Using Blue Online Course Evaluations to Improve Teaching and Learning at IUPUI
Agenda

• Show the Website for Course Evaluations
  o About Course Evaluations - Mission and Vision
• Key Features of Blue Course Evaluations
• Update on Campus-wide Administration of Blue
• Screenshots for Illustration:
  o IU Course Questionnaire Data Manager (CQDM)
  o Blue Dashboard
  o Online Course/Instructor Questionnaire (sample)
  o Course/Instructor Evaluation Report (sample)
• Challenges with Using Blue Course Evaluations
• Optimizing the Utility of Course Evaluation Data
• Using student feedback for Formative and Summative Evaluation purposes
Session Goals

• Provide a status update on the campus-wide use of Blue online course evaluation services

• Increase awareness about course evaluation resources available to users, and how to use the resources effectively

• Promote best practices in administering course evaluations

• Discuss ways to enhance the utility of course evaluation data
About Course Evaluations

• Website: ce.iupui.edu

• Mission of Course Evaluation Services:
  o Facilitate the collection, analysis, and distribution of data to improve the teaching and learning environment at IUPUI.

• Vision:
  o Our vision is to provide integrated evaluation information in ways that will continuously improve instruction and student learning at IUPUI.
**Blue Course Evaluations: Feature Highlights**

- Streamline/automate evaluations and report distribution
- Powerful reporting: comparative or aggregate reporting
- IT Integration with Canvas LMS / SIS
- Use Blue response rate monitoring tools to help raise survey response rates
- Configure levels of student anonymity/confidentiality
- Support for Joint- or Cross-Listed courses
- Evaluate team-taught courses
- Flexible completion windows for responses
Blue Resource Partnership: UITS, IUPUI, and Explorance Inc.

• UITS Enterprise Services
  o Blue System Administration (UITS Enterprise Services)
  o IT Support & Blue Integration with Canvas LMS
  o IU Course Questionnaire Data Manager (CQDM)
  o IU Knowledge Base
  o Partner with Explorance Inc. for External IT Support Services + Manage IU-Blue Services Contract

  ➢ Explorance Blue (Certification Training / Professional Development)
    o Webinars & Help Center (help.explorance.com)
    o Blue Community (Bluenotes Group)

• IUPUI (Indianapolis)
  o IRDS Office serves the role of Blue Project Administrator
    ✓ under the auspices of the Office of Academic Affairs
  o Blue Users (Schools & Departments)
Potential **Benefits** (for Instructors)

- “Question Personalization (QP)”
  - Instructor “add-on” items to standard course questionnaires in use
- Faculty control the timing of evaluations
- Quick Access to Results
- Gather Better Quality Data
- Detailed Reports (e.g., aggregate data across multiple classes, departments, terms, etc.)
- Use Time-Trend Analysis to monitor improvement over time
Possible **Benefits** of Online Ratings

- **Quicker feedback to instructors**

- **Anonymity of students’ comments** — instructors cannot identify student handwriting.

- **Longer and more thoughtful feedback from respondents** — students have more time to complete rating forms and provide greater quantity and quality of comments.

- **Class-time savings** — requires no class time.

- **Cost savings over time** — initial investment cost is usually high, but cost savings might accrue in the long run.

- **Flexibility in creating rating forms and reports for respective schools**
How Blue is Used at IUPUI (Indianapolis Campus)

• IUPUI employs a **decentralized** approach to management of course evaluation process
  
  o IUPUI administers **multiple course evaluation questionnaires** (each school develops and uses its own questionnaires)

• **School faculty control the questionnaire content and timing** of course evaluations
  
  o Automated Evaluations -- Automate all course evaluations including courses with different durations, start dates, and end dates
  
  o Blue Project Admins promote use of **uniform directionality or positioning** of **Likert-type response scales** on course evaluation instruments
Solutions Deployed at IUPUI (Indianapolis)

- Developed and implemented the Course Questionnaire Data Manager (CQDM) – tool designed to facilitate preparation and review of course data sources

- For each academic term, School/Department Admins for Blue use CQDM to select courses for evaluation plus evaluation start & end dates

- Blue Projects are centrally managed and administered by Certified Blue Project Admins (IRDS Office)
  - Certified Blue Project Admins in IRDS handle: Blue project set up, testing, & administration; Communication to students, faculty, and academic or IT admins; administration of the Question Personalization (QP) process; Distribution of Course Evaluation Reports, etc.
Course Questionnaire Data Manager (CQDM)
[For Admin use: cqdm.iu.edu]

- IU CQDM tool (aka the Evaluation “Planner”) is designed to help academic units to review and verify accuracy of course data sources for upload to Blue.

