IGNITE! Assessment Tools

Assessment 3.0 Maximizing Your Impact
University at Buffalo
Friday November 14, 2014
Using Tableau for UB Library Services

Nicole Colello & Jennifer Murray
Why Tableau?

- Formed Discovery and Delivery Assessment team in the Access Services unit (Circulation, Reserve, Inter-Library Loan)
- Have many systems that don’t talk to each other
- Numerous statistics kept by numerous staff using numerous tools
- Tool to easily connect, view and blend data elements → Tableau!
- Libraries Innovation Fund allowed us to purchase desktop licenses
Benefits of using Tableau

- Informed decision making
  - Drive improvement of services
  - Create workflow efficiencies
  - Aid in direction of future services

- Connect to a wide variety of data sources (InfoSource, MS SQL, Access, Excel...)

- Visualize your data - tell a story

- Interact with your data

- Easy to learn and use
Print Circulation Events – 5 years

Requests

Circulation Event Type
- loans
- renewals
- returns

- Delivery+ started in August 2012

Number of Records
- FY 2010: 15,448
- FY 2011: 19,178
- FY 2012: 19,597
- FY 2013: 32,450
- FY 2014: 35,669

Number of Records
Room Bookings, 2013-2014

Month

July 2013: 3
August 2013: 57
September 2013: 653
October 2013: 1133
Library Collections Overlap

SUNY Centers - Overlap with Empire Shared Serial Titles

<table>
<thead>
<tr>
<th>School</th>
<th>Number of Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>8000</td>
</tr>
<tr>
<td>Binghamton</td>
<td>7500</td>
</tr>
<tr>
<td>Stonybrook</td>
<td>8500</td>
</tr>
</tbody>
</table>

SUNY Centers - Overlap with UB (BUF) Print Books

<table>
<thead>
<tr>
<th>School</th>
<th>Number of Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>50K</td>
</tr>
<tr>
<td>Binghamton</td>
<td>60K</td>
</tr>
<tr>
<td>Stonybrook</td>
<td>55K</td>
</tr>
</tbody>
</table>
Next Steps

- Combine data from multiple systems within the Libraries
- Combine Library data with UB systems such as InfoSource
- Explore how else we might benefit from Tableau
- Goal to use Tableau across the UB Library units
THANK YOU!

Nicole Colello (ncolello@buffalo.edu)
Jennifer Murray (jlmurray@buffalo.edu)
Use of Learning Software for Classroom-Level Learning Outcomes Assessment

Laura Amo
Dianna Cichocki

School of Management
University at Buffalo
The State University of New York
Overview of MGQ201 and MGQ301

• Digital access courses with 600 - 850 students
• MGQ201 is general education course and prerequisite to admittance to the School of Management
• MGQ301 is core course in the BS in Business Administration and BS in Accounting programs
• Due to course volume, technology-assisted learning outcomes reporting is necessary
• Mastery-based model with learning software
  • MyStatLab is linked to the statistics textbook used
Course Objectives for MGQ201

Learning Objectives:

1. Students will demonstrate proficiency in information technology and management; specifically, students will perform word processing, spreadsheet design, data management, and information presentation.

2. Students will understand fundamental statistical concepts including types of data, types of statistics (descriptive vs. inferential), central tendency, central limit theorem, dispersion, association, and sampling.

3. Students will perform statistical computations including calculation of descriptive statistics, computation of probability, and derivation of sampling error.

4. Students will make decisions based on interpretation of statistical information.
# Mapping Course Objectives to Learning Activities

<table>
<thead>
<tr>
<th>Program Goal</th>
<th>Course Objective</th>
<th>Learning Objective</th>
<th>Means of Assessment</th>
<th>Criteria</th>
<th>Meets</th>
<th>Marginally Meets</th>
<th>Fails to Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will develop conceptual knowledge in analytics and quantitative methods</td>
<td>Students will understand fundamental statistical concepts including types of data, types of statistics (descriptive vs. inferential), central tendency, central limit theorem, dispersion, association, and sampling.</td>
<td>Types of data and types of statistics • Central Tendency • Central Limit Theorem • Dispersion • Association</td>
<td>Chapter 1 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 89% Fails = below 70%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Probability</td>
<td>Chapter 4 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 89% Fails = below 70%</td>
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<tr>
<td></td>
<td>Sampling</td>
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<td>Chapter 3 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 89% Fails = below 70%</td>
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<tr>
<td></td>
<td>Compute discrete probability</td>
<td>Chapter 5 Quiz</td>
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</tr>
<tr>
<td></td>
<td>Compute continuous probability</td>
<td>Chapter 6 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 89% Fails = below 70%</td>
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</table>
Gathering and Compiling Data

• Student performance on quiz (by item) is available for download in MyStatLab

• In MGQ201, quizzes are based on course objectives so the total score is an indicator for student learning for the different learning objectives

