EDUCAUSE capabilities and findings relevant to ICT Foresight

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Vice President, EDUCAUSE

UNESCO meeting, Paris, March 2015
How EDUCAUSE Describes Itself

**Build the Profession**
We build people and teams, strengthening IT and higher education with resources for growth

**Create Connections**
We bring influencers and thought leaders together, connecting people with ideas, resources, and each other

**Strengthen Higher Education**
We promote the end, not the means – it’s not just technology but what you do with it that counts

**Enhance Decision-Making**
We provide expert research, analysis, and benchmarking to help campus leaders plan, predict, and make the case for IT
About EDUCAUSE

- **Membership:** 2,400 colleges, universities, and organizations (40+ countries); 360 corporations
- **Size:**
  - $20M (excluding grants)
  - 100 employees
- **Outreach:**
  - 20 face-to-face events/year
  - 10+ online events/year
<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral Research – All types (DR)</td>
<td>249</td>
</tr>
<tr>
<td>Masters Granting (MA)</td>
<td>471</td>
</tr>
<tr>
<td>Bachelors Granting (BA)</td>
<td>338</td>
</tr>
<tr>
<td>Community and Technical Colleges (AA)</td>
<td>403</td>
</tr>
<tr>
<td>Other (tribal, music and art, law, medicine)</td>
<td>232</td>
</tr>
<tr>
<td>International</td>
<td>274</td>
</tr>
<tr>
<td>Associations/Organizations</td>
<td>78</td>
</tr>
<tr>
<td>State Agencies</td>
<td>36</td>
</tr>
<tr>
<td>K-12</td>
<td>20</td>
</tr>
<tr>
<td>Corporations</td>
<td>362</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,463</strong></td>
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</table>
## Association Outreach

<table>
<thead>
<tr>
<th>Channel</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face conferences</td>
<td>10,500 people</td>
</tr>
<tr>
<td>Online events</td>
<td>20,000 people</td>
</tr>
<tr>
<td><em>EDUCAUSE Review</em></td>
<td>22,000 copies circulated</td>
</tr>
<tr>
<td><em>EDUCAUSE Review Online</em></td>
<td>1,700,000 page views</td>
</tr>
<tr>
<td>EDUCAUSE Library</td>
<td>800,000 annual page views</td>
</tr>
<tr>
<td>Web site</td>
<td>8,600,000 page views</td>
</tr>
</tbody>
</table>
Coalition of Higher Education IT Associations (CHEITA)

- AMUE (France)
- ASAUDIT (South Africa)
- AXIES (Japan)
- CAUDIT (Australia)
- CERNET (China)
- CINECA (Italy)
- CSIESR (France)
- CUCCIO (Canada)
- EDUCAUSE (US)
- ICTC (New Zealand)
- JISC (UK)
- JUCC (China - Hong Kong)
- RED CLARA (Chile)
- SIGMA (Spain)
- SURF (Netherlands)
- UCISA (UK)
- ZKI (Germany)
Next Generation Learning Challenge
Initiatives, 2010-2014

Investing in Innovation

- Technology Innovation
  - PS SUCCESS: Wave I: $16.2M

- Breakthrough Delivery Models
  - Wave IIIb: $7.7M
  - COL READINESS: Wave II: $7.1M
  - Wave IIIa: $9M
  - Wave IV: $13.5M

Multiplying Impact

- Accelerating Adoption and Institutional Migration
  - Breakthrough Models Incubator and Academy

Knowledge-Building, Dissemination, Grantee Support

- Documentation: Grantee profiles, website, case studies, virtual-tour videos
- Analysis: White papers on Wave I grantees, NGL Framework, Getting Smart/IIIa
- Tools: K-12 Toolkit, Next Gen Tools series, EDUCAUSE on Campus
- Commentary/Dissemination: BlendMyLearning, blogs, conference presentations
- Grantee Support: Convenings, site visits, online networks, focus-area support
EDUCAUSE Review

- 6x/year print; bi-monthly online
- 26,000 online subscribers
- 22,000 printed copies
- Over 100,000 monthly page views
- ~50 international and national awards
eBooks

Used as resource for institutional strategic planning
- Learning analytics
- Learning pathway systems
- Badging
- Competency-based and online programs
- Many NGLC examples
Research, Benchmarking, Analytics

<table>
<thead>
<tr>
<th>Analytics Services</th>
<th>Focus</th>
<th>Member value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strategic</td>
<td>Manage, design</td>
</tr>
</tbody>
</table>

| Core Data Service  | Normative        | Assess, plan, make the case |

| ECAR Research      | Descriptive      | Understand, make the case |

| Working Groups     | Formative        | Define and design    |

| IT Issues          | Emergent/future | Predict and plan     |
Top 10 IT Issues

Demonstrating IT’s Business Value

- Hiring, retaining, maintaining staff
- Increasing IT’s capacity for change
- Developing enterprise IT architecture
- Balancing agility, openness, and security

From Technical to Business

- Optimizing technology in teaching and learning
- Developing new funding models
- Improving student outcomes
- Demonstrating IT’s business value

