

Technology News & Innovation in Higher Education

# eCN

eCAMPUS NEWS  
eCampusNews.com

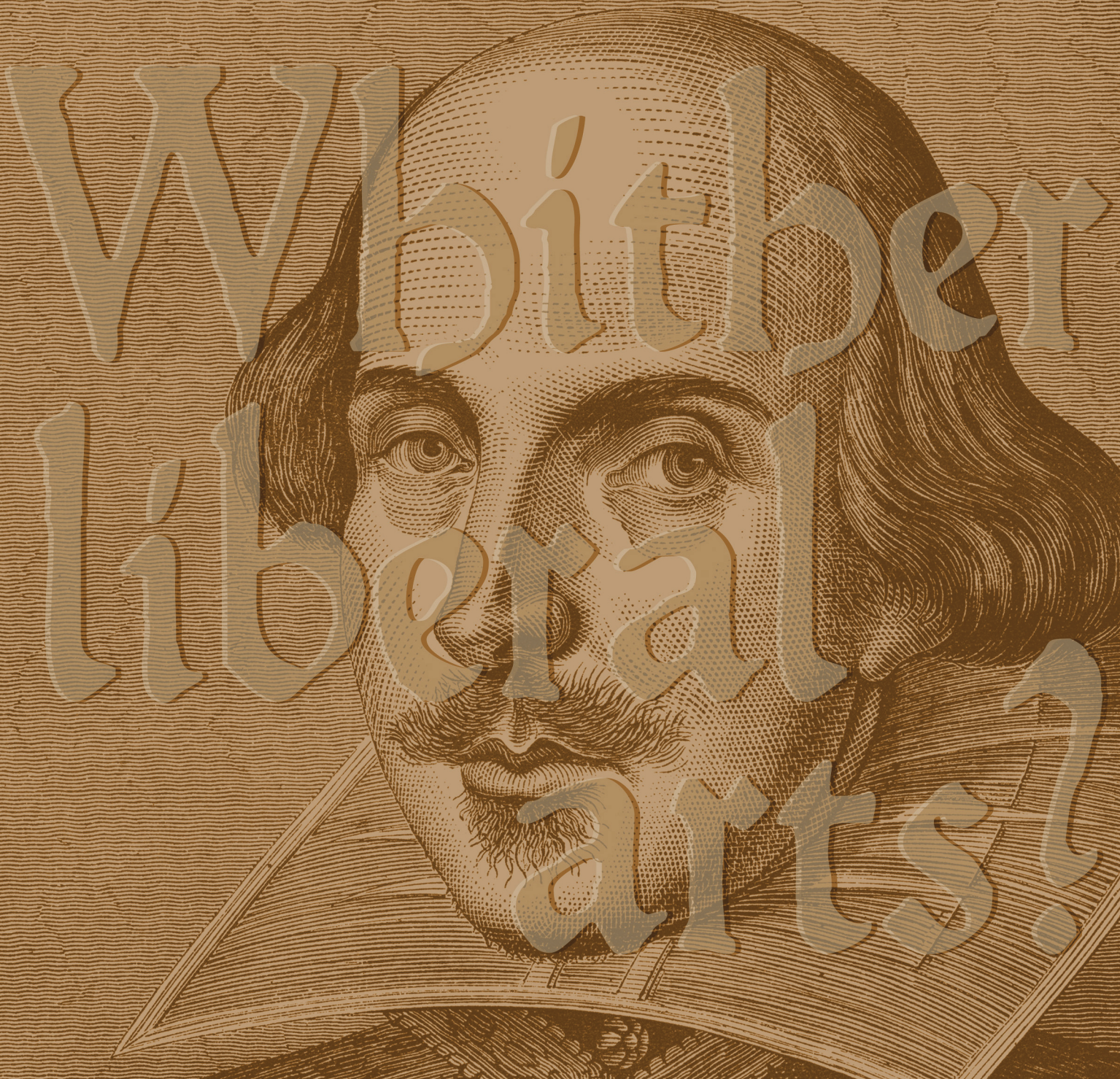
Vol. 8 No. 2  
Mar/Apr 2015

## Whither Liberal Arts?

Can liberal arts survive in an age that seems to value efficiencies and returns, but not the slow, percolating effects of a classic liberal arts education?

## College presidents predict new institutional models

Presidents say these new models could be the future of all colleges and universities in the next decade.



# BRIGHT MINDS FOCUS ON PERFORMANCE AND VALUE

## EXCEPTIONAL COLOR AND DETAIL



Genuine Canon  
Projection Lenses



Canon-Engineered  
Color Management



High-Resolution  
WUXGA (1920 x 1200)



3-Year  
Projector Warranty



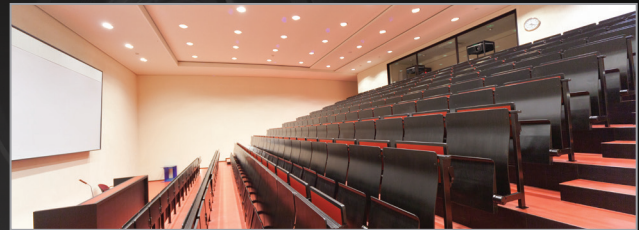
REALiS  
WUX6000



TAA Compliant Product

## THE SMART CHOICE IS CANON'S REALiS WUX6000 INSTALLATION LCOS PROJECTOR.

When educating the leaders of tomorrow, Canon's new REALiS WUX6000 Pro AV Installation LCOS Projector is a study in superb performance and affordable quality. Displaying bright, seamless images with highly accurate color and intricate detail, even small text and notations, and beautiful Full HD video, this 6000 lumen high-resolution WUXGA (1920 x 1200) widescreen projector is ideal for a wide range of curriculum from medicine and engineering, to business and fine art. Impressive features include a selection of optional Genuine Canon projection lenses to suit virtually all applications and throw distances, and extensive connectivity via HDMI, DVI and other leading network interfaces. All this, plus a 3-Year Warranty for peace of mind, and a price that will please the most educated eye.



*The Canon REALiS WUX6000 Pro AV Installation LCOS Projector displays exceptional brightness and impressive detail even in well-lit classrooms and lecture halls.*

To learn more about Canon's REALiS WUX6000 Projector, or to schedule a free in-person demo, visit:

[pro.usa.canon.com/WUX6000/Edu](http://pro.usa.canon.com/WUX6000/Edu)

REALiS  
LCOS PROJECTORS

Canon

# Contents

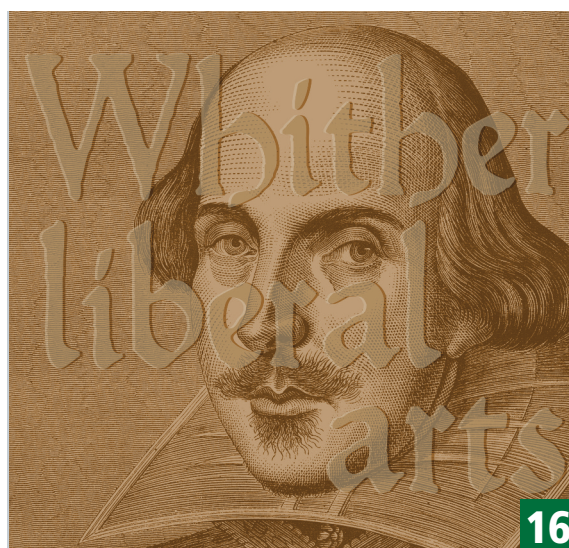
Vol. 8, No. 2

MAR/APR 2015

## SYMPOSIUM

### 16 Whither Liberal Arts?

Can liberal arts survive in an age that seems to value efficiencies and returns, but not the slow, percolating effects of a classic liberal arts education?



## THOUGHT LEADERSHIP

### 10 College presidents predict new institutional models

Presidents say these new models could be the future of all colleges and universities in the next decade



## INNOVATION IN IT

### 4 10 ways to ensure maximum tech effectiveness at your institution

With an abundance of technology solutions and tools, IT must ensure systems support their institutions' goals effectively and affordably. Here's how.



