



Can e-Learning Revolutionize Quality Assessment?

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Agenda

- Role of the Academic Enterprise System in quality assessment
- University System of Georgia applications
 - Retention
 - Faculty roles
 - Accreditation





Potential Application: Student Engagement



- Can active student engagement improve retention rates ?
 - How much time are student spending in their online course or course component ?
 - How often are students actively participating in the online environment through discussions or chat ?
 - Are students communicating with the instructor or other students using mail ?





Potential application: Formative Assessment

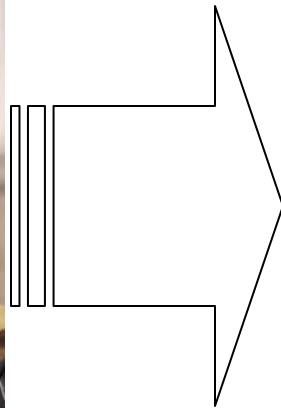
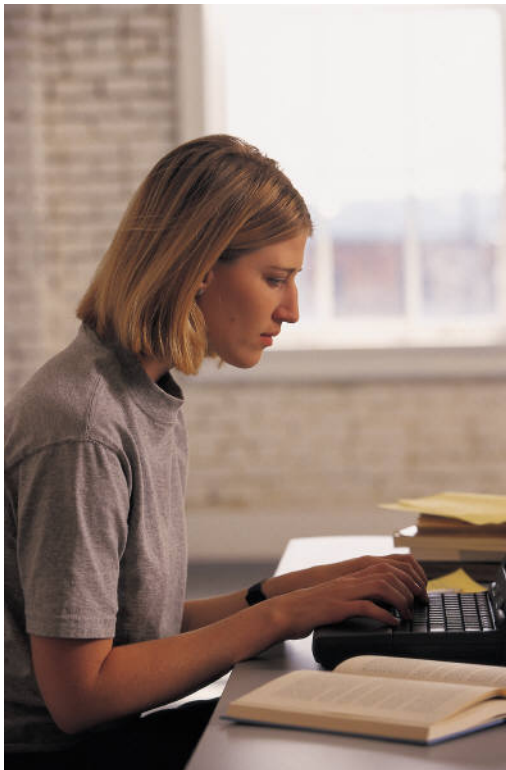


- Do you want to track the ways in which student learning is being assessed ?
 - What types of assessment tools are being used ? (quizzes, assignments, self tests)
 - Are students working & learning individually or in groups ?
 - What are interim student grades?
 - How many graded assessments per student on average ?





Student Online Activity

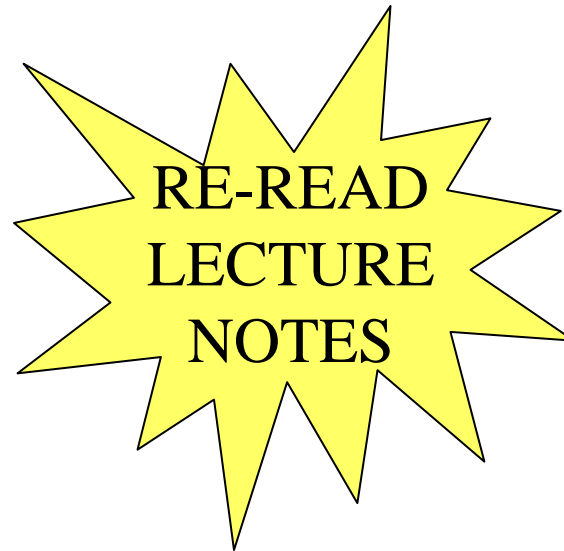
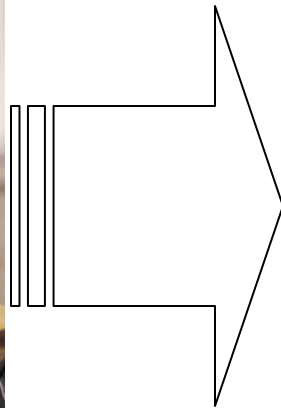


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Student Online Activity

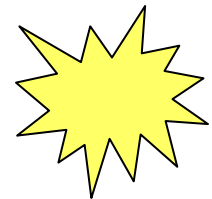
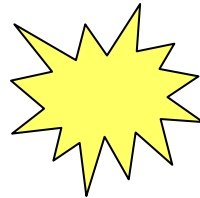
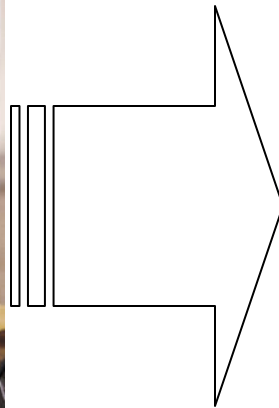