• After downloading the data into Excel, perform a frequency analysis based on the set criteria
  • For each quiz, calculate how many students received greater than 90% (Meets Criteria), between 70 and 89% (Marginally Meets Criteria), and below 70% (Fails to Meet Criteria)
  • Divide each $n$ (number of students in each category) by the total $N$ (total number of students who took the quiz)
## Mapping Course Objectives to Learning Activities

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<td>Chapter 1 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 83% Fails = below 70%</td>
<td>74.2% (n = 586)</td>
<td>9% (n = 71)</td>
<td>16.8% (n = 133)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Central Tendency</td>
<td>Chapter 3 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 83% Fails = below 70%</td>
<td>69.4% (n = 521)</td>
<td>15% (n = 113)</td>
<td>15.6% (n = 117)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Central Limit Theorem</td>
<td></td>
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<td></td>
<td></td>
<td>- Dispersion</td>
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<td></td>
<td></td>
<td>- Association</td>
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<tr>
<td>Probability</td>
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<td></td>
<td>Chapter 4 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 83% Fails = below 70%</td>
<td>89.6% (n=663)</td>
<td>6.4% (n = 47)</td>
<td>4% (n = 30)</td>
</tr>
<tr>
<td>Sampling</td>
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<td></td>
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<td>15.6% (n = 117)</td>
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<tr>
<td></td>
<td>Compute discrete probability</td>
<td></td>
<td>Chapter 5 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 83% Fails = below 70%</td>
<td>63.8% (n = 434)</td>
<td>12.6% (n = 86)</td>
<td>23.5% (n = 160)</td>
</tr>
<tr>
<td></td>
<td>Compute continuous probability</td>
<td></td>
<td>Chapter 5 Quiz</td>
<td>Meets = 90% or above Marginal = 70 – 83% Fails = below 70%</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

|  |  |  |  |  |  |  | |
| | | | | | 73.28% | 11.6% | 15.1% |
Informing Course Content and Delivery

• As part of closing the loop, I reflect on specific areas where students are not meeting criteria
  • Based on this data, discrete probability concepts and calculations appear to need more instructional attention as 23% of students are failing to meet the criteria
  • In future semesters, I need to dedicate more time to this topic and will provide review on discrete probability before the final exam for this semester
In order to report information at the program level, average the percentage of students who Meet, Marginally Meet, and Fail to Meet all of the learning objectives that map to that particular program goal. See the bottom row on the reporting form.

Approximately 85% of the students in MGQ201 were able to demonstrate that they developed conceptual knowledge in analytics and quantitative methods. Conversely, 15% of the students were unable to demonstrate such knowledge.

Combine this aggregated information from that in other courses to provide a more comprehensive perspective of learning outcomes.
Thank you for your time and feel free to contact us with any questions or comments

Laura Amo  lccasey@buffalo.edu
Dianna Cichocki  diannaci@buffalo.edu

Additional resources on MyLab:
http://www.pearsonmylabandmastering.com/northamerica/

Enhanced Scoring:
http://ubtlc.buffalo.edu/services/scoring.html
UB Course Evaluation:

Boosting Response Rates

Carol Van Zile-Tamsen
Associate Director
211A Capen Hall
Tel: (716) 645-3905
cmv3@buffalo.edu
New Approaches Required to Encourage Student Responses:

- Unlike old paper-and-pencil evaluations, online course evaluations can be completed at any time and from anywhere.
- This approach allows a great deal of flexibility but response rates tend to decline when students are not “captive” in a classroom.
Top Methods for Increasing Response Rates:

• University-wide Advertising campaign:
  • Should stress the importance of course evaluations in teaching and learning
  • Emphasize students’ responsibility to provide feedback
• Announcements from deans and department chairs about the importance of evaluations.
Top Methods for Increasing Response Rates:

• Announcements from instructors:
  • on syllabus, in class, and/or UBlearns
  • encouragement to complete evaluations
  • emphasis on the importance of evaluations
• Direct e-mail to students with link to system.
• Frequent reminders to those who haven’t responded.
Top Methods for Increasing Response Rates:

- In classrooms with sufficient wifi bandwidth, time allotted for students to complete evaluations
- Incentives to an entire class for achieving a certain response rate, such as getting out of class early on the last day or some other incentive.
Questions?

What other details do you need to know?
SURVEYS, RUBRICS, BENCHMARKING, OH MY!
ACCESSING CAMPUS LABS BASELINE

Kim Yousey-Elsener
Office of Assessment and Evaluation
University Life & Services
kmelsene@buffalo.edu
Setting the Context – What is Campus Labs

- **Ca**: Compliance Assist
  - Organize planning and accreditation

- **B**: Baseline
  - Capture evidence of student learning

- **Ce**: Course Evaluations
  - Elevate teaching and learning

- **Be**: Beacon
  - Retain students through early alert

- **C**: CollegiateLink
  - Create meaningful involvement experiences

- **In**: Insight
  - Inform decision making
So why has this changed now?

