Academic Transformation
Which of these is most important in academic transformation?

- Educational technology
- Campus culture
- Campus IT infrastructure
- Faculty development
- Campus organization partnerships
That 'Useless' Liberal Arts Degree Has Become Tech's Hottest Ticket
transformation | tran(t)sfərˈmɑːSH(ə)n |
noun

a thorough or dramatic change in form or appearance: *its landscape has undergone a radical transformation.*

- a metamorphosis during the life cycle of an animal.

- **Physics** the induced or spontaneous change of one element into another by a nuclear process.

- **Mathematics & Logic** a process by which one figure, expression, or function is converted into another that is equivalent in some important respect but is differently expressed or represented.

- **Linguistics** a process by which an element in the underlying deep structure of a sentence is converted to an element in the surface structure.

- **Biology** the genetic alteration of a cell by introduction of extraneous DNA, especially by a plasmid.
Challenges

Developments in ed tech

Veronica Diaz - EDUCAUSE
Which of the 6 developments in educational technology will have the greatest impact at your institution?

- Bring Your Own Device (BYOD)
- Learning Analytics and Adaptive Learning
- Augmented and Virtual Reality
- Makerspaces
- Affective Computing
- Robotics
Developments in Ed Tech

- **fast (<1 yr)**
  - BYOD
  - Learning Analytics and Adaptive Learning

- **mid-range (2-3 yrs)**
  - Augmented and Virtual Reality
  - Makerspaces

- **long range (4-5 yrs)**
  - Affective Computing
  - Robotics
Which of the trends do you think is most important at your institution?

- Advancing Cultures of Innovation
- Rethinking How Institutions Work
- Redesigning Learning Spaces
- Shift to Deeper Learning Approaches
- Growing Focus on Measuring Learning
Trends Accelerating Tech

**short-term**
- Growing Focus on Measuring Learning
- Increasing Use of Blended Learning Designs

**mid-term**
- Redesigning Learning Spaces
- Shift to Deeper Learning Approaches

**long-term**
- Advancing Cultures of Innovation
- Rethinking How Institutions Work

Veronica Diaz
Many thought leaders have long believed that universities can play a major role in the growth of national economies. Research universities are generally perceived as incubators for new discoveries and innovations that directly impact their local communities and even the global landscape. In order to breed innovation and adapt to economic needs, higher education institutions must be structured in ways that allow for flexibility while spurring creativity and entrepreneurial thinking. There is a growing consensus among many higher education thought leaders that institutional leadership and curricula could benefit from adopting agile startup models. Educators are working to develop new approaches and programs based on these models that stimulate top-down change and can be implemented across a broad range of institutional settings. In the business realm, the Lean Startup movement uses technology as a catalyst for promoting a culture of innovation in a more widespread, cost-effective manner, and provides a compelling model for higher education leaders to consider.

Overview
The Lean Startup movement was largely cultivated in Silicon Valley, the hub of technology innovation, with roots in higher education. Many graduates of Stanford University, for example, have become successful entrepreneurs because of the experience they gain developing business strategies through hands-on curriculum. Stanford alumni entrepreneurs are responsible for global revenue of $2.7 trillion annually. Similarly in the UK, the Cambridge University Entrepreneurs group has helped generate companies with approximately £100 million of investment over a 15-year period. In many ways, the career trajectory of graduates reflects the offerings of the institutions they attend, making it vital for universities and colleges to exemplify the principles they wish to foster in their students. Like startups, institutions are becoming structured in ways that allow them to constantly evolve, reflecting and pushing the boundaries of the global marketplace. This includes deviating from hierarchical decision-making processes to promote collaborative strategies and incorporate student voices.

The contemporary workforce calls for employees that are agile, adaptable, and inventive and universities and colleges are increasingly revamping their existing programs and creating new ones to nurture these key skills. In the US alone, the number of formal entrepreneurial courses in higher education has grown exponentially over the past two decades with nearly 25% of today’s college students aspiring to be entrepreneurs. While this trend has been materializing more gradually, the positive impact is evident. A study prepared for the European Commission revealed that in comparison with their peers, university alumni who engaged in entrepreneurial programs were able to secure jobs more quickly and were more confident in their abilities to innovate in the workplace and start new businesses. The Consortium for Entrepreneurship Education also cites major benefits for improving aspects of student attitude including self-awareness, self-management, and creativity.