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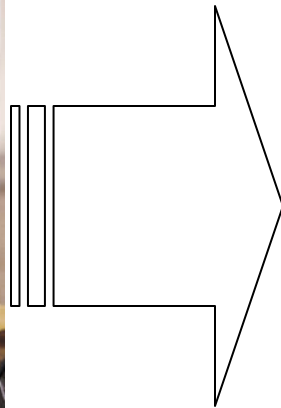


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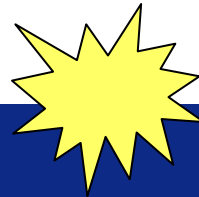
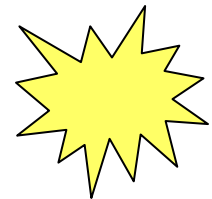
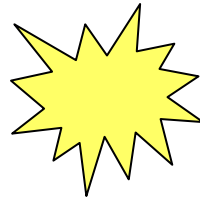




Student Online Activity



**READ
MESSAGE**

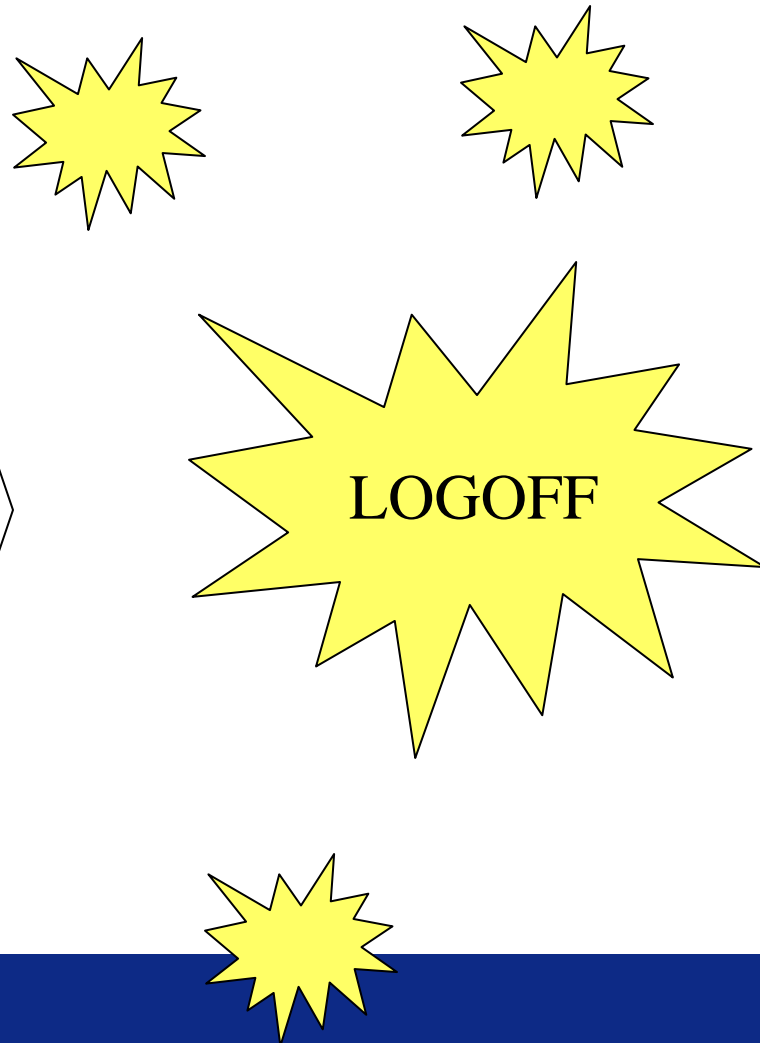
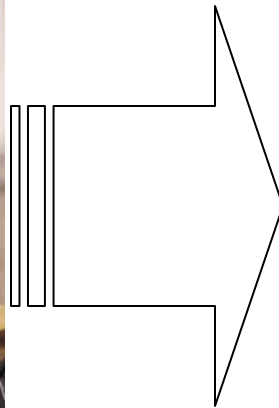


