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## **Developing CourseEvalUM: Our Process, Challenges, and New Directions**

Sharon A. La Voy & Jessica Mislevy  
Institutional Research, Planning and Assessment

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## **What We'll Cover Today**

-  History of the project
-  Decisions made along the way
-  Instrument development
-  Reporting
-  Administration and implementation
-  Next steps



## Project History

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- Decentralized by college and even department
- Students interested in seeing results
- Senate action – committees, task forces, etc.
- Assigned to IRPA to design and administer
- Technical development assigned to OIT



## Project History - Timeline

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- April 2005: Task Force submits final recommendations to Campus Senate
- April 2006: Implementation Committee submits plan
- December 2006: Items piloted
- Summer 2007: First level of technology piloted
- December 2007: All courses participate
- May 2008: College level & multiple instructors added



## Decisions

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- Senate task forces envisioned dynamic system with hierarchy for university, college, department, and instructor items
- Lawyers required administrative vs. student views for personnel file reasons
- Comments go to administrators, and instructors see all
- Off-the-shelf products did not have such a system available, could develop for \$\$



## Decisions (cont.)

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- OIT heard of an open-source product being designed with these specifics, in Sakai
- Student participation key
  - 70% response rate necessary for course display
  - No access without participation
- Needed a coordinator



## Instrument Development

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- Senate task force suggested 16 universal items
- Piloted the items to see how they function
  - Partnered with units to replace with or add items to existing systems in Fall'06
- Conducted subsequent pilots to test new technology system



## Qualitative Analysis of Pilot Data

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- Respondents asked to comment on items which seemed unclear, were hard to answer, or did not seem to apply to them
- Most feedback was positive but some items were identified as problematic
  - Slight changes made to item wording and response options

## Example of Item Changes

- Original item: “*The grading in this course was fair.*” (Strongly Disagree to Strongly Agree)
- Several issues raised by respondents
  - Hard to answer
  - Non-directional
- Revised item: “*Based on the quality of my work in this course, the grades I earned were...*” (Too Low, Appropriate, Too High)

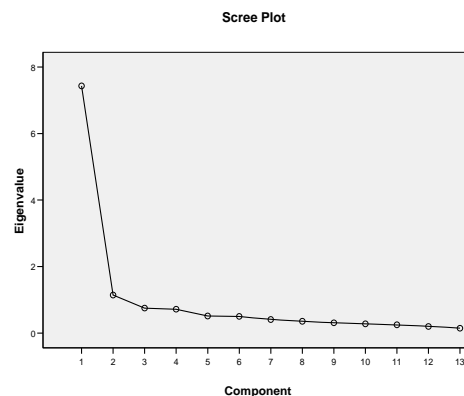
## Quantitative Analyses of Pilot Data

- Descriptive statistics:

Respondents tend to use positive end of scale

- Dimensionality:

Items tap single dimension






## Quantitative Analyses (cont.)

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### Reliability:

- Responses are highly consistent across the set of items
- Student and administrator item sub-sets function the same
- Responses remain stable across administrations



## Reporting of Results

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- Types of reports currently available
  - Course-section reports
  - Summary reports
  - Large lecture roll-up reports
- Calculation and display of results
  - Access to results
  - Summary measures
- Methodological decisions and challenges

## Course-Section Reports

Display of results depends on item type:

- 🌸 Access to results - student, admin, or instructor
- 🌸 Focus of the item - instructor or course item
- 🌸 Response scale - interval, ordinal, or text
- 🌸 Hierarchy level - university or college-level

## Sample Course-Section Report

### ADMINISTRATOR UNIVERSITY-WIDE INSTRUCTOR ITEMS:

Questions for use by faculty/instructors and for administrative purposes  
N/A responses have been excluded from the following calculations.

	Instructor: Professor A						FAKE100	0101	COLLEGE COMPARISON*
	Number of Responses	% Strongly Disagree	% Disagree	% Neutral	% Agree	% Strongly Agree	Mean	Stdv.	Mean
The instructor treated students with respect.	65	0	2	2	25	72	3.68	0.589	3.49
The instructor was well-prepared for class.	65	0	0	2	17	82	3.80	0.440	3.40
Overall, this instructor was an effective teacher.	65	0	0	5	15	80	3.75	0.531	3.04

\* Average rating for all similarly leveled course sections (e.g., all 200-level course sections) in this college.