In order to breed these progressive cultures, higher education institutions and their faculty must be equipped with proper strategies. In Poland, Kozminski University (KU), known for its leading graduate management program, found that a large pool of incoming students who had received undergraduate degrees elsewhere were not adequately prepared. As a result, KU launched an initiative to introduce entrepreneurship courses to 40 local non-business universities and train lecturers in other disciplines, such as engineering, agriculture, and art. Additionally, Harvard Business Review recommends that institutions work with industry leaders to integrate more experience-based learning. This notion is being increasingly embraced by universities around the world; San Jose State University, for example, recently partnered with Facebook to expose more young women to computer science with the long-term goal of boosting the company’s cyber security efforts.

Implications for Policy, Leadership, or Practice
The Innovation Policy Platform (IPP) asserts that universities should bolster entrepreneurship courses to attract and accommodate more students, while nurturing faculty that can meet high-quality teaching standards. Educators in these programs must understand the complex pedagogies that support more
Which of these challenges is the most pressing one at your institution?

- Blending Formal and Informal Learning
- Improving Digital Literacy
- Competing Models of Education
- Personalizing Learning
- Balancing Our Connected and Unconnected Lives
- Keeping Education Relevant
Challenges Impeding Tech

solvable
- Blending formal and informal learning
- Improving digital literacy

difficult
- Competing models of education
- Personalized learning

wicked
- Balancing our connected and unconnected lives
- Keeping education relevant
Blending Formal and Informal Learning

Solvable Challenge: Those that we understand and know how to solve

As the Internet has brought the ability to learn something about almost anything to the palm of one’s hand, there is an increasing interest in the kinds of self-directed, curiosity-based learning that have long been common in museums, science centers, and personal learning networks. These, along with life experience and other more serendipitous forms of learning, fall under the banner of informal learning, and serve to enhance student engagement by encouraging them to follow their interests. Higher education institutions have not yet been able to incorporate such experiences across their courses and programs at scale, though many experts believe that a blending of formal and informal methods of learning can create an environment that fosters experimentation, curiosity, and above all, creativity. In this sense, an overarching goal is to cultivate the pursuit of lifelong learning in all students and faculty. However, methods of formally acknowledging and rewarding skills both instructors and students master outside of the classroom are compounding this challenge.

Overview
In an age of video tutorials, open content, and social media, it is easy for people to find ways to learn and gain new skills anytime, anywhere. Informal learning recognizes that knowledge acquisition can happen in any given moment, no matter how casual the environment. A student can spend years practicing advanced graphic design techniques, for example, only to be relegated to introductory design courses when enrolled at a university. Most higher education institutions still exclusively speak the language of course credits, not incorporating prior informal experience as a placement factor. While the blending of formal and informal learning is an intriguing notion, it is hampered by the lack of scalable ways to qualify learning that happens beyond the classroom. Fortunately, UNESCO is setting a precedent, connecting informal learning outcomes to the goal of building societies of lifelong learners in their book Global Perspectives on Recognizing Non-formal and Informal Learning: Why Recognition Matters.

Although the burden initially appears to be on formal institutions to deeply consider how informal learning experiences fit in with course objectives and assessment, students must also better understand what characterizes beneficial informal learning resources. This intersection encompasses a potential solution; universities and colleges are well poised to play a bigger role in helping students discover and maximize credible digital tools and resources as they pursue their curiosities. Responses to the challenge can be easily mistaken for simply integrating informal opportunities, but the ultimate goal is to combine the two to achieve the best of both worlds. For example, an EDUCAUSE study revealed that even though students and instructors use mobile devices regularly, they still need technical, logistical, and pedagogical support from institutions to understand how to use them for learning purposes.