- Course data contain various fields including:
  - Course evaluation start and end dates;
  - Specific data fields required for use in generating customized or aggregated course/instructor evaluation reports; and
  - Key data for generating additional input data sources (e.g., student, instructor, student-course, instructor-course, user data, etc.) required for upload to Blue.
IU CQDM: Screenshot

Public View of CQDM: https://cqdm.iu.edu/course/selection/public
IUPUI – BLUE Users
Fall 2018

Total # of Academic Units Using BLUE Course Evaluations: 15
Total # of Courses marked “Evaluate”: ~4,547 out of 7,782 courses

- Business (Indianapolis)
- Education
- Engineering & Technology
- Health & Human Sciences (SHRS + PETM)
- Herron Art & Design
- Informatics & Computing
- Law
- Liberal Arts

- Medicine (Radiology & Imaging Sci.; Pathology & Lab Medicine Depts.)
- Philanthropy
- Public Health
- Science
- Social Work
- Public & Environmental Affairs (via Blue Project administered at IUB)
- University College
## Blue Online Course Evaluations
### Overall Average Response Rates
#### Fall 2015 – Fall 2018

<table>
<thead>
<tr>
<th>Term</th>
<th>Number of Academic Units (included in analyses)</th>
<th>Overall Mean Response Rates</th>
<th>Range of Overall Mean Response Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2015</td>
<td>10</td>
<td>53%</td>
<td>41% to 69%</td>
</tr>
<tr>
<td>Spring 2016</td>
<td>11</td>
<td>56%</td>
<td>45% to 78%</td>
</tr>
<tr>
<td>Fall 2016</td>
<td>13</td>
<td>58%</td>
<td>47% to 76%</td>
</tr>
<tr>
<td>Spring 2017</td>
<td>16</td>
<td>52%</td>
<td>32% to 94%</td>
</tr>
<tr>
<td>Fall 2017</td>
<td>16</td>
<td>55%</td>
<td>41% to 79%</td>
</tr>
<tr>
<td>Spring 2018</td>
<td>16</td>
<td>53%</td>
<td>38% to 91%</td>
</tr>
<tr>
<td>*Fall 2018</td>
<td>15</td>
<td>51%</td>
<td>35% to 73%</td>
</tr>
</tbody>
</table>

*Note: SHRS and PETM merged and established new School of Health & Human Sciences (SHHS)*
Response Rates

- Low response rates for online surveys is a concern
- Non-response bias might occur; so…
- Strive to achieve sufficient response rates to maintain reliability and validity evidence that is acceptable.
Tips to Increase Response Rates for Online Course Evaluations

1. Communicate with your students accordingly (to increase engagement)

2. Promote importance & usefulness of your course evaluations

3. Make it easy for students to provide their feedback (e.g., use uniform positioning of Likert-type response scales)

4. Use customized email subject and content; and provide reminders when course evaluations are active

5. Offer incentives to spur course evaluation participation and completion

6. In-class evaluations (allow students to complete the evaluations on their mobile devices)

7. Create a culture of feedback in the course (e.g., collect other types of feedback during the semester)
Access Blue Course Evaluations

Via IU Central Authentication Service // Two-Step Login (Duo)

https://coursequestionnaire.iu.edu
### IUPUI Course Evaluation - Spring 2016 for CIT 34600 (LEC) 26673 DESKTOP PUBLISHING CIT

**4-Point Response Scale:** 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

Please rate the course on the following criteria:

**Alert:** The POSITIVE (favorable) responses are positioned on the RIGHT

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online instructional materials helped me learn the subject.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The class provided a motivating environment for learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course assignments were helpful to my learning the subject.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The class was appropriately designed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, I learned a great deal from this class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments about the course**

Please click "Next" to continue...

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**Mobile Version | Standard Version**
Blue Dashboard (Screenshot)
## Example of Course Satisfaction Ratings

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
<th>Median</th>
<th>Count</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course syllabus was clear and well designed.</td>
<td>4.50</td>
<td>5.00</td>
<td>10</td>
<td>70 %</td>
<td>20 %</td>
<td>0 %</td>
<td>10 %</td>
<td>0 %</td>
</tr>
<tr>
<td>Instructional materials were helpful in learning the subject.</td>
<td>4.40</td>
<td>5.00</td>
<td>10</td>
<td>60 %</td>
<td>30 %</td>
<td>0 %</td>
<td>10 %</td>
<td>0 %</td>
</tr>
<tr>
<td>I understood the grading procedures in this course.</td>
<td>4.00</td>
<td>4.50</td>
<td>10</td>
<td>50 %</td>
<td>20 %</td>
<td>20 %</td>
<td>0 %</td>
<td>10 %</td>
</tr>
<tr>
<td>I gained knowledge or skills in this course.</td>
<td>4.00</td>
<td>4.50</td>
<td>10</td>
<td>50 %</td>
<td>30 %</td>
<td>0 %</td>
<td>10 %</td>
<td>10 %</td>
</tr>
<tr>
<td>I recommend this course.</td>
<td>4.10</td>
<td>4.50</td>
<td>10</td>
<td>50 %</td>
<td>30 %</td>
<td>10 %</td>
<td>0 %</td>
<td>10 %</td>
</tr>
</tbody>
</table>
### Basic Statistical Report