### AVERAGE OF FIVE ADMINISTRATOR AGREE/DISAGREE QUESTIONS: 3.58 / 4.00

Scaled 0-4: Strongly Disagree=0; Strongly Agree=4. N/A is not in the average.

The standards the instructor set for students were ... (Number of Responses 65)

0% Too Low

94% Appropriate

6% Too High

## Summary Measures

- 🎓 Instructor score
- 🎓 College comparison mean
- 🎓 Large lecture roll-up
- 🎓 Unit summaries
  - Department, college, and university level
  - Results by sub-unit and by course level

## Sample Summary Report

### College-level Results by Department and by Course Level

Fake College Department-Level Results:

Department	Score*	The instructor treated students with respect.	The instructor was well-prepared for class.	The course was intellectually challenging.	I learned a lot from this course.	Overall, this instructor was an effective teacher.	Number of Course Section Units Included in Calculations	Total Number of Evaluations Submitted	Total Number Enrolled	Overall Response Rate
Dept A	3.53	3.60	3.73	3.23	3.41	3.70	11	112	201	55.7%
Dept B	3.10	3.51	3.45	2.59	2.74	3.22	11	117	175	66.9%
Dept C	3.33	3.55	3.46	3.14	3.20	3.30	73	995	1,301	76.5%
Dept D	3.28	3.63	3.53	2.71	3.08	3.45	40	527	839	62.8%

\* Average of Instructor Scores from course-section units across all course sections in department  
 Instructor Scores are scaled 0-4: Strongly Disagree=0; Strongly Agree=4. N/A is not in the average.





## Methodological Challenges

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- Deciding what to display and how to calculate it
  - Specific descriptions and formulas
  - Handling NA and missing responses
- Rolling up the data across courses
  - Unit of analysis
- Defining a course section unit
  - Large-lecture and multiple-instructor courses



## Administration and Implementation

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- Senate interest
  - “Must be implemented next semester”
- IRPA Coordinator as campus “point-person”
- IRPA-OIT planning and development team



## Administration

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- College Liaisons
  - Communication within colleges
  - On-going communication with IRPA
- Schedulers
  - IRPA Liaison with registration to department schedulers
  - SIS indicators for Yes or No Evaluation per course and instructor



## Administration (cont.)

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- Advisory Group
  - Colleges, SGA, GSG, Academic Affairs, OIT, IRPA, Graduate School
  - Policy and development recommendations
- OIT Help Desk
  - Responding to issues they cannot address
- Student Government and other groups



## Implementation

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- 🌟 On-going development of application
  - Sakai development vs. reporting
  - Open source challenges
- 🌟 Faculty buy-in
  - Varies by college and unit
  - Individual instructors make the difference



## Implementation (cont.)

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- 🌟 Student participation challenges
  - About 61-66% overall each semester
  - Confusion over “shadow systems”
  - 2/3 submit and 1/3 did not
- 🌟 Need to understand why, and to what effect



## Response Rate Qualitative Study

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### Best Practices for Faculty:

- 🌟 Almost all - verbal reminders
- 🌟 Almost half - electronic reminders
- 🌟 Several - section-specific response rates, some for friendly competitions among sections
- 🌟 Only some - mention on syllabus
- 🌟 Theme - high importance placed on teaching



## Response Rate Qualitative Study

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### Non-Participating Students:

- 🌟 Almost all were aware of CourseEvalUM
- 🌟 Most said they were too busy or ran out of time
- 🌟 Others said they filled out another eval, they forgot, were too lazy, or didn't want to participate



## Response Rate Quantitative Study

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Study on relationship between response rates and instructor scores:

- Less than 1% of variance in scores explained by response rate
- Less than 5% of variance in scores explained by response rate, class size, course level, and academic discipline
- Leaving 95% unexplained by known course characteristics



## Continuing Development

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- Competing desires for enhancements
- Eliminating “shadow systems”
- Acknowledging frustrations with iterative process of development

## Data Warehousing

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- Need for direct access to data
- IRPA long-term assessment/research interests
- “Local” assessment interests
- Current vs. frozen
  - Users would query current
  - IRPA would use frozen
- Methodological challenges – calculation error

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See our CourseEvalUM website:

[https://www.irpa.umd.edu/Assessment/crs\\_eval.shtml](https://www.irpa.umd.edu/Assessment/crs_eval.shtml)

Email: [course-eval-admin@umd.edu](mailto:course-eval-admin@umd.edu)



**Fear the Turtle**