Solving this challenge requires institutions and employers to view informal learning in a positive light. Ongoing learning is particularly important for working professionals who must continuously gain new skills to advance their careers. Traditionally, this has translated into pursuing graduate degrees. The rise of micro-credentials or “nanodegrees” is disrupting this paradigm as online learning providers like Udacity and Coursera have partnered with businesses including Google and Instagram to help people informally further their education in areas such as mobile app development. Increasingly, social media is also being leveraged to display these kinds of accomplishments. LinkedIn, for example, enables users to list any skills that could appeal to prospective employers; open badging integration through Credly allows the sharing of verified achievements, such as completing an online course in coding.

Implications for Policy, Leadership, or Practice
The European Commission has been instrumental in acknowledging the benefits of informal learning and setting policy precedents. Their report “Recognition of Prior Non-Formal and Informal Learning in Higher Education” describes an assortment of initiatives including Common European Principles for the Identification and Validation of Non-formal and Informal Learning and the European Guidelines for Validation of Non-formal and Informal Learning. Understanding societal changes and their impact on education is key
Which of the top 7 key issues is most important at your institution?

- Academic Transformation
- Faculty Development
- Assessment of Learning
- Online and Blended Learning
- Learning Analytics
- Learning Space Designs
- Accessibility and Universal Design for Learning
née content anchors
Each year, ELI surveys the higher education community to determine key issues & opportunities in post-secondary teaching & learning. These key issues serve as the framework, or focal points, for our discussions and programming throughout the coming year. More than 900 community members voted on the following key issues for 2016.

http://tinyurl.com/ELIkeyissues
1. Academic Transformation
   - 7 Things To Know About Leading Academic Transformation
   - 7 Things You Should Read: Faculty Digital Fluencies & Frameworks

2. Faculty Development
   - 7 Things You Should Read: Evaluating Faculty Development Programs
   - Technology and Change: Perspectives on the Role of Faculty

3. Assessment of Learning
   - 7 Things You Should Know About CBE Tools
   - 7 Things You Should Read About Multimedia Assessments

4. Online and Blended Learning
   - Anytime and Anywhere: A Case Study for Blended Learning
   - Considerations for the Future of Research in Online & Blended Learning

5. Learning Analytics
   - How Students Engage with a Remedial English Writing MOOC: A Case Study in Learning Analytics with Big Data
   - Learning Analytics: A Report on the ELI Focus Session

6. Learning Space Design
   - 7 Things You Should Know About the Learning Space Rating System
The 2016 Key Issues in Teaching and Learning

EDUCAUSE LEARNING INITIATIVE | FEBRUARY 2016

About the 2016 ELI Key Issues in Teaching and Learning

Identifying a community’s challenges and opportunities is an important exercise. It furnishes the basis for a common understanding, a common vocabulary, and a set of shared priorities. By identifying this common ground, we open the door to the productive sharing of best practices and make it easier to establish collaborations that benefit the entire community. Since 2011, ELI’s Key Issues survey has been exactly that—a way for the higher education teaching and learning community to discover the common ground that cuts across differences such as Carnegie Classification and FTE counts. The ELI Key Issues (formerly called Content Anchors) offer a window into the technologies and developments that the community finds most important for higher education.

The Key Issues function as navigation points for our work. The context provided by the Key Issues is a valuable resource for framing our day-to-day activities. Knowing what issues the community considers its top concerns enables us to prioritize and sync our efforts against a broader picture. But the Key Issues also help establish a common professional vocabulary, facilitating a way for us to share our experience and insights. Our professional endeavors are a social and collaborative enterprise. By sharing our efforts, wisdom, and best practices, we collectively promote higher education teaching and learning.

This issue of the 7 Things You Should Know series consists of short commentaries on the top 7 issues from the survey. These short meditations provide focus, serving as brief, guided tours of that issue’s particular landscape. Seven members of the community contributed to these profiles. Those individuals are identified below, next to the particular issue for which they provided their exper-
We extend our thanks to them for their time and to the entire teaching and learning community for sharing its collective wisdom for all to benefit.

