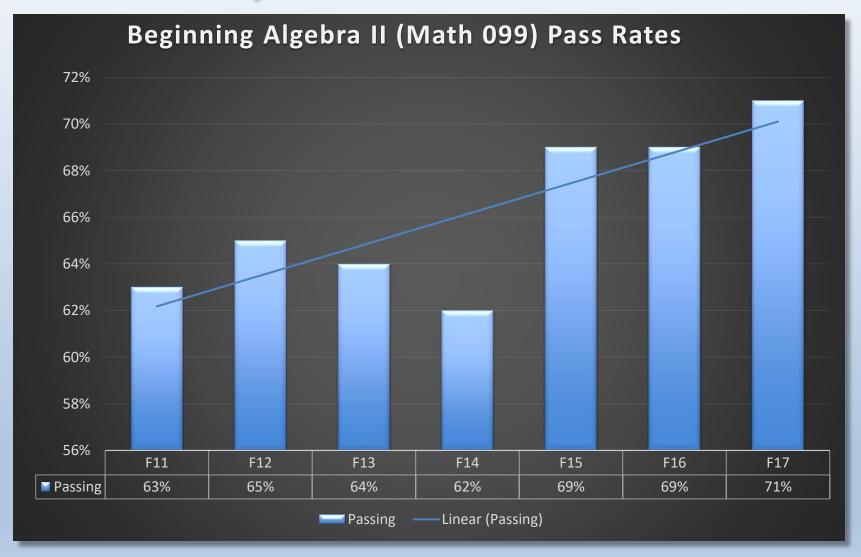
7-Year, Diachronic Data: Math 102 Pass Rates





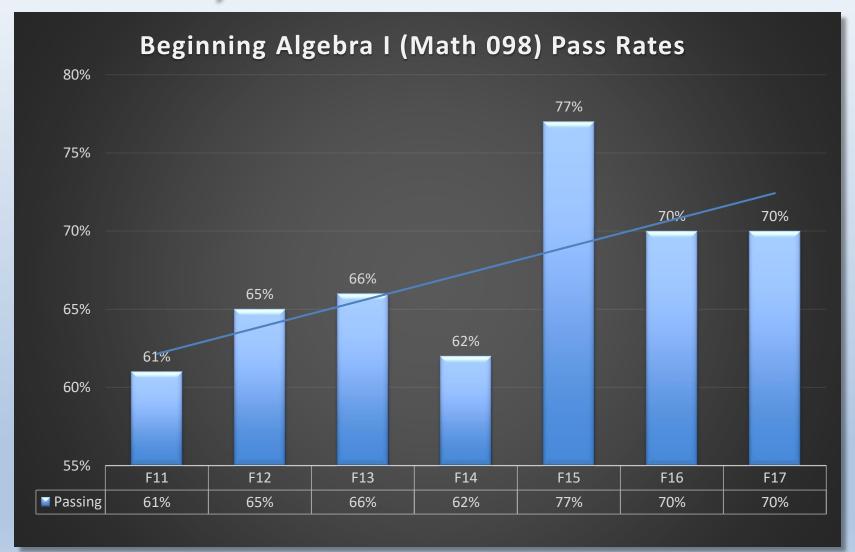
CAMPUS.

7-Year, Diachronic Data: Math 099 Pass Rates



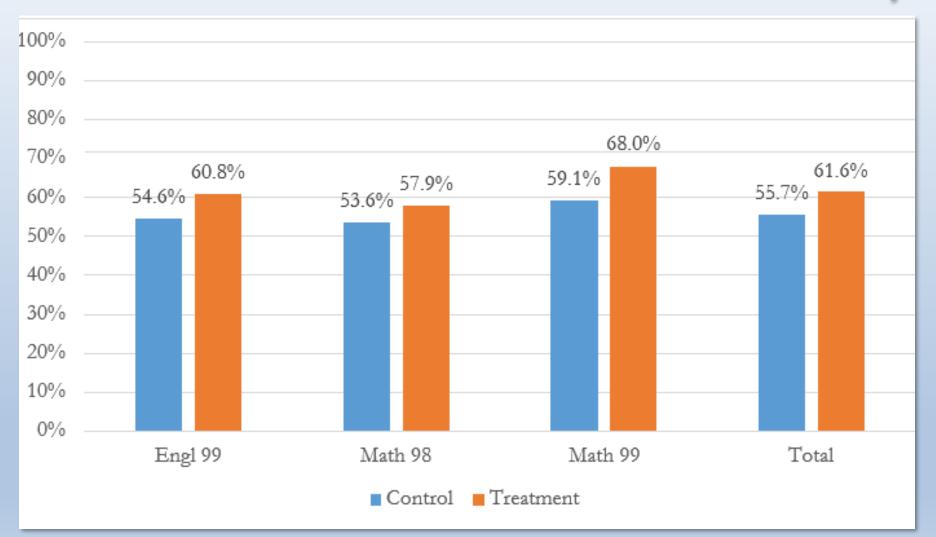


7-Year, Diachronic Data: Math 098 Pass Rates

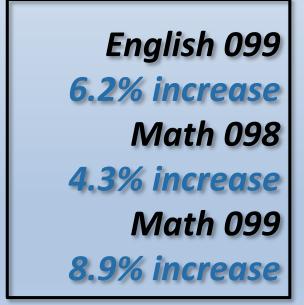


Pass Rates 9% increase **3-Year Sustained** Students' **Cost Savings** (\$550/3 hour course) **Cumulative College Hours Saved**

SPRING 2017 CLUSTER RANDOMIZED CONTROL TRIALS PERFORMANCE OUTCOME DATA: 980 STUDENTS/34 CLASSROOMS



Results:
Treatment students
6% more likely
to have passed...









SCALING OPEN CAMPUS™ DESKTOP TO ADDRESS

EDUCATION NEEDS ACROSS LA: 200,000+ Contacts

- LCTCS: 13 COLLEGES SYSTEM/STATEWIDE
- CAREER COMPASS OF LA: 30 PARISHES
- LOUISIANA TECH UNIVERSITY
- NORTHWESTERN STATE UNIVERSITY OF LA
- UNIVERSITY OF LA-MONROE
- COMMUNITY RENEWAL INTERNATIONAL®
- SHREVEPORT/BOSSIER BUSINESS ALLIANCE
- BARKSDALE DEPLOYED MILITARY
- LA DEPARTMENT OF EDUCATION
- OCHSNER HEALTH SYSTEMS®
- LA JUVENILE JUSTICE SYSTEM
- LOFSA/LA BOARD OF REGENTS



3.6 Million Viewing Minutes * 208 Countries/Territories





Statistically, every minute, every hour, every day, someone, somewhere around the world is watching a BPCC-branded, Open Campus™ video lecture.

Thanks for Attending!

BPCC Open Campus™ Project Bossier Parish Community College Shreveport/Bossier, LA 71111



CONNECT...

Allison Haughton Martin amartin@bpcc.edu







Upcoming TLT Sessions

September 18, 2018 at 2:30 pm

Low-Income Students and Career Pathways

Want to showcase your expertise? Is there a teaching technique that has been effective in the classroom? Apply to be a TLT presenter!

For more information: www.sctechsystem.edu/tlt