## TECH-ENABLED TEACHING

### 22 How to apply game-based learning to course curriculum

Two leading researchers of game-based learning discuss best practices for enriching course curriculum through the integration of consumer games.

### 24 Online Update

### 26 Fast Facts

# 10 ways to ensure maximum tech effectiveness at your institution

With an abundance of technology solutions and tools, IT must ensure systems support their institutions' goals effectively and affordably. Here's how.

**By Andrew Barbour**

Just two years ago, higher ed CIOs were scrapping for a seat at the table. Now they're firmly in the hot seat.

In that short span, IT has become so central to campus operations that its performance has a direct impact on the quality of teaching and learning. Furthermore, with the consumerization of IT, faculty and student expectations have risen dramatically, leaving IT little room for error, whether in the wireless network or the LMS interface. To thrive within this cauldron, IT must develop policies and best practices to help it evaluate, implement, and then re-evaluate the systems on campus. *eCampus News* looks at 10 keys for success:

**1) Maintain tech flexibility.** Like it or not, students and faculty expect tech services that rival what they can find off-campus. Meeting those expectations is almost impossible if your school is tied down by unwieldy legacy systems. "It used to be that our environment was one massive ERP system like Banner or PeopleSoft, and we would use only the tools that were inherent to Banner or PeopleSoft," said Paige Francis, CIO of Fairfield University in Connecticut. "As we rely on more and more technology solutions, we're now looking for smaller components that might integrate with larger components. We are at a point where we have decided not to count anything out."

As long as additional components are compatible with Banner (the release of web-based

Banner XE is expected to make interoperability far simpler), Francis treasures the flexibility of being able to scout other solutions. The school is currently looking at Salesforce.com, for example, as a possible new CRM.

In the fizzing tech sector, it's also important to remember that today's hot product may be yesterday's news. Schools should be wary of entering into long contracts with companies that could become has-beens in a few years. "The last thing that you want is to get roped into a 10-year contract," explained Francis. "I would take a one- to three-year contract, but I would also want language that gives us an out in certain circumstances, because technology is moving so quickly right now."

**2) Establish requirements.** It's no good evaluating potential tech solutions if IT is unclear what problem it's trying to solve in the first place. "It's really important that due diligence is done at the very beginning before you even look at a system and that you understand what you're trying to accomplish," explained Toni Raftery, associate program director for the MBA and MSL (Science in Leadership) programs at Norwich University in Vermont.

As an example, Raftery pointed to Norwich's contract-renewal process for adjunct faculty, which was beset by problems. "Before I even looked at a technology, I wanted to map out the process," she recalled. "I got all the major stakeholders into a room, and we spent a half day talking about how we could make the process

better." In the course of this research, she unearthed myriad workflow issues and unnecessary routing of documents.

She also discovered that processing the contracts each term took 14 days, cost \$2,670, and consumed 61 minutes of staff time per contract. Only after Raftery had a firm grasp of the problem at hand did she begin her search for a tech solution. Ultimately, the school selected OnBase, which was already in use in the admissions office.

"Before implementing any technology, the most important thing is the process," advised Raftery. "If it's a bad process and you try to throw it into a technology system without doing all the pre-work, it's going to be a disaster. Technology isn't always the answer."

It's also important not to develop a requirements document in a vacuum. Colleagues at other institutions and organizations can often share insights (see *Talk to Other Institutions*, below), as can vendors. At the University of Wisconsin-Madison, IT sends a Request for Information to vendors to help the school flesh out its requirements document.

"We put an RFI out so that vendors can tell us the state of the most contemporary e-commerce system, for example, along with the latest features and benefits'," explained Brian Rust, communications director for the Division of Information Technology at UW-Madison. "We may say, 'Gosh, we hadn't thought about this other aspect of e-commerce, but it would be great to include it in our Request for Bid.'"

**3) Secure buy-in.** Nothing, it seems, ticks faculty off more than the feeling that IT is shoving tech solutions down their throats. Indeed, failure to secure buy-in (along with lack of faculty training) may be the leading cause of tech death on campuses. The process of winning faculty and staff support needs to be an integral part of how IT operates, and success begins with ensuring that feedback loops are in place (see *Solicit*

*Feedback*, below). If faculty and staff feel they've been heard, they are far more likely to sign up for the ride.

Even with established feedback loops, additional strategies can increase the chances that a system will be successfully adopted on campus.

As viral marketers have discovered with online media, it's worth targeting those tastemakers on campus whose opinions are highly regarded. It's equally important to pull in those naysayers who are most likely to torpedo an initiative, as Raftery learned during her faculty-contract project. "When I put my team together, I purposely chose people who would probably resist change the most," she recalled. "Even though it definitely made some of the meetings more difficult, it was key to implementing the new system. I made sure they were involved from the start and I let them get all their concerns out."

#### **4) Analyze the vendor, not just the product.**

It's important to remember that, in most cases, a school is not just buying a product: It's also hiring the company that will likely provide service for the product. It's worth researching the service reputation of vendors as part of the due diligence, and looking for clues that the school's business is actually important to the vendor. When Norwich University was shopping for a new LMS, for example, vendors were invited to fly up to the Vermont campus to demonstrate their products. "Flying to Vermont is quite a thing," explained Raftery. "It's like, 'How badly do you want our business?'" Four vendors accepted the invitation; one, whose product was one of the initial front-runners, declined. Needless to say, it didn't get the contract.

**5) Solicit feedback and more feedback.** The need to obtain feedback from stakeholders and constituents is hammered home at almost every gathering of higher ed IT leaders—for good reason. Feedback is far and away the most important element for ensuring that IT's systems

provide value and support the school's mission. Yet, among faculty and staff at institutions nationwide, the failure to consult them continues to be seen as one of IT's biggest weaknesses.

How IT shops solicit feedback from their constituents varies from institution to institution, often depending on their size. At smaller institutions, the process is often more casual and organic, but establishing formal feedback loops ensures both transparency and inclusiveness.

Regularly scheduled meetings, either in groups or one-on-one, have proven their worth. At Fairfield University, for instance, Francis meets once a semester with the deans and the associate deans from each school and college to gather feedback. It's a similar story at UW-Madison. "We talk to customers quite a bit about how their work habits are evolving, and how their requirements are changing," said Rust. "We ask them whether the tools, services, and resources are in need of change."

Most schools also have a committee that serves as a liaison between faculty and IT. At Fairfield, for instance, the Educational Technologies Committee compiles faculty feedback on new systems and IT issues. "It's faculty-led, faculty-driven," noted Francis. "A few of us from administration attend but we don't have voting privileges. We've got a good mix of individuals around the table."

As the customer who's ultimately footing the bill, students need a voice, too. UW-Madison operates a Student Advisory Group of about 25 students who meet every month. "We ask them for feedback on a variety of specific topics," said Rust. "That feedback is channeled back into adjustments and improvements to the services we provide."

The other tried-and-true feedback mechanism is surveys. UW-Madison does an annual survey of a sample of faculty and staff to get their input on core IT services, and also conducts an annual survey of students. For its part, Fairfield partici-

pates in the annual EDUCAUSE Center for Applied Research (ECAR) survey, which goes out to a sampling of faculty and students on campus. "It allows us to get feedback not only on what we're doing right, but also to gather information about what tools individuals are using," said Francis.

But Francis cautions against surveys that don't include a text box. "You need to give people that open forum to give you feedback on how things are working," she noted. "It can either identify, 'Hey, we need to locate a new solution,' or 'Here's a training opportunity.'"

**6) Talk to other institutions.** No school on its own can hope to stay on top of the rapid developments in the tech world, so it's important to tap the knowledge and experience of colleagues at other organizations. UW-Madison, for example, looks to a variety of outside groups including EDUCAUSE; the Committee on Institutional Cooperation, which comprises the Big Ten schools plus the University of Chicago; as well as various professional organizations that cover everything from networking to IT security.