1 Academic Transformation
Gardner Campbell, Vice Provost for Learning Innovation and Student Success, and Dean, University College, Virginia Commonwealth University

Must higher education change? An overwhelming “yes” comes from various sectors: the Christensen disruption corner, various educational technologies (and the money following them), the “degree-completion agenda” that also goes by various names connected with “student success” (some little more than high-volume models of “get that C and get your degree”), and the drive toward “economic competitiveness” (a job upon graduation, U.S. market dominance). But another question also deserves our attention: Should higher education change? This latter question, sometimes overlooked, engages larger questions of value and meaning at the heart of the practice of schooling we call “higher.” In both cases, the primary agent of transformation, disruption, liberation, or commodification remains the computer, a mind-like invention that can turn relationships into automated transactions, as well as enlarge our capacity to store, retrieve, judge, share, and build on the products of human ingenuity.

2 Faculty Development
Norm Vaughan, Professor, Mount Royal University

Faculty members in higher education are often overwhelmed with the competing demands on their time in the areas of teaching, research, and service. In order to overcome this issue, there has been a growing trend in faculty development to focus on the scholarship of teaching and learning (SoTL) through a community of inquiry (CoI) approach. SoTL attempts to integrate teaching, research, and service through a process of scholarly inquiry into student learning, which advances the practice of teaching by making the findings of the inquiry public. Rather than undertaking this inquiry process in isolation, faculty members are being encouraged to participate in CoIs, which are composed of other faculty, students, and staff. These CoIs engage in active and collaborative research projects that investigate student learning across the disciplines.

3 Assessment of Learning
Bernard Bull, Assistant Vice President of Academics and Assoc. Professor of Education, Concordia University Wisconsin

Assessment is central to the conversation about the value of higher education. Unless we are able to assess what students have learned, how can we show the true value of education? Without assessment, making informed improvements is difficult. A robust and diverse assessment plan for courses and programs pro-
<table>
<thead>
<tr>
<th>Issue</th>
<th>2016 rank</th>
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<tbody>
<tr>
<td>Academic Transformation</td>
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<td>Faculty Development</td>
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<td>Assessment of Learning</td>
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<tr>
<td>Online and Blended Learning Learning Analytics</td>
<td>4</td>
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<tr>
<td>Learning Space Designs</td>
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<tr>
<td>Accessibility and Universal Design for Learning</td>
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**ELI Key Issues**

**past 2 years**

*(top 7 only)*
## ELI Key Issues past 2 years (top 7 only)

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<thead>
<tr>
<th>Issue</th>
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<th>2015 rank</th>
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<tr>
<td>Learning Space Designs</td>
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<tr>
<td>Accessibility and Universal Design for Learning</td>
<td>7</td>
<td>12</td>
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</table>
Ways to use the ELI Key Issues

• “checkmarking” your unit’s/institution’s work
• identifying areas of strategic emphasis
• initiating the conversations with stakeholders
• compare with Horizon Report results for a comprehensive view
• compare to the EDUCAUSE Top Ten IT issues for learning/IT synergies
26 videos
24 different institutions
5 countries
5 developments in ed tech

http://tinyurl.com/ELI16vids
4 Key Questions

1. What problem were they trying to address
2. Why did you choose this technology
3. What change management or cultural leadership was needed
4. Impact of project
The University of Texas at Austin

Category: Adaptive Learning
Pharmacy Adaptive Learning (PAL)

Ken Tothero
The Challenge
The Challenge

Wide variance in entry level knowledge in four core subject areas:

- Biology
- Chemistry
- Information Literacy
- Mathematics
PAL Project Team

Learning Sciences

College of Pharmacy

College of Education
Identification of Adaptive Tool

• 2013 RFP process
• An adaptive learning tool was one of 5 elements in that RFP
• 4 tools were evaluated and LeaP was a winner based on a combination of features and pricing
Content Development

Learning Outcomes

Assessment Items

Content Library
Aligning Objectives, Assessment, Content
1. Amines are most similar in chemical structure and behavior to
   - A. a primary alcohol
   - B. the hydronium ion
   - C. water
   - D. ammonia
   - Don't know
   Source not available