#### (Individual Instructor Report)

**About the course - Experimental Investigation & Analysis of Behaviour-C-I**

1. This course helped me develop my ability to work as a team member

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
</tr>
<tr>
<td>Neutral</td>
<td>4</td>
</tr>
<tr>
<td>Agree</td>
<td>5</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Count</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>2.68</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>+/-0.95</td>
</tr>
<tr>
<td>Population Standard Deviation</td>
<td>+/-0.92</td>
</tr>
<tr>
<td>Standard Error (base on SD)</td>
<td>+/-0.22</td>
</tr>
<tr>
<td>Standard Error (base on PSD)</td>
<td>+/-0.21</td>
</tr>
</tbody>
</table>

2. This course sharpened my analytical skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
</tr>
<tr>
<td>Agree</td>
<td>5</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Response Count</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>3.11</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>+/-1.24</td>
</tr>
<tr>
<td>Population Standard Deviation</td>
<td>+/-1.21</td>
</tr>
<tr>
<td>Standard Error (base on SD)</td>
<td>+/-0.29</td>
</tr>
<tr>
<td>Standard Error (base on PSD)</td>
<td>+/-0.28</td>
</tr>
</tbody>
</table>

3. This course developed my problem solving skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
</tr>
<tr>
<td>Agree</td>
<td>7</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Count</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>3.63</td>
</tr>
<tr>
<td>Median</td>
<td>4.00</td>
</tr>
<tr>
<td>Mode</td>
<td>4</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>+/-1.38</td>
</tr>
<tr>
<td>Population Standard Deviation</td>
<td>+/-1.38</td>
</tr>
<tr>
<td>Standard Error (base on SD)</td>
<td>+/-0.32</td>
</tr>
<tr>
<td>Standard Error (base on PSD)</td>
<td>+/-0.31</td>
</tr>
</tbody>
</table>

4. This course improved my skills in written communication

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Statistics**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Response Count</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>3.37</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>2.5</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>+/-1.38</td>
</tr>
<tr>
<td>Population Standard Deviation</td>
<td>+/-1.38</td>
</tr>
<tr>
<td>Standard Error (base on SD)</td>
<td>+/-0.32</td>
</tr>
<tr>
<td>Standard Error (base on PSD)</td>
<td>+/-0.31</td>
</tr>
</tbody>
</table>
Example of Comparative Mean Scores

Comparative Mean Scores:

Overall

- Your Score: 4.20
- Department (ENG): 4.24
- Program (English): 4.24
- School (School of Liberal Arts): 4.28

1. The course syllabus was clear and well designed.

- Your Score: 4.50
- Department (ENG): 4.28
- Program (English): 4.28
- School (School of Liberal Arts): 4.31

2. Instructional materials were helpful in learning the subject.

- Your Score: 4.40
- Department (ENG): 4.23
- Program (English): 4.23
- School (School of Liberal Arts): 4.25

3. I understood the grading procedures in this course.

- Your Score: 4.00
- Department (ENG): 4.20
- Program (English): 4.20
- School (School of Liberal Arts): 4.28

4. I gained knowledge or skills in this course.

- Your Score: 4.00
- Department (ENG): 4.32
- Program (English): 4.32
- School (School of Liberal Arts): 4.35

5. I recommend this course.

- Your Score: 4.10
- Department (ENG): 4.18
- Program (English): 4.18
- School (School of Liberal Arts): 4.21
What challenges related to online course evaluations has your school/department experienced?
Challenges to Using Course Evaluation Data (continued)

- Ambiguity about the primary **purpose(s)** of course evaluations

- **Inconsistency** in the campus-wide adoption of course evaluation processes across the schools

- Concerns regarding misinterpretation or **misuse** of course evaluation data (particularly when making personnel decisions)
Making Course Evaluations Effective
[Ref.: Felder (1993)]

- **Constructing, administering, & interpreting evaluations:**
  - **Collect overall course-end ratings of instruction.**
    - **Note:** Clearly define the numbers on the response scale
      - Example: “Rate the instruction you received in this course on a scale from 1 to 5, with 5 being the highest response.”
  - **Collect ratings of individual aspects of instruction.**
  - **Collect evaluations midway through a course** rather than waiting until the end. (purpose: *formative evaluation*)
  - **Use multiple methods to collect student feedback**
    - (e.g., from small groups of students; focus groups; interview student reps.)
  - **Use a variety of sources of feedback**
    - Have faculty colleagues observe your teaching and provide feedback.
    - Video record one of your classes and review the recording
  - **Work with an instructional consultant** to interpret student feedback and plan teaching improvement strategies
Student Evaluations of Teaching:

Using Student Feedback for Formative or Summative Assessment
Useful Points to Consider …

- Instructors benefit most from *formative evaluation* if they have:
  - helped to shape the questions posed (e.g., via *Question Personalization* process)
  - a good understanding of the feedback provided
  - assistance and resources available for making improvements
Formative Uses of Student Ratings

- **Formative purposes:** Useful feedback for faculty development and enhancement of instruction

  - For instance, student feedback can lead faculty to revise teaching methods, refine their courses, change textbooks, revise assignments, or make other changes to provide students with better learning experiences.

  - Research suggests that students are most qualified sources to report on the extent to which the learning experience was productive, informative, satisfying, or worthwhile.
Additional Tips for Using Student Ratings to Enhance Effective Instruction

• Look for **trends or patterns** in the data

• **Focus on key aspects** of your course evaluations

• **Don’t give undue weight to open-ended comments** from respondents

• Take into account **course characteristics**
Beneficial Ideas on How Instructors Might Improve their Courses

- Reflecting on goals for the course
- Reflecting on teaching methods
- Considering one’s strengths & weaknesses as a teacher
- Targeting key areas that need improvement
- Identifying strategies for change (e.g., clarifying points or chunking content)

Ref.: Using Student Evaluations to Improve Teaching. *Speaking of Teaching.* (Stanford University Newsletter on Teaching), Fall 1997, 9(1).
Beneficial Ideas on How Instructors Might Improve their Courses (continued)

• To help take the sting out of student feedback, organize students’ comments into three categories:
  o Positive Comments (verbatim quotes of positive comments)
  o Constructive Criticism (summary of constructive criticisms)
  o Unconstructive Criticism (note: leave out the negative comments)

• Benefit of this approach is how one characterizes the constructive criticism (e.g., to “remove the emotional intensity” that negative feedback might raise)
Summative Uses of Student Ratings

- **Summative** (high-stakes) purposes: Student ratings are one source of data about teaching effectiveness for specific uses, such as:
  - Program review, and/or for meeting accreditation data requirements.
  - Assessment of student learning outcomes
    (assuming the instruments in use are designed appropriately and have good technical properties)
Summative Uses of Student Ratings (continued)

- Make appropriate decisions about course and program level modifications
- Evaluate strengths and weaknesses of various instructional delivery modes, including the intersection of content and mode of delivery
- Measure program level and general education learning outcomes
- Evaluate and address concerns for preparatory course (e.g., the first course in a required sequence of courses)
- Meet accreditation standards and data requirements
Limitations of Course Evaluation Ratings

- **Impact of gender & racial biases in student evaluations**
  - Occurs when one employs *global/overall items* to measure general impressions such as “*overall teaching ability*” or “*overall value of course*” (i.e., global items are *abstract* and *subjective*, not *concrete*…)
    - Instructor item: “*Overall, this instructor is an excellent teacher.*”
    - Course Items: *I learned a lot in this course. Overall, this is an excellent course.*

- **Gender/racial bias** (i.e., the phenomenon of lower teaching evaluations from students) creates a problematic situation for an academic unit and its personnel decisions
  - *Selected list of recent articles include:* Boring, 2017; Boring, Ottoboni, & Stark, 2016; Collins, 2016; Hornstein, 2017; Lilienfeld, 2016; MacNeil & Hunt, 2014; Mitchell & Martin, 2018; Rojstaczer, 2012; Smith & Hawkins, 2011; Shaw, 2018; Winer, DiGenova, & Costopoulos, 2016)
Blue: Selected Online Resources

- Course Evaluations – Basic Info via the IRDS website:
  - ce.iupui.edu

- IU Knowledge Base (Course Questionnaires):
  - kb.iu.edu (type in the search key: Course Questionnaire)

- eXplorance Blue:
  - explorance.com/course-evaluations/

- The Bluenotes Group:
  - bluenotesgroup.com
Course Questionnaires (CQ) via Blue: Instructional Videos (YouTube)

- Course Evaluation Planner (aka **CQDM**):
  https://iu.mediaspace.kaltura.com/media/Course+Evaluation+Planner+/1_9b8ox3j3

- Student Access to Course Questionnaire (CQ):
  https://www.youtube.com/watch?v=bS-GgBR8wGQ

- Instructor CQ Question Customization:
  https://www.youtube.com/watch?v=asD948vI2zs

- Instructor CQ Rates and Reports:
  https://www.youtube.com/watch?v=HlvPkmw1Bu8
Q & A Session...

Question & Answer

and

Thank You!
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