"We keep in regular contact with them regarding best practices and issues," said Rust. "We discuss what issues we're seeing, plus we keep an ear toward what's going on in the commercial sector."

It's a similar story at Fairfield University, which turns to sister schools in the Northeast Regional Computing Program (an associate of EDUCAUSE), as well as the 28 institutions in the Association of Jesuit Colleges and Universities. "When I have questions about any service or software, I get immediate feedback from 27 of my peers, who may be a step ahead of us or a step behind," said Francis. "We really rely on each other for these decisions."

**7) Conduct pilots.** In this era of heightened service expectations and cost containment, no school can afford to put in a system that simply doesn't cut it. "We don't just plug-and-play and



## Powering virtual and personalized learning with **Cox Business solutions.**

Higher education requires a higher degree of information technology. Cox Business delivers. We offer advanced solutions customized to drive virtual and personalized learning. We offer voice, data/networking and TV/video solutions tailored to meet the growing needs of your campus.

Visit us online at [www.coxbusiness.com/highered](http://www.coxbusiness.com/highered) or call us at **866-419-6026**.



then stop using a system if people don't like it—we don't have that luxury," said Rust. "Our audiences have extremely high expectations for reliability, security, integrity of data, and processes."

Enter the pilot project. Pilots not only give schools a chance to test a system before they invest in it—but they also give IT a chance to work out any kinks. Fairfield University, for example, has just completed a cutting-edge classroom featuring mobile furniture, multiple whiteboards, and a projection system that can be controlled from any device. For now, teachers can only sign up to use the room for one-off trial classes, and must agree to provide feedback on the room's performance.

"It's something we can do upfront before we mirror this classroom across campus," explained Francis. "We're doing it in baby steps to find out what we're doing right before we invest that money."

A pilot project also helps introduce the product to the broader campus community in a non-threatening way. "Whenever I launch a project, I always run it as a pilot first," said Raftery. "People are a little more forgiving because nothing works exactly the way you think it's going to."

**8) Set goals and measure performance.** The task of measuring IT performance is best divided into two spheres: technical infrastructure and public-facing systems. For the most part, the performance of technical infrastructure, such as networks or virtual servers, can be minutely monitored. Monitoring tools are available across the spectrum and often provide real-time visibility into the performance of IT systems. Given the availability of all this performance data, the decision to keep, upgrade, or replace a system can be calculated with a certain degree of precision.

Establishing metrics for public-facing systems, on the other hand, is far muddier. "It's easier to monitor the network than it is to monitor a researcher's satisfaction with the suite of soft-

ware and other tools that we make available," said Rust, who emphasized the importance of feedback to help gauge the performance of these systems. "When you start benchmarking an LMS, say, we may set a combination of more technical metrics—uptime and response time—and softer benchmarks including satisfaction with a particular system or set of tools."

Given these "softer benchmarks," the holy grail of calculating return on investment becomes a pipe dream. "Calculating ROI is almost impossible," said Francis. "At the administration level, so much of it is intangible. Although we may identify a solution that saves a student time and possibly money, we never see those savings because it's the student's time and the student's money."

**9) Train faculty and staff.** Campus IT could install the best technology solution on the planet and it wouldn't be worth a hill of beans if faculty and staff were unable or unwilling to use it. It's also no secret that faculty training is one of the toughest tasks on campus—technology is simply not a faculty focus. While IT's first responsibility is to implement solutions that are as intuitive as possible, that's only the beginning.

"Many people in higher ed don't focus enough on the training of faculty and staff on these new tools," said Francis, who noted that recent ECAR surveys showed that Fairfield students felt faculty don't have enough knowledge about the technology they're using in class. "That was one of the biggest indicators that we need to focus more on training. We're not going to roll something out unless we also have a bag of money to train our campus."

**10) Live with compromise.** No matter how many surveys, product assessments, and requirement-gathering sessions are conducted, it's impossible to meet every constituent need. A case-in-point is what happened at UW-Madison when it attempted to whittle down the number of e-mail/calendaring systems on campus from



30 to just 1. Among many faculty and students, Google was the hot favorite, according to Rust. But one of the key requirements was that all data be stored in domestic servers because of its often-sensitive nature. Some faculty and staff, said Rust, "didn't really think about that, because they're only thinking about what they might need in particular."

Several other vendors were disqualified on the same grounds. Ultimately, UW-Madison decided to go with Microsoft Office 365. With IT caught between compliance regulations and myriad

user preferences, it was the system that met the most campus needs.

"Regardless of how thorough you are in collecting requirements and getting input, there will be people who will not be satisfied with your solution," said Rust. "You have to understand that, otherwise you'll be constantly conflicted about whether your services are satisfactory or meeting the need." **eCN**

---

*Andrew Barbour is an editorial freelancer with eCampus News.*



Whether at home, at work, or on the road,  
you can keep up with eCampus News 24/7.

**Login and learn!**

**[eCampusNews.com/social](http://eCampusNews.com/social)**

# College presidents predict new institutional models

Presidents say these new models could be the future of all colleges and universities in the next decade

A new think-tank-esque collection of leading college and university presidents came together to discuss the trends and disruptions shaping higher education, thanks to new technologies and the evolving global economy. Outside of just naming trends, they also predicted new models of higher-ed that may exist in the next 10 years.

The brainstorming made formal can be found in a series of papers called the Presidential Innovation Lab (PIL) **White Paper Series**, funded as part of a grant from the Bill & Melinda Gates Foundation and hosted by the **American Council on Education** (ACE).

Here, *eCampus News* asked seven of the participants part of the American Council on Education's PIL—convened in the fall of 2013—to give their thoughts on the new college and university models of the future.

[Listed in alphabetical order by last name]

## Personalized learning trumps all



By **Chris Bustamante**, president of Rio Salado College

A redesign of the traditional higher education model is underway. Change-agent institutions that use data to drive evidence-based decision making are exploring and implementing next generation learning models and pushing beyond the limits of tradition. Student-centric institutions that are nimble enough to respond to the changing landscape of higher education are the colleges and universities of the future.

Higher education models of the future will be based in personalized learning, customized to the

needs of the individual student. Predictive analytics will become a standard for learning management systems and support high-tech, high-touch outreach. Real-time dashboards will tell students how they are doing in their coursework and where they are on their pathway to a degree. These dashboards will also be visible to faculty and college staff, who can in turn encourage persistence through appropriate interventions.

As we move into the future the credit hour will continue to be used for administrative and financial purposes; however, learning models such as competency-based education which demonstrate improved student learning outcomes will replace seat time as a learning measurement. These learning models will also recognize learning that takes place outside the classroom and enable students to move forward in coursework at their own pace as they demonstrate content competency. In addition, credit awarded for prior learning will be widely recognized and more easily transferable between institutions nationwide.

As funding revenues continue to decline, institutions will reset their business models to include an increase in public and private partnerships to leverage resources from these relationships. We will also see a leveraging of resources across institutional boundaries and programming that avoids duplication within regional ecosystems of higher education.

---

*Rio Salado College serves nearly 59,000 students annually with more than 30,000 students online.*

*Dr. Bustamante is an advocate for increasing access to higher education and degree completion, and for forging partnerships with business, government, and other educational providers.*

## A new American research university



By Michael Crow, president of Arizona State University

Change at research institutions over the course of the next decade will likely be only incremental.

Despite the urgent need to provide advanced levels of

education to a broader demographic sector, most research universities are content to maintain modest enrollments and turn away the majority of academically qualified applicants.

Transformation of American higher education is however the objective of the New American University model, which I envisioned when I became president of Arizona State University. At ASU I have led a comprehensive reconceptualization of the nation's largest public research university to facilitate accessibility to a research-grade education. ASU serves as the foundational prototype for the New American University, which is predicated not only on academic excellence, but also inclusiveness to a broad demographic as well as maximum societal impact. The reconceptualization is discussed as a case study in the book I coauthored with William Dabars, *Designing a New American University* (Johns Hopkins University Press, 2015).