NOT ATTEMPTED

Recommended Reading:
   - Ethers vs. Alcohol solubility.docx
   - Amines as Bases

2. Propan-2-ol is a ________ alcohol.
   - A. Primary
   - B. Secondary
   - C. Tertiary
   - Don't know
   Source not available
Phenol_pKa

Substituents on the phenol benzene ring can alter the pKa of the phenol functional group:

\[
\begin{array}{cccc}
\text{OH} & \text{OH} & \text{OH} & \text{OH} \\
pK_a & 16 & 10.0 & 10.2 & 9.2 & 7.7 \\
\end{array}
\]

First, note that phenol (pK_a = 10) is much more acidic than cyclohexanol (pK_a = 16).

Second, note that phenols that have electron-donating groups attached to the benzene ring (e.g., OCH3) are slightly less acidic than phenol itself (e.g., pK_a = 10.2 for 4-methoxyphenol vs. pK_a = 10 for phenol).

Third, note that phenols with electron-withdrawing groups attached to the benzene ring (e.g., Cl, NO2) can be much more acidic than phenol itself (e.g., pK_a = 0.3 for 2,4,6-trinitrophenol vs. pK_a = 10 for phenol).
Phenol_pKa

Substituents on the phenol benzene ring can alter the pKa of the phenol functional group. First, note that phenol (pKa = 10) is much more acidic than cyclohexanol (pKa = 1). Second, note that phenols that have electron-donating groups attached to the ring are more acidic than phenol itself (e.g., pKa = 10.2 for 4-methoxyphenol vs. pKa = 10 for phenol). Third, note that phenols with electron-withdrawing groups attached to the benzene ring are less acidic than phenol itself (e.g., pKa = 0.3 for 2,4,6-trinitrophenol vs. pKa = 10 for phenol).
Phenol_pKa

Substituents on the phenol benzene ring can alter the pKa of the phenol functional group:

First, note that phenol (pKa = 10) is much more acidic than cyclohexanol (pKa = 16).

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Recommended Reading
- Chapter 19: Carboxylic Acids
- Amine_pKa
- Ch20: Hydrolysis of Esters
Research

- Impact of adaptive learning reviews on student performance
- Relationship of non-cognitive and demographic variables to engagement with the reviews
- Student experience of using LeaP tool
Findings

• Statistically significant learning gains in:
  – Biology
  – Chemistry
  – Information Literacy

• No impact of Mindset

• Students with higher levels of math anxiety – opted out of the math review in greater numbers

Ken Tothero – University of Texas, Austin
Thanks to:

• Learning Sciences: Phil Long, Josh Walker, Stephanie Corliss
• College of Pharmacy: Pat Davis, Kamran Ziai, Doris Adams, faculty members, and students
• College of Education: Min Liu, Emily McKelroy
St. Norbert College
Category: **BYOD**
BYOD Computer Science Lab

Krissy Lukens
Director of Academic Technology
St. Norbert College
St. Norbert College Begins Construction of New Facility to be Named Gehl-Mulva Science Center

From St. Norbert College, February 19, 2013
by Mike Counter, mike.counter@snc.edu, 920-403-3089

St. Norbert College's board of trustees gave approval on Friday, Feb. 15, to begin construction in March on the college's new state-of-the-art science facility, to be named the Gehl-Mulva Science Center. The naming donors are Paul O. and Carol H. Gehl and James J. and Miriam B. Mulva. The new facility will replace John R. Minahan Science Hall, which is almost 50 years old. It will allow St. Norbert faculty and undergraduates to work on the leading edge of science and mathematics.
In January, CS moved to “old” science building “temporary” lab – existing equipment. Also used a general purpose lab.

“Temp” lab unchanged but general purpose lab is replaced with VDI. Phase I of science building construction underway.

CS moves to a classroom in completed Phase I of science building. Uses laptops. Continues to use existing VDI lab. Phase II construction underway. Required BYOD announced.

CS moves to their new computer lab. Graphics node added to VDI environment.
Computer Lab Requests

Using existing furniture and existing equipment

• Furniture/workstations need to facilitate group work or students working in pairs.