- University-wide license was purchased as of Spring 2015

- Free pilot/trial period for departments from now until June 2015

- After that, charges will be made to cover cost of license and human resources needed to administer the program details will come early in Spring 2015
What is Baseline?

- Unlimited use of features and support
- Technical support weekdays 8 am – 8 pm Eastern
- Consultation from an assessment team
- Training and professional development webinars
- Access to assessment resources and template projects
- Open participation in all benchmarking studies
- Central location for all assessments with customized access
- Survey data collection (web, mobile)
- Rubrics
- Online reporting tools
- Key performance indicators
<table>
<thead>
<tr>
<th>Title</th>
<th>Institution</th>
<th>Description</th>
<th>Date Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Satisfaction Survey (Retention)</td>
<td>Canisius College</td>
<td>Survey to assess student satisfaction of various resources and key interactions on campus (e.g., academic advising, bookstore, library). Data used as part of a larger conversation surrounding student ...</td>
<td>10/28/2012</td>
</tr>
<tr>
<td>UAAC Advising Survey</td>
<td>Miami University</td>
<td>Survey for faculty advisors to find out what types of issues they are facing as advisors, how much time they are spending and what training they would like to receive.</td>
<td>10/28/2012</td>
</tr>
<tr>
<td>Scholar in Residence Scholar Assessment 2012-2013</td>
<td>The University of Chapel Hill</td>
<td>This is an assessment of the Scholar in Residence's experience as a result of participating in and facilitating the Scholar in Residence program.</td>
<td>10/24/2012</td>
</tr>
<tr>
<td>Faculty Survey on Test Modification Services</td>
<td>The University of Montana</td>
<td>This survey focuses on faculty knowledge and attitudes regarding testing modifications and their experiences with the Disability Services office.</td>
<td>8/22/2012</td>
</tr>
<tr>
<td>Learn and Earn Survey</td>
<td>Cascadia Community College</td>
<td>This survey was administered to students that self-identified as working while attending. The purpose was to gain insight into how the college could better serve this population of students both face2...</td>
<td>8/13/2012</td>
</tr>
<tr>
<td>Residence Learning Plan Assessment</td>
<td>York University</td>
<td>This survey was designed to assess how students are learning in their residence hall</td>
<td>8/2/2012</td>
</tr>
<tr>
<td>Commuter Assistant Mentorship Program Evaluation: Mentee (CAs)</td>
<td>Stony Brook University</td>
<td>This survey gathers satisfaction and learning outcome data from mentees about their experience working with mentors in the Commuter Assistant Mentorship program.</td>
<td>7/25/2012</td>
</tr>
</tbody>
</table>
Surveys

Mobile data collection

Online data collection

Use your departmental webpage as the Finish page

508 compliant for screen reading technology
### Critical Thinking Rubric

<table>
<thead>
<tr>
<th>Component</th>
<th>1 - Beginner</th>
<th>2 - Developing</th>
<th>3 - Accomplished</th>
<th>4 - Advanced</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic selection</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>- Identifies a topic that is far too general and wide-ranging as to be manageable and doable.</td>
<td>- Identifies a topic that while manageable/doable, is too narrowly focused and leaves out relevant aspects of the topic.</td>
<td>- Identifies a focused and manageable/doable topic that appropriately addresses relevant aspects of the topic.</td>
<td>- Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the topic.</td>
<td></td>
</tr>
<tr>
<td><strong>Existing Knowledge, Research, and/or Views</strong></td>
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<tr>
<td></td>
<td>- Presents information from irrelevant sources representing limited points of view/approaches.</td>
<td>- Presents information from relevant sources representing limited points of view/approaches.</td>
<td>- Presents in-depth information from relevant sources representing various points of view/approaches.</td>
<td>- Synthesizes in-depth information from relevant sources representing various points of view/approaches.</td>
<td></td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>- Lists evidence, but it is not organized and/or is unrelated to focus.</td>
<td>- Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities related to focus.</td>
<td>- Organizes evidence to reveal important patterns, differences, or similarities related to focus.</td>
<td>- Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.</td>
<td></td>
</tr>
<tr>
<td><strong>Leadership Rubric Template - Inclusive</strong></td>
<td></td>
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</tr>
</tbody>
</table>
Question 1

How long is the typical resume?

Single Response

3 1 page 50%
2 2 pages 33%
1 3 pages 17%
4 pages 0%

Connected Users: 0
Best Uses For Baseline:

- Departments and programs looking to do program or service level assessments when aggregate data is needed
- Intended respondents are UB students, faculty, staff, alum or other constituencies

Should not use for:

- Research projects
- Student projects
- Individual student testing
- To replace forms when individual data is needed
How do I get access?

- If in University Life and Services – contact Kim Yousey-Elsener (kmelsene@buffalo.edu).

- If under the Provost Office – contact Kim Yousey-Elsener (kmelsene@buffalo.edu) OR Carol Van Zile-Tamsen (cmv3@buffalo.edu)

- Everyone else – contact Kim Y-E
QUESTIONS FOR ALL PRESENTERS