Accessibility to research-grade academic platforms is similarly the context for the formation of the University Innovation Alliance, a consortium of large public research universities that endeavors to promote student success, especially to socioeconomically disadvantaged students. In addition to ASU, our eleven member institutions include Ohio State and the University of Texas, Austin.

---

*Dr. Crow became the 16th president of Arizona State University on July 1, 2002.*

## 5 revamped models, and 1 new model



By John F. Ebersole, LPD, president of Excelsior College

**1. Four-year community college:** Florida and California have recently designated community colleges with specific expertise

and reputation as bachelor's degree granting institutions, in those fields. Students will benefit as they avoid the long vexing and costly problem of not having their lower division credits accepted.

**2. Private systems:** Following the decades-old model of hospitals, private colleges will increasingly move to merge and share services. Thanks to technology, geography and distance won't be factors. Following in the footsteps of the Claremont Colleges and the Colleges of the Fenway, we are seeing a variety of affiliations occur; these range from sharing library resources, as Johns Hopkins does with smaller schools all over the U.S., to "takeovers" like those of John F. Kennedy University in California, and City University of Seattle, by National University.

**3. Completion colleges:** These mostly public institutions are not particularly new. Most were founded in the 1970s but have been recently "discovered" by the Lumina Foundation and others, as specialized sources of expertise in helping adult learners to complete degrees. Inexpensive and progressive, these niche colleges help adult transfer students who have accumulated credit and relevant experience but need guidance in terms of pulling it all together. With their focus on the working adult, these schools do not typically serve traditional aged students.

**4. Flagship networks:** This model is being pioneered by Northeastern University. Instruction is distributed from Boston to its growing number of "Graduate Centers." A hybrid format com-

bines face-to-face instruction with online. Centers now exist in North Carolina, Washington state and California.

**5. The “franchise” model:** Western Governors University (WGU) has established a network of state affiliations which are largely student recruitment vehicles, offering some localization. The states now on board include Indiana, Texas, Tennessee, Missouri, and Washington. Instruction primarily originates from the Utah campus for all.

**New model – global university:** A totally new model will be the emergence of the Global University Network through which U.S institutions will serve students in other parts of the world, and domestic students will have access to learning from abroad. With half the world’s population under the age of 25, access to higher education must take on new forms. Here may be a place for the next generation of MOOC.

---

*Dr. Ebersole, president of Excelsior College, was a member of the inaugural American Council on Education “Presidential Innovation Lab,” convened in the fall of 2013. The imagining of new types of academic institutions was a part of this experience. This, and other, outcomes from the “Lab” are [available on the ACE Web site](#).*

## ROI as the basis

**By Shawntel Landry, provost and interim president of American College of Education**



There are three key external pressures that will drive new institutional models. The first is the deflationary pressure on tuition. In the retail marketplace, a consumer wants to know what she is getting for her hard earned dollar. However, consumers of education (i.e. students) routinely purchase on name, family experience, and reputation. Yet, the student of the future will want

more for less. This new mindset will drive down tuition rates of many institutions as students become more cost conscious.

Instinctually, colleges will then look to differentiate, which brings us to the second external pressure – better measurements of instructional outcomes. Currently, we measure institutions by faculty ratios, research dollars, and institutional statistics. But rarely do we see actual measurement of instructional outcomes. This will spark studies, debates, and a litany of attempts to best determine if the student is actually receiving the knowledge that she purchased at enrollment. In the end, schools will need to be able to prove

*Effective use of technology for both college efficiencies and student learning will be key to the college that delivers on its promise.*

that they are better than their peers at instructing students. They must prove that the education was worth what students paid.

Which gets us to the final pressure: The only way that any school will survive in this future is to embrace technology in the education process. There is no single capability that can reduce price and track instructional outcomes like technology. We must embrace this change and recognize that countless studies prove that when done properly remote learning gets the job done, and gets it done well. Effective use of technology for both college efficiencies and student learning will be key to the college that delivers on its promise. After all, the primary job of a college is to deliver on the mission of educating students, and that should take primacy over all else.

---

*Dr. Landry has spent more than 20 years in education at both the classroom and administrative levels, and served as a curriculum development consultant for online schools.*

## An unbundled learning eco-system



By Paul LeBlanc, president of Southern New Hampshire University

Competency based education (CBE) and micro-credentialing (giving credits and financial aid for learning that is less than a

degree) will combine to change the face of higher education over the next ten years. We are shifting to outputs (the claims we make for student learning and how we know for sure), and when we make that final shift we will worry a lot less about how we get students there and more about what they actually know and can do with that knowledge. Then, a host of new delivery models, providers, and credentials will emerge. With clusters of competencies adding up to credentials of various levels, we will see portable, stackable, and just-in-time learning that often precedes (but leads to) a traditional degree and that frequently adds to a traditional degree as people continue to retool and learn at every stage of their lives.

Think of it as a new learning eco-system in which traditional higher education becomes unbundled, students construct their learning pathways (or have someone do it for them) in highly individualized ways, and those pathways draw upon various providers, forms of learning, and include a wider array of credentials all mapped to competencies.

---

*Dr. LeBlanc is president of Southern New Hampshire University in Manchester, NH*

## Disaggregated faculty roles

By Robert Mendenhall, president and CEO of Western Governors University (WGU)

Over the next decade, there will be an increased emphasis in measuring learning rather



than time and increasing accountability for learning results. Instead of progressing according to set course times, students advance as soon as they can demonstrate that they have mastered course subject

matter. This model provides shorter times to graduation, saving students time and money. In addition, there will be an increased focus on tying competencies to industry needs. There will continue to be an increasing emphasis on ensuring the employability of graduates, and institutions will need to work closely with employers to create job-relevant programs.

Technology will take a leading role in the delivery of instruction. As competency-based models allow students to go at their own pace and in their own time, technology-based learning is the only option to individualize and personalize learning. As great technology-based courses are developed institutions will be able to share great courses to not only save money but create more consistent learning outcomes. Utilizing technology to deliver curriculum will also impact faculty roles: Rather than teaching a class of thirty (or 300), faculty will serve as mentors, answering questions and leading discussions. Faculty roles may be disaggregated into specialized expertise as few faculty members would be experts in instructional design, curriculum development, assessment development, and mentoring students.

---

*Dr. Mendenhall is president and CEO of Western Governors University (WGU), a nonprofit online university founded by 19 U.S. governors in 1997. Now with more than 55,000 students in all 50 states, WGU says it is the leader and pioneer in competency-based learning.*

## “Purposeful Work” for liberal arts

By Clayton Spencer, president of Bates College



Preparing students for lives of meaningful work has always been a powerful dimension of the liberal arts education we provide at Bates. However, in today’s world liberal arts institutions need to pursue

this goal with greater intentionality and effectiveness. That’s why Bates has created the Purposeful Work Initiative that embeds questions of work and career into all aspects of our college experience, beginning with first-year orientation and continuing through senior year. Almost every college provides career counseling and helps students find internships, but Purposeful Work at Bates goes well beyond. Purposeful Work is developmental in its approach, incorporating cycles of exploration and reflection regarding questions of work and meaning, and touches upon all aspects of the student experience, including the curricular and co-curricular, athletics and residential life. During our five-week spring mini-semester, we offer courses taught by practitioners in such fields as digital innovation, entrepreneurship,

urban planning and music production. We have a set of core employers who offer internships targeted at our students across a broad range of fields such as finance, communications, health-care, and technology. This semester, more than 30 professors have incorporated exercises into

*Bates has created the Purposeful Work Initiative that embeds questions of work and career into all aspects of our college experience, beginning with first-year orientation and continuing through senior year.*

their regular courses that allow students to explore the relationship between the course and work and career. The result is an approach to work that grounds practical experiences within the framework of the liberal arts so that our students graduate with the knowledge, skills and values they need to be effective and contributing members of society. **eCN**

*Dr. Spencer is the president of Bates College in Lewiston, Maine.*

## eSCHOOLMEDIA INC.

eCampus News covers the intersection of technology and innovation in higher education. We focus on how technology can help colleges deliver instruction more effectively, enhance the student experience, and keep costs down – helping campus leaders in their search for a more sustainable business model as the higher-education landscape evolves.