• Ability to plug into an external monitor – especially when instructor is helping students 1:1.

• Raised floor for greater flexibility in furniture design.

• A space for TAs to work with students or small-group work.
Change over Time

New furniture and phased in BYOD

- No fixed computers.
- Plugging into external displays with Extron “show me” cable.
- “Presentation” and “Collaboration” mode
- DaLite IDEA board
- Movable soft seating for space for robotics
New Ideas

Introducing the new IDEA line. The first and only line of projection screens that provide the functionality of a dry erase board without sacrificing the ability to display a clear, vibrant image. With no glare and interactive capability - that's a good idea.
Hey all. I mocked up a demo with a 32" tv (tho not the same from the install).

I don't think this arm isn't going to work. The tape represents 1/4 of the total table size tape edge is at 30" and table is 24" deep, representing the space one student would have.

The arm isn't long enough to put the center of the monitor at the mid point of the table, thus not making a comfortable viewing experience for the second student. Also the arm isn't very strong I have the tension maxed and it still sags. I think it will be important for the user to manipulate the height and have it stay where they put it. The plate pivot knuckle where the monitor connects to the arm is all loosey goosey. I think for single use it might be pretty sweet, I kind of want one for my desk. Tandem use i don't think it'll be workable.
Version 1.0

Version 2.0

Huddle boards on pillars
Displays mounted on side
Soft seating in center
Table with cable cubby
What Works

• swivel monitors portrait/landscape
• huddle boards
• soft seating
• white board space
• vLab (common working environment)
• pair programming

Things to Consider

• “lab” or “classroom”
• “sleep” mode of displays
• line-of-sight
• no windows
Secrets for Success

• Listen
• Be flexible
• Little details make a big difference
• Communicate often and honestly
• Document meetings
• Be present (Back-to-School-Blitz)
• Be committed
<table>
<thead>
<tr>
<th>Trust</th>
<th>Vision</th>
<th>Skills</th>
<th>Resources</th>
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<td>Action Plan</td>
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<td>False Starts</td>
</tr>
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</table>
“Nobody should feel bad here. Everyone has worked hard at finding a solution. It’s still exciting to see the potential for this lab.

Thanks to all for not giving up. We’ll get there!”

dcp

“We really appreciate the attention you all have given to make this space work for us.

And it REALLY helped students have a solid learning experience this week. I was able to prep them at the grease board, project a demo in presentation mode, and then they worked in pairs using the collaboration mode.

GOOD STUFF”
Penn State University
Category: Makerspaces
Maker Commons: 3D Printing and Rapid Prototyping

Ryan Wetzel
Manager, Media Commons
Media Commons

- Central IT service
- Focus on teaching, learning, and creativity with digital media and storytelling
- 14/15: 16,000 students, faculty, staff helped
25 Locations at 21 Campuses

- Standard issue equipment:
  - editing iMacs, microphones, cameras, One Button Studio
Maker Commons

A university-wide initiative to enrich the teaching and learning experience through 3D printing, rapid prototyping, design thinking and direct support for students, faculty and staff.
MakerBot Innovation Center

- 32 MakerBot 5th Gen Replicators
- W136 West Pattee
- PLA filament - cornstarch-based
- Submit prints online
- Future-proof ventilation enclosure
- Opened mid-February 2016
Supporting Technologies

- 3D Scanning methods (white paper @ tlt.psu.edu)
- Simple 3D modeling using TinkerCAD
- Support for thingiverse.com
Rapid Prototyping featuring littleBits

- 2 Pro Libraries, several student and synth kits
- W138 West Pattee - the Invention Studio
- 4 Custom Maker tables
- LEGO as raw materials
- Invention as homework
- Opened late-February 2016
Spring 2016 Course Partnerships

- Mechanical Engineering 340
- English 202 - Technical Writing classes
- Information Sciences & Technology 437 - Entrepreneurship
- Engineering Design 100
Impact

• Data from first three weeks of service (Feb 10th - Mar 2nd)

