Analytics Readiness: Is Your Institution Primed for Success?

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• Who we (and you) are

• Introduction
  • What are we doing here?
  • Analytics readiness components
  • Who should complete the readiness instrument?

• Group work/Break/Report out

• Next steps

• How to keep the conversation going
Introduction

Who we (and you) are
Institution Types

- No community colleges represented
- 40% four-year institutions
- 80% PhD granting
- 53% public
- 20% private
Time in Higher Education

- Less than 5 years: 0%
- 5 to 10 years: 33%
- More than 10 years: 67%
Learning Analytics Familiarity

- Novice: 53%
- Immediate: 27%
- Expert: 20%
Learning Analytics Experience

- Attending presentations, readings – Most of us
- Campus/national discussions (50%)
- Small scale exploration (40%)
- Application (30%)
Why are you here?

- Interest in learning analytics (33%)
- Institutional directive (26%)
- Learn more about learning analytics (63%)
- Gather resources/network (26%)
Introduction

What are we doing here?
What brought us here?

- Semantic bickering
- Surveying the landscape of LA
- Institutional capacity (Norris and Baer)
- ECAR State of Analytics at your Institution (Bischoell)
- Funding streams want to invest wisely
- Time for action
Introduction

The analytics readiness components
Analytics Readiness Components

- Components to base on research/experience
  - Stakeholders
  - Technical infrastructure
  - Institutional support
    - Strategic
    - Financial
    - Human capital
  - Model building
Analytics Readiness Components

- Components to discuss today
  - Intent and goal of initiative
  - Data
  - Assessment and evaluation
  - Human capital
Introduction

Who should complete the instrument?
So, who do you involve?

- Institutional leadership
- Faculty
- Student affairs
- Business staff
- Students (yes, students!)
Create focus

- What problem do you want to address?
- What data/information is available?
- Who on campus needs to provide input?
- How can you provide leadership to move this effort forward?
- What will success look like in the end?
Group Work I

Analytics Readiness – Is Your Institution Primed for Success?
Group Work

- 30 minutes
- Google docs
- Given component--details
  - what are the individual pieces
  - context specific criteria
  - where best source for accurate information about that component
Group Brainstorming Activity

- **Intent & Goals / Outcomes**
  - bit.ly/lar_intent
- **Data**
  - bit.ly/lar_data
- **Assessment & Evaluation**
  - bit.ly/lar_assessment
- **Human Capital**
  - bit.ly/lar_human
Break
Group Work II
Group Work

- 20 minutes
- Google docs
- Given component--details
  - What measures can be used?
  - How do we gauge an institution's preparedness
Next Steps

- Build the instrument
- Pilot and validate
- Refine
How to Keep the Conversation Going
Overview

- Leaders – who & how to connect
- Activities & Events
- Initial Actions – Setting the Stage
- Mapping the Current Data
- Connecting with External Organizations
Who are the local Analytics Leaders?

- **Faculty** who are interested in the intersection of “big data” and educational success / impact
- **Administrators** interested in topic and see long-term potential
- **Staff** who maintain institutional data and are actively looking for ways to leverage it
- **Students** who are interested in statistics for education, applications for “big data”, etc.
How to Connect the Leaders?

- Special Interest Group (SIG)
- Send to conference & report back
- Speaker series / symposium
- Special event
- Others?
Example: Symposium Series

- Symposium on Learning Analytics at Michigan
- Internal & External Speakers
- sitemaker.umich.edu/slam
Example: Symposium Series

Internal Speakers:
- Physics success
- Chemistry concurrent enrollment
- Writing – quantitative assessment
- Quai-experimental methodology in Education
- Summer Bridge program
- Engineering advising
- Psychology student success
- Student effort - LectureTools

External Speakers:
- John Campbell – Signals
- David Pritchard – MIT Cognitive Tutors
- John Fritz – Check my Activity
- George Siemens – Multi-Directional Analytics
- Krishna Madhaven – Social media & visualization
- Marsha Lovett – Learning Dashboard
- Tristan Denley – Degreee Compass
- David Niemi - Kaplan
From Leaders to Action

- Example: University of Michigan Learning Analytics Taskforce
- Provost charged leaders with 3-year charge and $2 million budget.
  1. Explore the UM information environment and build a learning analytics community
  2. Fund a series of the best proposed LA projects at UM
  3. Review the metrics used to assess teaching and learning at UM
Learning analytics' "goal is to deploy technology to collect and collate the richest possible portrait of the progress of students, to mine this data for new insights into what affects student success, and to support an array of interventions aimed at optimizing teaching and learning. ... To help the University of Michigan take advantage of this new opportunity, the Learning Analytics Task Force (is) charged with designing a program of activities to **draw out, support, and execute** the best ideas in learning analytics at Michigan."

UM LATF Website: https://sites.google.com/a/umdich.edu/um-latf/home
Example LA Activities

- Exploring Learning Analytics Grants
  - Financial & Technical assistance ($50-100K per year)
- LA Fellows Program (Winter 2013)
  - Projects & Training – 17 senior & 15 junior fellows
- Subcommittees
  - Information environment
  - Teaching & Learning metrics (incl. course evals)
Mapping the Data

- What data is currently available at your institution?
  - Who controls it?
  - What reports are already generated?
  - What tools are already available?
Mapping the Data

- HR / Benefits
- Payroll / Time & Labor
- Financials
- Research
- Space / Asset Management
- Development
- Etc.
Example: Existing Tools

Course Grade Pairs

Grade in PHYSICS 240 Terms: Fall 2002 - Fall 2012

Grade in STATS 250 Terms: Fall 2002 - Fall 2012
External Organization Connections

- LAK Conference
  - Also ICLS, CSCL, CHI, etc.
- Local “Flares”
- Summer Institute
- Webinars
- Listserve / Mailing List
- Twitter #learninganalytics
Recap

- Leaders – who & how to connect
- Activities & Events
- Initial Actions – Setting the Stage
- Mapping the Current Data
- Connecting with External Organizations
Wrap Up
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