<b>CEO</b>	Rob Morrow	rmorrow@eschoolmedia.com
<b>Publisher</b>	Wendy LaDuke	wladuke@eschoolmedia.com
<b>Editorial Director</b>	Therese Mageau	tmageau@eschoolmedia.com
<b>Editor, eCampus News</b>	Meris Stansbury	mstansbury@eschoolmedia.com
<b>Director of News, K-12 and Higher Education</b>	Laura Devaney	ldevaney@eschoolmedia.com
<b>Editor, eSchool News</b>	Stephen Noonoo	snoonoo@eschoolmedia.com
<b>Creative Director</b>	Chris Hopson	chopson@eschoolmedia.com
<b>Director of Education Marketing &amp; Media Strategy</b>	Mark Buchholz	mbuchholz@eschoolmedia.com
<b>Education Marketing &amp; Media Strategist</b>	MF Harmon	mfarmon@eschoolmedia.com
<b>Sales Associate</b>	Paul Turchetta	prturchett@aol.com
<b>Sales Administrator</b>	Lee Calloway	lcalloway@eschoolmedia.com
<b>Circulation &amp; Online Director</b>	Nancy David	ndavid@eschoolmedia.com
<b>Director of IT</b>	Vincent Carlson	vcarlson@eschoolmedia.com
<b>Web Comm. Specialist</b>	Jeffrey Festa	jfesta@eschoolmedia.com

### eCampus News (ISSN: 2156-2733)

7920 Norfolk Ave., Suite 900 • Bethesda, MD 20814  
 Phone: (301) 913-0115 • Fax: (301) 913-0119  
 eMail: ndavid@eSchoolMedia.com  
 Home Page: www.ecampusnews.com

All rights reserved; reproduction in whole or in part without written permission is prohibited. Opinions expressed in articles are those of the authors and do not necessarily represent those of eCampus News or eSchool Media Inc. ©2015 by eCampus News.

The cost for a subscription in the U.S. is \$120/year, Mexico or Canada \$158/year, all other countries \$196/year. Please enclose a bank draft or international money order in U.S. dollars. Back issues of eCampus News are available for \$15 each.

**For reprint permission contact: NDavid@eCampusNews.com**

### POSTMASTER SEND ADDRESS CHANGES TO

eSchool News, Circulation Department, 7920 Norfolk Ave., Suite 900 Bethesda, MD 20814

**Co-Founder Larry Siegelman 1954–2002**

# Arrive powers room collaboration for learning



Outside



Inside

## Arrive InfoPoint™

Networked room signage for classrooms and meeting spaces



Arrive InfoPoint is an elegant touch screen networked digital room sign. Managed centrally from its server software, Arrive InfoPoint room signs display classroom timetable information automatically, right outside the door and make it highly visible. Eliminate room scheduling conflicts and resultant chaos.

Arrive InfoPoint's feature rich platform delivers a real facility management solution. Critical scheduling information is at your fingertips. Centrally manage scheduling and communicate room specific updates to elegant signage displays.

### Schedule an entire semester in advance

Arrive InfoPoint integrates with your learning management systems for timetabling information - centrally plan and schedule a full semester in advance. Update changes instantly and automatically at each classroom doorway. Visual status indicators light up distinctly.

### Instantly book meetings right at the door

Arrive InfoPoint is able to provide adhoc booking right outside the meeting room doorway. Updated meeting information is displayed at-a-glance for pre-scheduled meetings from mainstream schedulers such as Microsoft Outlook. Room Finder capabilities locate available facilities from any interactive sign.

### Your messaging billboard outside every room doorway

Arrive InfoPoint server software allows content updates centrally to each individual sign. Control and display emergency announcements, notifications, directions... leave virtual sticky notes on the door sign to get instant notice. Conduct student surveys and get instant feedback. Report maintenance problems right at the door.

## Arrive MediaPoint™

Unified media collaboration for classrooms and shared spaces



Arrive MediaPoint is an innovative 4-in-1 media management walk-up-and-use hub. It's designed for small classrooms, huddle rooms and meeting spaces and can be easily installed everywhere people gather to share and discuss ideas.

Our table-top, flush mounted device solves your most important media connectivity problems. It powers easy sharing of media with connected displays such as flat panels and projectors. Learners and educators can collaborate using their personal tablets, smartphones and laptops.

Arrive MediaPoint is a unified media appliance that's easy to use and truly cost effective. Create the classrooms and collaboration spaces of tomorrow, today.

### Simply connect, present and share media wirelessly from your mobile device

Connect iPads, iPhones, Android and select laptop devices wirelessly for screen mirroring. No software apps to install on user's personal devices - No hardware dongles to attach.

### Instantly connect and switch to wired inputs

Conveniently auto-switch between multiple types of wired inputs and control source switching via button panel, serial or IR remote control.

### Convenient cable pull-out facility

Arrive MediaPoint includes video cable connections, hidden inside the flush mount cable holder for convenient user access.

### Keep your mobile devices charged

Arrive MediaPoint includes a built-in universal fast charger for mainstream phones and tablets. Conveniently keep your devices and presentations fully charged.



Scan to read more

Present your big ideas on our small device footprints.  
Learn more about Arrive Edgeless Media Collaboration by visiting  
[www.arrivesys.com](http://www.arrivesys.com)



Scan to read more

**arrive**<sup>®</sup>  
EDGELESS MEDIA

✉ [info@arrivesys.com](mailto:info@arrivesys.com)  
☎ 1-844-427-7483  
📍 6737 Katella Avenue, Cypress, CA 90630

# Whither Liberal Arts?

A few causes and conditions are meeting to create a “perfect storm” for traditional liberal arts education. Seemingly inexorable tuition increases, and the “ROI” demands on college degrees. Can liberal arts education deliver the same returns, but not the slow, percolating effects of a classic liberal arts education? What are best practices? Participants bring fresh answers to these questions. Gunnar Counselman suggests that liberal arts education is a more scale effective learning in the liberal arts and pure sciences to the 99.6 percent of people on the planet. Martinsen get practical about the role of technology in helping liberal arts students get an economic edge. This article can be read at [ecampusnews.com/symposium](http://ecampusnews.com/symposium). There we welcome your thoughts and ideas for presentation.

– Therese Mageau, Editorial Director.

---

## 8 steps to 7 billion liberal arts degrees

Making the case not for private choice, but public necessity.

By Gunnar Counselman

Ancient Greece considered the liberal arts to be necessary for a free person to participate in democracy and civic life. But in the Greeks’ day, there was only one place in the world with democracy. And even there, only a small percentage of the population was able to participate. Today, 123 nations have participatory democracy, accounting for 60 percent of the world’s population. If Aristotle were alive today, he’d likely imagine that to make that work, we must have developed massive global education systems for liberal education.

That’s why it’s been so frustrating to watch the evolution of a largely unsophisticated debate about the value of liberal arts education that’s pitted engineering fields against philosophy, literature, history and music – as though liberal studies and practical studies are somehow enemies, as though a world could possibly be in balance with one and not the other.