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Student Online Activity

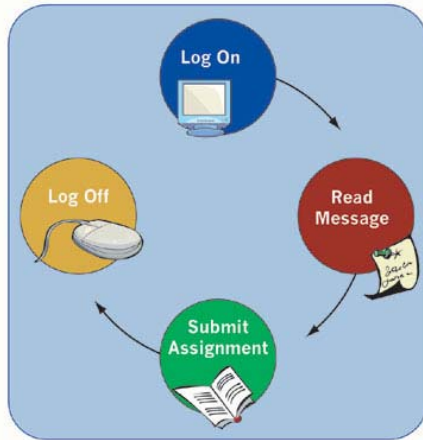


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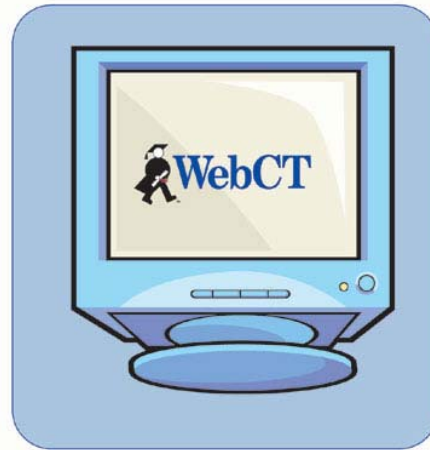


Emergence of a New Data Set



Student Interactions

X



WebCT Courses

X

January

Sun	Mon	Tues	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Academic Terms

= Large Data Set



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How is the data different from other inputs to assessment?

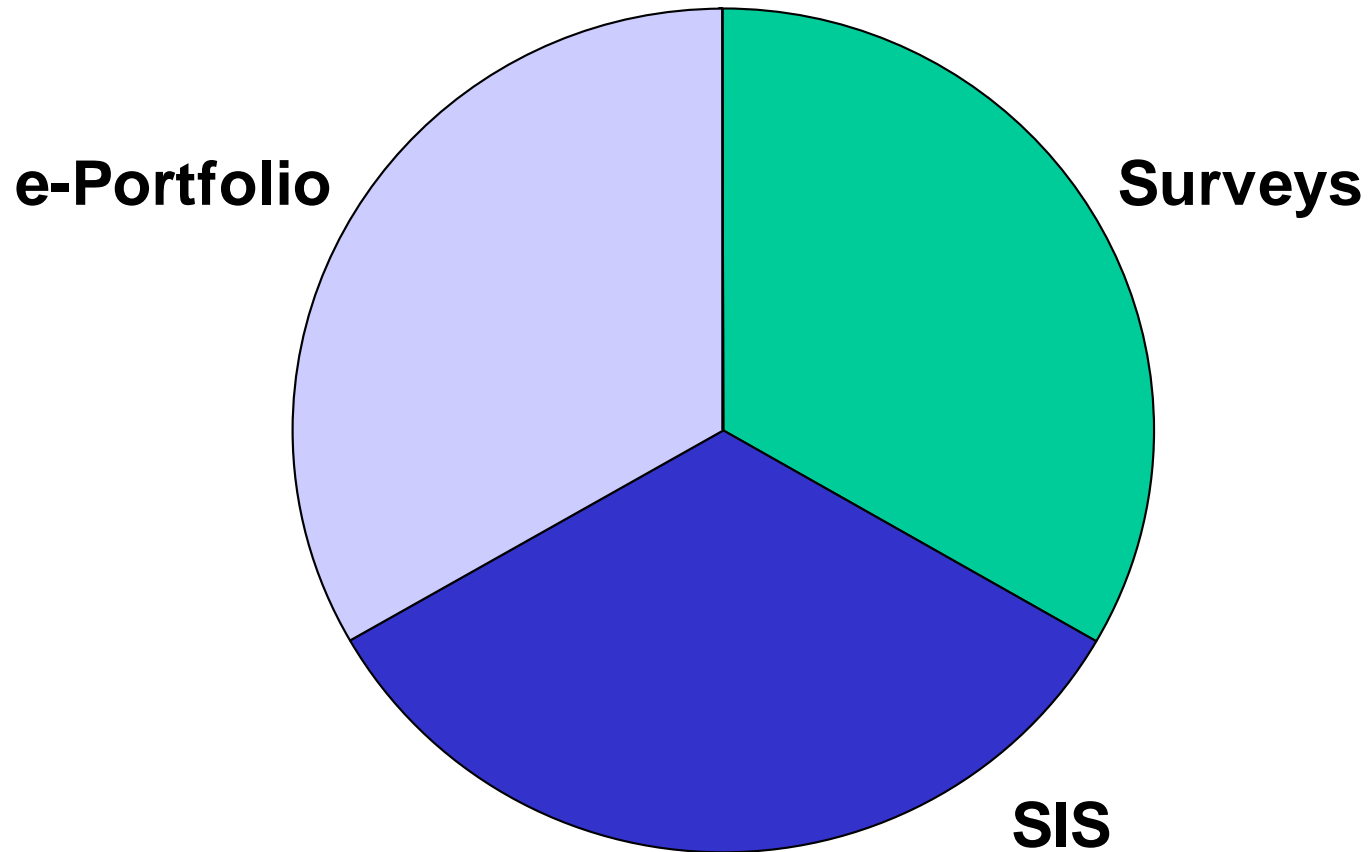


- It's what the students actually did
 - Compared to self-reporting
- It captures the steps of the process
 - Rather than the outcome alone
- It's quantitative
- It's easy to collect this data across a large number of students.



