Moving the Red Queen Forward: Maturing Learning Analytics Practices

Thursday, October 29, 2015 at 2:40 PM in Sagamore Ballroom 3
A slow sort of country!' said the Queen. 'Now, HERE, you see, it takes all the running YOU can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

--Lewis Carroll, *Through the Looking-Glass*
Learning Analytics Defined

“The measurement, collection, analysis and report of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs.”

--Society for Learning Analytics Research (SoLAR)

Not just theoretical insights!!

Not just reporting!!

Not just a dashboard!!

Actionable intelligence!!
The Philosophical End of Learning Analytics

• In order to “do analytics” you must understand the use cases for the data/information

• There needs to be context for the data

• You must understand who the audience is (students, faculty, admin, departments) and what problems they are trying to solve

• If you are doing analytics right, analytics information and output will support the conversation, not replace the conversation
Overview

• Leadership and Expertise
• Priorities and Investments
• Analytics and Ethics
• Advice to move your RED QUEEN forward
• Maturity of Analytics
Leadership and Expertise...
Audience Question

Who in the audience is an expert in learning analytics?

YES  NO
Leadership in learning analytics
(in the institutions that have this role)

*fewer than 25% of institutions have this role*
Responsibilities for analytics services

- Institutional research (IR): 27%
- Shared by IR and IT: 43%
- Information technology (IT): 17%
- Dedicated analytics center: 9%
- Other: 5%
PANEL DISCUSSION
Leadership and Expertise

• Analytics is a highly collaborative, matrixed process. What advice do we have for IT leaders to find balance their leadership, support, and strategic advisors roles?

• How do you help cultivate a scenario where analytics at your institution to support the conversation, not replace the conversation?
Priorities and Investments...
Audience Question

Which is a higher priority for your institution?

LEARNING ANALYTICS

INSTITUTIONAL ANALYTICS
23% of respondents said *learning analytics* was a major priority; twice as many described institutional analytics as one.
Four in ten respondents reported little or no investment in learning analytics.
Investment in student success technologies and leadership commitment

Our senior leaders are publicly committed to initiatives designed to improve student success.

Our student success technology initiatives are adequately funded.
PANEL DISCUSSION
Priorities and Investments

• Why the disconnect between the commitment to student success efforts and investment?

• While ECAR research shows that priority and investment in learning analytics lags behind institutional analytics, what investments might NOT be reflected in these measurements?
  • Can investment in institutional analytics drive learning analytics?

• What areas have the best investment potential to yield favorable returns for both learning analytics and institutional analytics initiatives?
Analytics, Students, and Ethics...
Student interest in analytics-powered personalized matriculation facilitators

At least 8 in 10 students are interested in

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Interest Rate</th>
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<tbody>
<tr>
<td>Personalized support and information on degree progress</td>
<td>92%</td>
</tr>
<tr>
<td>Personalized dashboards that give you real-time feedback about your progress</td>
<td>89%</td>
</tr>
<tr>
<td>Suggestions for how to improve performance</td>
<td>88%</td>
</tr>
<tr>
<td>Personalized quizzes or practice questions</td>
<td>88%</td>
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<tr>
<td>Personalized feedback and recommendations</td>
<td>88%</td>
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Student perspectives about the ways higher ed can use student data

Progress toward your degree or certificate goal
Performance in current courses
Performance in past courses
Performance in individual courses compared to the performance of other students
Activity in a specific application or service provided by the college or university
Activity on a college or university website
Campus-based activities logged through your student ID/smart card
Campus-based activities logged through your smartphone
Proximity to a college building, office, or resource
Location on campus
Social media activities

Helpful “big mother”
Creepy “big brother”

Percentage of respondents

Good idea
Very good idea
PANEL DISCUSSION
Analytics and Ethics

• What are the potential unintended consequences of learning analytics?

• Data can be dangerous --- context, user knowledge, quality, privacy --- What should be our greatest concerns about learning analytics?
a few resources and services...
Some EDUCAUSE resources...
ECAR RESEARCH HUB
Analytics is one of higher education’s top IT-related issues. Institutions need solid methods for campus BI/data reporting and analytics to support campus priorities and decision-making. We’ve reached an inflection point where the maturation of analytics tools and the amount of data available have reached critical mass to engage in data informed solutions. Analytics can provide insight in areas such as reducing students’ time to degree, improving student learning outcomes, targeted recruitment, business process optimization, alumni relationship management, and increasing research productivity. In 2015 EDUCAUSE will update and extend the 2012 ECAR analytics study to understand the nature, magnitude, and future directions of analytics in higher education and provide guidance to institutions enhancing or developing analytics programs.

RESEARCH IN HIGHER EDUCATION, 2015

A Collaboration Between:

EDUCAUSE

Gartner

REPORTS AND SUPPORTING MATERIALS (FORTHCOMING)

Related Resources
- Infographics: Institutional Analytics and Learning Analytics
- Data Tables
- Survey Instrument
- Slide Presentations: Institutional Analytics and Learning Analytics

The survey instrument and slide presentations will be open access. All other materials will be available to ECAR subscribers only for the first five months after publication.

Subscribe to receive all ECAR research and analysis about IT in higher education.

Subscribe Now
A new EDUCAUSE benchmarking service...
Benchmark your analytics progress...

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<tr>
<th>Area</th>
<th>Maturity Index</th>
<th>Deployment Index</th>
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</thead>
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<tr>
<td>Analytics</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Culture of innovation</td>
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</tr>
<tr>
<td>E-learning</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Information security</td>
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<tr>
<td>IT governance</td>
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<tr>
<td>Research computing</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Risk management</td>
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<td>Not applicable</td>
</tr>
<tr>
<td>Student success technologies</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

A 2016 collaboration between ECAR and CDS
1) Build reports with customized peer groups on demand
2) Benchmark maturity and technology deployment
3) Receive recommendations for improvement
Stop Guessing. Start Making Data-Driven Decisions.

Core Data Service
IT financials, staffing, and services

EDUCAUSE Benchmarking Service BETA *(Coming in early 2016!)*
Reports you can use to communicate the value of IT to non-IT leaders.

Use benchmarking to inform IT planning and support for strategic initiatives.
educause.edu/research

CDS survey deadline November 6
Analytics Maturity...
Analytics maturity, 2014

Composite score: 3.4

- Investment/ resources: 2.9
- IR involvement: 3.7
- Data efficacy: 3.4
- Technical infrastructure: 3.4
- Policies: 3.5
- Decision-making culture: 3.4

2nd gen maturity index
PANEL DISCUSSION
Analytics Maturity

What is/was the most important single thing that you/your institution does/did to jumpstart your learning analytics programs?
Q&A...
Help Us Improve and Grow

Thank you for participating in today’s session.

We’re very interested in your feedback. Please take a minute to fill out the session evaluation found within the conference mobile app, or the online agenda.
Transforming higher education through the use of information technology
Why Learning Analytics Matter

“...We have 50 million reasons why we need to get this work right, right now...”

-Scott Morgan, Ed Surge

http://bit.ly/1El185T