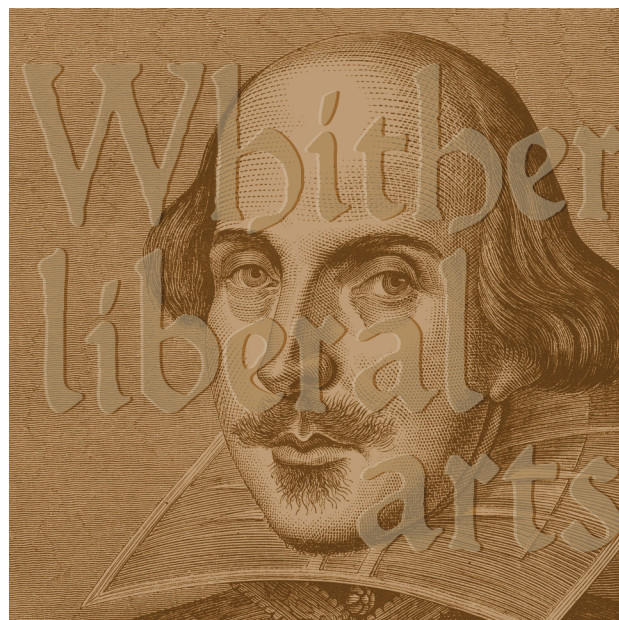
The attack on the liberal arts is ridiculous in its simplicity. It mocks the disconnect between what’s studied and what’s needed in the job market, ignoring the fact that liberal education is intentionally non-vocational and that vocational study is intentionally non-liberal. And for some reason, those who rush to defend the liberal arts have chosen to set up their defense on that point rather than concede it, acknowledging a critical role for practical studies, and then forcefully casting their own arguments for a critical role for liberal studies.

In choosing to defend the liberal arts on its contribution to employability, the defenders are playing weakness to strength rather than strength to weakness – Sun Tzu wouldn’t be impressed. Claiming that liberal arts is better at producing critical thinking, curiosity, or learning how to learn doesn’t give fair credit to practical studies like business, communication, engineering, and

Degrees, page 18



education: the steady rise of large-scale online learning, how can liberal arts survive in an age that seems to value efficiencies and standardized metrics for online liberal arts teaching? Our Symposium on the Future of Liberal Arts Advocates must get “creative about using technology to create a network of support” who do not study them. Josh Jarrett and Tabor Martensen discuss the economic footing in today’s workplace. These essays may also explore the challenges of surviving (or not?) the liberal arts in higher education.



## Mind the gap: How to close the distance between liberal arts and employment

Why better measurement and applied experiences will help, not hurt, liberal arts.

By Josh Jarrett and Tabor Martensen

“The transition from education to employment used to be a bunny hop. Now, it’s a running leap—and the gap is only getting bigger.” That was the message delivered by Phil Gardner of Michigan State University at the Innovation and Disruption Symposium hosted by Colgate University last year. This growing chasm between education and employment is serving to magnify another chasm—the chasm between the liberal arts and STEM or other “vocational” education. Proponents of the liberal arts— of which we proudly count ourselves— can be forgiven for feeling defensive in the face of declining majors across departments, rising student loans, and pressure on post-college outcomes. However, the balkanized “either/or” debates of liberal arts versus STEM are not helping our students, our economy, or our society.

We would offer two bridges across the chasm that have historically been anathema in the liberal arts: better measurement and applied experiences.

Before we jump into the solutions, it’s worth spending a moment to agree on the problem. According to a [2013 study](#) by AOL Jobs, the ten lowest paying and highest unemployment majors are all liberal arts [majors](#). Additionally, liberal arts grads are much more likely to work in a job outside their field of study, so it’s particularly difficult to translate a graduate’s academic experience into the world of work.

We get it. Why would you want to take a chance on a recent anthropology major grad if you weren’t able to assess what he/she could do for your organization? Employers typically know what they are getting out of grads with technical/STEM backgrounds— a quicker return. They

[Distance](#), page 20

## Degrees

continued from page 16

architecture. That claim is rather a case for the benefits of study in general, not liberal study in particular.

The liberal arts need a higher-minded defense that focuses on what makes it different from the practical sciences— and that defense must be centered on what’s differentially valuable about the liberal arts, to wit:

Liberal arts education is unique in its ability to develop *independence of thought*, to nurture *wisdom*, and to build both a deep *empathy* for others and *broad context* for decision making in uncertain situations.

These are the strengths that should form the bedrock of the case for liberal arts. But those are all public goods. And we’ve set up a system in which people pay private dollars (tuition) to create public goods.

Should an individual student choose a liberal arts education? Well that depends...

Should a democracy choose to invest in liberal arts education for all its students? Absolutely, without question, every time— it should be a requirement.

As I watch important political, economic, and social conversations devolve into trivial sound bites crafted by spin doctors, I’m actually becoming increasingly afraid of a future where leaders and citizens aren’t well-educated in the liberal arts and sciences.

There’s no defense like a good offense and it’s time that we, who believe in the liberal arts, go on the offensive, making our case not for private choice, but as a public necessity. A quick glance around the globe yields obvious reasons to be on the offensive about these valuable public goods:

- Extremist fundamentalism is flourishing
- Climate change is happening
- Technological unemployment will make 25

percent of the workforce unnecessary within the century

- Income gaps are widening
- Resources are stretched as 3 billion people enter the consumer economy

These are just a few of the issues that may become existential for humanity in the 21st century if our republics aren’t guided wisely. And without an electorate and leadership whose wisdom has been shaped by significant study in the liberal arts and sciences, we may not make it.

So being on the offensive about the liberal arts means reframing the conversation from a defense for the 40M people who participate in it today. Being on offensive means abandoning all tendency toward Ludditism and instead getting creative about using technology to scale effective learning in the liberal arts and pure sciences to the other 99.6 percent of people on the planet. And being on the offensive means we must stop worrying about jobs. There will be many more jobs educating 99.6 percent of the world’s population than there are educating the .4 percent (the percentage of the world population currently receiving a liberal arts degree), no matter how efficient we become with technology.

Designing the technology to scale the liberal arts demands that we unpack the big concept of the liberal education into component pieces and then reassemble them in relational databases and beautiful UI.

Let’s observe the ingredients of liberal education as they are today at places like Middlebury, Smith, Sarah Lawrence, and Union, honors programs at state universities, then imagine what it would look like scaled to 7 billion people.

1. Students can choose between **many** different liberal arts colleges.
2. Liberal arts colleges tend to be beautiful residential communities.
3. These communities allow students to build strong peer relationships both in and out of class.

4. Liberal arts encourages a culture of openness and mutual support that actively facilitates relationship formation.

5. Small class sizes, low student-teacher ratios, and intellectual activities mean students typically have strong mentor and advisory relationships with faculty and staff.

6. Faculty get to know students deeply through these relationships and are able to help students carve personalized pathways for intellectual, social, and emotional development.

7. Alumni engagement tends to be higher than average both philanthropically and in the lives of students because of a deeply held affinity for the community.

has to be a relationship-management machine, purpose-built to make sure that every single person in a learning community has peers, mentors, and advisors to collaborate to build strong learning pathways of content.

Ten years ago, that would have seemed insurmountable. In fact, when I first started designing an early version of Learning Relationship Management technology, it seemed way ahead of its time. But the 2000s saw relationship-management technology find its place in the world.

Facebook connected the world in its love of cat videos. LinkedIn convinced people to manage their Rolodexes and resumes online. And Salesforce built a sales relationship-management


*This analysis makes it clear that liberal education is a relationship-generation machine built around personalized content. So our technology has to be a relationship-management machine, purpose-built to make sure that every single person in a learning community has peers, mentors, and advisors to collaborate to build strong learning pathways of content.*

8. Instructionally, liberal arts colleges tend toward a tutorial pedagogy where students are guided as much as they are taught within those strong peer learning communities.

I'm certain that I've missed some ingredients here, but eight feels like a Goldilocks-level of description: enough to matter, not too much to remember. What I find particularly noteworthy about this list is that each and every one of these points has to do with relationships.

This analysis makes it clear that liberal education is a relationship-generation machine built around personalized content. So our technology

tool in the cloud and has made CRM ubiquitous beyond conventional sales departments.