• 415 Penn State users

• 3,800 hours of print time across 32 printers

• 610 successful prints (73.5% success rate)

• 24 new print requests per day on average

• 64.5g average filament per print
Contact

@ryanwetzel
rlw32@psu.edu

mediacommons@psu.edu
mediacommons.psu.edu

makercommons@psu.edu
makercommons.psu.edu
Minnesota State University, Mankato
Category: **BYOD**
The Maverick Course Learning Assistant for Student Success (MavCLASS) App

Promoting Constructive Learning and Personal Behaviors to Build Lifelong Learning and Promote Student Success

Presented by: Ted Johnson, Lindsy Mason, Ph.D., Henry Morris, Ph.D., Matthew Potocnik, Guarionex Salivia, Ph.D., Ginger Zierdt, Ph.D., Jude Higdon, Ed.D.
MAVCLASS: WHAT, WHY AND WHO?

What:
The Maverick Course Learning Assistant for Student Success (MavCLASS) app is a personal learning assistant designed to empower MSU students by motivating proactive, self-regulated learning behaviors that have been shown to correlate with positive learning outcomes (Schunk, 2005; Wolters and Hoops, 2015).

Why:
By providing study, planning and action prompts and help support (such as organizing notes, conducting research, drafting outlines, etc.) well in advance of assignment due dates, the app seeks to scaffold the process of building a more active, engaged framework of self-regulated learning behaviors that will lead to:
• Improved efficacy,
• Lower anxiety,
• Higher attainment of content mastery,
• Better performance on assignments and assessments, and
• Lifelong learning skills among MSU learners.
MAVCLASS: WHAT, WHY AND WHO?

The major goals of MavCLASS are to:

• Prompt students to engage in proactive, self-regulated learning activities that will help them achieve;
• Leverage media channels (mobiles) that are more likely to garner student attention;
• Simplify the process of communication between instructors and students; and
• Empower instructors and advisors to see learning and administrative behaviors and intervene when issues are manifest.

Encouraged and supported through recommendations by each of the four Academic Master Plan Extraordinary Education Task Forces:

• Foster the growth of all faculty and staff in the adoption of appropriate instructional support technologies and innovations (Teaching Excellence & Innovation);
• Implement Advising (and Student Support) Technological Tools to Full Capacity (Advising);
• Change the culture around engagement pedagogies employed within our classrooms (Academic Engagement Programs and Opportunities);
• Utilize learning competencies/outcomes associated with scholarly thinking (Research, Scholarly, and Creative Activity)
MAVCLASS: WHAT, WHY AND WHO?

As of March 1, 2016:

- English 101 (2 sections): 23 users, 16 notifications
- English 103: 9 users, 7 notifications
- IT 101 (2 sections): 43 users, 29 notifications in each section
- KSP 220W (2 sections): 3 users, 3 notifications
- Math 098 (3 sections): 11 users, 24 notifications in each section
- Student Deadlines: 75 users, 2 notifications sent
MAVCLASS DEMO
OUTCOMES TO DATE

Student survey for 40 pilot students yields interesting results:

• Nearly 90% of students reported positive generalized motivational benefits;
• About 80% of the students reported a positive affectual response to the app;
• Between 60-70% of students reported a positive change in motivational behaviors due to the alerts;
• About 45% of students reported feeling more connected to the instructor and the learning community; and
• About 45% of students reported feeling as if they were better students because of the app.
ROADMAP FOR MAVCLASS

Current and future areas we’d like to explore:
• Further integration with University calendar;
• Integrate with Microsoft PowerBI for analytics;
• Roll out to additional courses in spring 2016 and campus-wide launch fall 2016;
• Integration with D2L, Hobsons and other third-party tools;
• Round-trip development into Gates-funded MavCLASS tools; and
• Evaluate and publish on the results (IRB-approved).
THANK YOU!

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Initial P.I. for the MavCLASS Grant
Lynn Akey, Ph.D.
REFERENCES


26 videos
24 different institutions
5 countries
5 developments in ed tech

http://tinyurl.com/ELI16vids