The New Normal

- Supporting users in the new normal
- Developing security policies for mobile, cloud, and digital
Trend-Watch

- 15 trends
- Extent to which trend is influencing IT strategy
- Identified % of institutions saying each trend was
  - “already incorporated” or
  - “exerting a major influence on emerging IT strategy”

Most influential (61+)%
- IT complexity
- Mobile device diversity
- Business process redesign
- Migration to the cloud

Taking hold (41–60%)
- Enterprise data management
- Agile approaches to change
- Growth of social media
- Shared services

Worth understanding (21–40%)
- Green technology
- DevOps movement
- Personal clouds

Limited impact (0–20%)
- Shift to students as creators
- Reduced reliance on service desk
- Software-defined networking
- Access for diverse devices
Top 10 Strategic Technologies

Estimated Five Year Adoption Trends for Technologies related to Teaching and Learning
Top 10 Strategic Technologies: Estimated Progress in Technology Areas

Measured progress:
- Communications/networking
- Infrastructure and operations
- Social/personal
- IDM/access management
- Devices

Greatest progress:
- Enterprise
- Mobile
- User support
- Research and scholarship*
- Security and privacy
- Cloud
- Teaching and learning
- GRC
- Analytics

*Among DR institutions only
Maturity Indices

- Examines multiple dimensions of progress, not just technical
- Enables institutions to determine where they are...and where they aspire to be
- Both expert- and data-driven
  - E-learning
  - Student success technologies
  - Analytics
  - Research computing
  - IT governance
  - Information security
Concerns about E-learning

- Technological know-how of faculty
- Adequacy of staff
- Ability to keep up with others
- Affordability
- Adequacy of technology
- Faculty skepticism
- Return on investment
- Adequacy of policies
- Accountability/accreditation issues
- Transformation of higher education for the worse

Fewer than 1/4 of respondents saw this as a major or moderate concern.
Students see many benefits to technology

- **Technology makes me feel more connected to...**
  - Other students: 51% agree
  - Instructors: 54% agree
  - The institution: 65% agree

- **Comparison between 2012 and 2013**
  - Helps me achieve my academic outcomes
  - Better prepares me for future educational plans
  - Will have prepared me for the workplace

PERCENTAGE
Interest in Academic Analytics

**EARLY-ALERT SYSTEMS**

Faculty are very interested in correcting substandard student progress in coursework

- Suggestons about new or different academic resources for your students: 91%
- Alerts if it appears a student’s progress in a course is declining: 83%
- Suggestions for how to improve performance in a course: 82%
- Guidance about courses they may consider taking in the future: 68%
- Automated tracking of attendance via ID card scanners/automated means: 62%

**Students are interested in the use of learning analytics for...**

- Suggestions for how to improve performance: 100%
- Guidance about courses they might consider taking in the future: 100%
- Alerts if it appears their progress in a course is declining: 100%
- Suggestions about new or different academic resources: 100%
- Feedback about their performance compared to that of other students: 98%
- Automated tracking of their course attendance: 72%
Less interest in MOOCs among traditional students and faculty
What motivates faculty to incorporate technology into teaching?

- **Benefits to students**
- Release time
- Reliability
- Better understanding of technology

<table>
<thead>
<tr>
<th>Clear indication/evidence that students would benefit</th>
</tr>
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<tr>
<td>Release time to design/redesign my courses</td>
</tr>
<tr>
<td>Confidence that the technology would work the way I planned</td>
</tr>
<tr>
<td>A better understanding of the types of technologies that are relevant to teaching and learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direct assistance from IT staff to support the technology I choose to implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct assistance from an instructional design expert to design/redesign my courses</td>
</tr>
<tr>
<td>More/better technology-oriented professional development opportunities</td>
</tr>
<tr>
<td>Working in a faculty cohort or community that is adopting the same types of practices</td>
</tr>
<tr>
<td>A monetary or other value-oriented incentive more or better tech</td>
</tr>
<tr>
<td>A teaching assistant to assist with technology implementation</td>
</tr>
<tr>
<td>Increased student expectations of technology integration</td>
</tr>
<tr>
<td>Tenure decisions and other professional advancement considerations</td>
</tr>
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| Support/encouragement from peers more or better technology |
More than half of faculty would like more training in:

- Free, web-based content
- Online collaboration tools
- LMS
- Simulations or educational games
- E-books or e-textbooks
- Lecture capture/recordings

Students would like faculty to use these technologies more:

- Recorded lectures or “lecture capture”
- Freely available course content
- The course or learning management system
- Online collaboration tools
- Simulations or educational games
- E-books or e-textbooks

*Among device owners 0% 25% 50% 75% 100% 

Percentage of respondents

Wish their instructors would use it more
Wish their instructors would use it less
CERTIFICATIONS

The undergraduate degree is still the gold standard certification for contemporary college students.

On their resumes,

- 90% would include their diploma
- 53% would include a college certificate
- 21% would include a digital badge
- 18% would include an e-portfolio
Discussion