It's time for leaders of liberal arts colleges and faculty to stop hunkering down in a defensive posture. It's time to go on the offensive, and use Learning Relationship Management systems to scale what works on the beautiful ivy covered campuses of New England, to make it work for every human being. 

---

*Gunnar Counselman is the founder and CEO of Fidelis Education, a Learning Relationship Management (LRM) System.*

## Distance

continued from page 17

feel it's riskier to take a chance on a liberal arts grad, especially because the value of a liberal arts grad usually results in a slower return, as it takes time to learn the direct skills necessary for the job. As one liberal arts college president quietly told us, "We're doing a great job educating our students for the job they'll have in 20 years. However, we're not doing a great job educating our students for the job they'll have next year."

So how do we make sure we're preparing students for the jobs they'll have next year as well as the jobs they'll have in the next decade? The first solution is better measurement of the com-

*So it's pretty clear what we need to do: encourage and offer more high-quality, immersive internships and opportunities for students to become "real-world ready."*

petencies that really drive success and fulfillment in the 21st century economy and society. While surveys of senior executives espouse the importance of abstract competencies like critical thinking and collaboration, the reality is that HR teams and hiring managers default to the skills they can easily infer from resume keywords and high level educational data (e.g., college, major, GPA). The result is a bias—intentional or not—against hiring liberal arts grads. As one hiring manager recently told us, "I can't tell any of the 3.5 [GPA] history majors apart so, unfortunately, I don't interview any of them."

Employers need a better way to "see" the skills of liberal arts grads and level the playing field. Next generation assessments such as the **CLA+** are increasingly allowing us to affirm and measure the higher-order thinking and commu-

nication skills of college grads.

At **Koru**, we've identified what we call the Koru7—the seven competencies that employers wish they could ascertain and use in hiring (grit, rigor, impact, polish, teamwork, curiosity, and ownership). We're refining how to best collect data and evidence along each of these dimensions to empower college graduates and help them make stronger cases to employers. Far more than what you know, employers care about what you can do with what you know—can you GSD (translated to "get stuff done" in polite circles)? Continued advances in technology will play an important role in measuring what really counts.

This leads us to part two of the solution: providing more applied opportunities to students from all higher education backgrounds. You might think there are plenty of opportunities out there for students to gain experience through internships, clubs, summer jobs, and so forth, but the reality is there are not enough.

In a recent **study** by the Association of American Colleges & Universities (AAC&U), only 37 percent of employers thought recent grads were well-prepared for work after college. The AAC&U report states, "When it comes to the types of skills and knowledge that employers feel are most important to workplace success, large majorities of employers do not feel that recent college graduates are well prepared. This is particularly the case for applying knowledge and skills in real-world settings, critical thinking skills, and written and oral communication skills—areas in which fewer than 3 in 10 employers think that recent college graduates are well prepared." We've heard this same sentiment echoed by nearly every employer we work with, and it's time for that to change.

Colleges know this too. As Byron White, vice president for University Engagement at Cleveland State University said, "We know what's needed: We need skills-oriented learning, infused with the liberal arts, with a heavy dose

of real-world experience.”

The numbers back this up. According to the **2013 NACE Student Survey**, students who combine a liberal arts education with hands on experiences, such as research projects or internships/jobs, are almost two times more likely to land a job by graduation than students who just stick to education only. These students are also two times as likely to be engaged in their post-college job, according to the 2014 Gallup-Purdue Index **Report**.

So it's pretty clear what we need to do: encourage and offer more high-quality, immersive internships and opportunities for students to become “real-world ready.” And even as these opportunities increase, we still have a ways to go to overcome the erroneous, yet overwhelmingly accepted, idea that students must choose an either/or when it comes to their higher education. The only thing holding us back from defeating this idea is our outdated way of thinking. If

we can let go of the false debate between liberal arts and STEM that has held us captive for so long, then we can continue to develop more useful measurements and better applied learning experiences for our students.

Imagine a world where we level the playing field for young people so that all have access to opportunities based on what they have shown they can do, and not be subjected to the knee-jerk bias of a hiring manager reviewing resumes. If we can cross the chasm between the liberal arts and STEM, then — and only then — can we cross the yawning chasm between education and employment. **eCN**

---

*Josh Jarrett is co-founder and Chief Learning Officer at Koru, who formerly served as head of the higher education innovation team at the Bill & Melinda Gates Foundation and a consultant at McKinsey & Company. Tabor Martinsen is a senior at Whitman College studying anthropology.*

## eCN Symposium

eCampus News announces *Symposium*, discourse from higher education professionals on topics of urgency and controversy, with commentary and response from the field published on our web site, [ecampusnews.com](http://ecampusnews.com). We are actively soliciting submissions and response to topics for the rest of the year:

### **March/April: Whither Liberal Arts?**

*We are seeking responses starting immediately at [www.ecampusnews.com/symposium](http://www.ecampusnews.com/symposium)*

**May: How to Value Open Scholarship** — The tenure system is still built on a publish-or-perish foundation, but what does it mean to “publish” in a digital age? How does an institution appropriately evaluate, and reward, a body of academic work that is collaborative, iterative, and communal in nature?

**Participant query: 2/15 • Submissions deadline: 3/1 • Responses start: 5/1**

**June: Containing the Costs of a Higher Education Degree** — Many higher ed institutions are turning to online to more cheaply deliver certain kinds of courses (large, introductory). Is this, in fact, a good or sustainable model? What role does technology have to reduce the costs of delivering a post-secondary education?

**Participant query: 3/1. Submissions deadline: 4/1 • Responses start: 6/1**

**August/September: New Models for Funding Technology:** Critics say that traditional models for funding technology (capital vs. operational) have handcuffed higher ed leaders into using non-innovative technologies. How can funding models be improved so that they support, rather than thwart, innovation?

**Participant query: 5/1 • Submissions deadline: 6/1 • Responses start: 8/17**

**October/November: Suggestions for our last Symposium topic are being accepted. Deadline: 7/1**

For more information on each topic and/or to submit a 100-word submission query, contact Meris Stansbury: [mstansbury@ecampusnews.com](mailto:mstansbury@ecampusnews.com)

# How to apply game-based learning to course curriculum

Two leading researchers of game-based learning discuss best practices for enriching course curriculum through the integration of consumer games.

**By Jennifer Welch**

Education-specific games are not the best way to incorporate games into curricula – a sentiment perhaps unexpected by an avid game-based learning professor.

This is just one of several tips given by experts in the higher-ed game-based learning field. *eCampus News* recently sat down with two leading researchers in the field of game-based learning to discuss best practices for enriching course curriculum by using consumer games to demonstrate and assess key concepts.

Sherry Jones is a Philosophy, Rhetoric, and Game Studies Instructor at the University of Colorado, Denver, and the Creator and Facilitator of the Game Studies track for the Metagame Book Club, supported by ISTE's Games and Simulations Network. Karen Novak is an instructional designer for online learning at Front Range Community College in Westminster, CO, and chair of ISTE's Special Interest Group for Virtual Environments.

Here are their top five tips for successful game-based learning:

**1. Be open to using “real-world” consumer games to teach educational concepts.** Jones has found that there are three camps of educators applying game-based learning to their classrooms: passionate gamers who find connections to their course curriculum while playing consumer games recreationally; non-gamers who seek educational games that teach the concepts they're trying to teach; and non-gamers who hire game designers to build an educational game from scratch based on how they think the concept should be taught.

“Most of the games that are being used successfully in the classroom are consumer games, like using *Angry Birds* to teach physics concepts, or using *World of Warcraft* to teach ESL students,” remarked Jones. “Educational games designed specifically around a concept, especially custom-built ones, impose a certain way of teaching a concept on game designers, whose job it is to make games fun and interesting. Educational games can be inflexible and very boring to play, students don't like them, and then the whole process falls apart.”

**2. Do your homework.** Spend time exploring games that are on the market to see how they work and how they can be applied to the curriculum. Nail down the skills that you're trying to teach, and then go out and play a few of the major popular games—both computer/console games and app-based games. “Take notes as you're playing the games—can you use these games to teach any of the principles you've laid out,” asked Jones. “Teachers don't need to become passionate gamers, but they need to play games in order to use games in the classroom.”

**3. Clearly communicate your objectives.** Be open with students about why you chose a particular consumer game and outline the learning objectives they'll master through the game play. Novak recently worked as an embedded instructional designer on an implementation of *World of Warcraft* in business and economics classes across three FRCC campuses, and explained that “anytime you use a commercial game, or really with any kind of change, you get resistance, and because we're higher ed, our students run the




*“Most of the games that are being used successfully in the classroom are consumer games, like using Angry Birds to teach physics concepts, or using World of Warcraft to teach ESL students,”*

gamut from 16 year-olds who are getting early college credits to retired adults. So, you need to be explicit with students about why you’re using these games in this course, and how learning this game will benefit their education.”

**4. Reach out to your campus instructional designers.** Novak and her team hold a number of professional development trainings and host an in-house technology conference every year. “During those trainings, we talk about what the capabilities are for various games—World of Warcraft is great because it has an economy and an auction house that is just as good as any educational simulations out there—and then we tell instructors who are interested to come in for a consult with us,” she explained. Novak recently met with an Eastern Religions instructor whose students were having a hard time mastering the concepts of the Tibetan Book of the Dead—an especially important aspect of the course for nursing majors who would be going on to work in the field with the area’s large Nepalese community. Novak worked with the instructor to build a simulation in the virtual environment Second Life to

demonstrate how the concept of the soul is different in Tibetan Buddhism, allowing students to play out the experience of the soul described in the text in a virtual immersive environment.

**5. Be willing to fail.** Trial and error is key when it comes to determining which games will effectively enrich course content. “The only way to assess the assessment is through actually using the game in the classroom,” remarked Jones. “Perhaps you’d like to spice up an assignment that traditionally involved watching a specific television program. Present the class with the game and the parameters they need to go unpack the game. Survey the class to see how they liked it and if the game was more effective in assessing their understanding of the concepts. The best way to determine if it’s going to be effective is to do it.”

For free professional development resources on game-based learning, visit [#MetagameBook Club](#), or join the ISTE [Games and Simulations Network](#). 

*Jennifer Welch is a freelance writer based in Brooklyn, NY.*

## 4 innovations from exceptional community colleges

New report identifies specific IT-enhanced characteristics of successful community colleges across the country.

<http://www.ecampusnews.com/technologies/innovations-community-colleges-339/>



## Why online ed accessibility is not a "when we get to it" issue

As several high-profile lawsuits surface around accessibility of web content, colleges and universities must take the steps necessary to shore up their own approaches to online accessibility of web content.

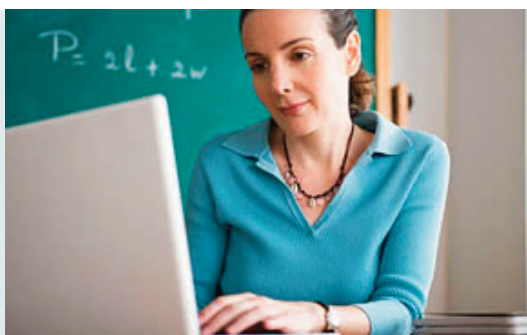
<http://www.ecampusnews.com/top-news/online-education-accessibility-299/>



## Is faculty career flexibility the next disruptive innovation?

Group of university presidents say university lifespan now dependent upon faculty work-life balance options; give list of 10 issues to consider.

<http://www.ecampusnews.com/top-news/faculty-career-flexibility-019/>



## University moves past the myth of fits-all analytics

CIO uses customizable analytics engine to make data usable for the University's specific goals.

<http://www.ecampusnews.com/technologies/university-moves-past-the-myth-of-fits-all-analytics/>



## Why higher education should care about Net Neutrality

Broadband for education expert gives four reasons why the FCC's decision about Internet service is a human rights issue.

<http://www.ecampusnews.com/top-news/education-net-neutrality-388/>





# NetSupport School - Classroom Management Software

that delivers whole school benefits

**NetSupport**   
Celebrating 25 years of software



With a 25-year development history and a worldwide installation base in excess of 13 million systems, NetSupport School offers a unique solution for the modern school: a single software solution that delivers benefits for the whole school, from the classroom to the technology department to the leadership team.

- PC monitoring, e-safety, collaboration, and unique testing and assessment features come together to help teachers deliver education best practice in an IT environment;
- Dedicated technicians' tools for the school-wide management of PCs help maintain a productive, secure, and fully operational IT infrastructure;
- Compatible with any mix of classroom technology - Windows, Mac, Linux, Chromebook and, to fully support your BYOD initiatives, Android and iOS tablets.



Learn more about NetSupport's award-winning solutions and download a free trial at: [www.netsupportschool.com](http://www.netsupportschool.com)

w: [www.netsupport-inc.com](http://www.netsupport-inc.com) | e: [sales@netsupport-inc.com](mailto:sales@netsupport-inc.com) | t: 1-800-665-0808 (toll free)

# THE EVOLUTION OF COLLEGE STUDENTS



## 1960s

By 1965,  
**28%**  
of 18-24 year olds  
were enrolled in  
higher education



**1,354,000** High School grads enrolled in college\*

% of male  
grads enrolled **57%**



% of female  
grads enrolled **45%**



\*1965

College students may have been impressed by the invention of:



Audio Cassettes



Spacewar  
Video Game



BASIC Computer  
Language



Handheld  
Calculator

## 1970s

By 1977,  
**39%**  
of 18-24 year olds  
were enrolled in  
higher education



**1,615,000** High School grads enrolled in college\*

% of male  
grads enrolled **53%**

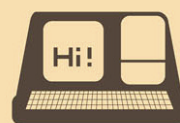


% of female  
grads enrolled **49%**



\*1977

College students may have been impressed by the invention of:



Word Processor



Pong  
Video Game



Stay-on-Tab




Walkman®

Copyright: Carrington College, California. To view the full infographic, [click here](#).

1980s

By 1987  
**45%**  
of 18-24 year olds  
were enrolled in  
higher education




**1,539,000** High School grads enrolled in college\*

**% of male  
grads enrolled 59%**

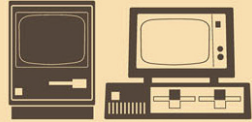
**% of female  
grads enrolled 57%**

\*1987


College students may have been impressed by the invention of:




Disposable  
Cameras



Apple Macintosh  
& IBM PC




Digital Cellular  
Phones



Disposable  
Contact Lenses

1990s

By 1991  
**54%**  
of 18-24 year olds  
were enrolled in  
higher education




**1,610,000** High School grads enrolled in college\*

**% of male  
grads enrolled 63%**


**% of female  
grads enrolled 61%**

\*1995


College students may have been impressed by the invention of:




The World  
Wide Web



DVDs




Distance Education  
Programs



Emoticons

2000 & UP

By 2001  
**68%**  
of high school grads  
were enrolled in  
higher education




**20,397,000** total students were enrolled in college\*

**% of total  
males enrolled 45%**


**% of total  
females enrolled 55%**

\*2011


College students may have been impressed by the invention of:




iPod® and iTunes®



Smartphones



Hybrid Cars



Social Media



**STEM**



**Online Learning**

**MAIL BOX**



**Analytics**



**Disruptive Innovations**



**Open source**

**Get the latest higher-ed news delivered right to your mailbox!**



Go to  
[eCampusNews.com](http://eCampusNews.com)  
and Register  
for FREE!



**Register Today!**

**eCAMPUS NEWS**

*Technology News & Innovation in Higher Education*



[eCampusNews.com](http://eCampusNews.com)

[@ecampusnews](https://twitter.com/ecampusnews)