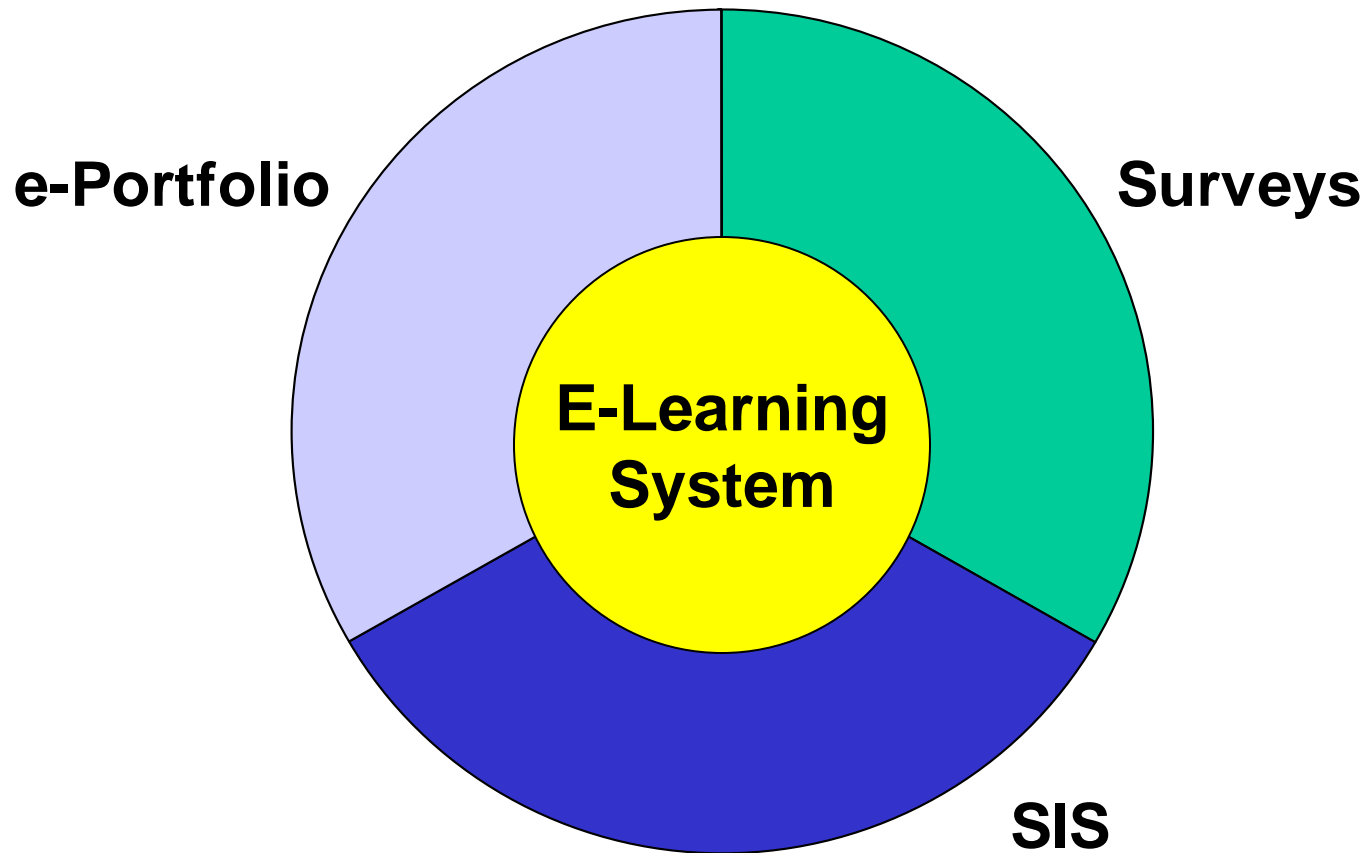


Assessment Data Sources





Learning System In Assessment





How can the data contribute towards assessment?



- See patterns and trends
- Tell a story that explains the results
- Identify areas of improvement and targeted change
- Evaluate impact of changes





Studying Retention in Programs

Research Questions

- What is the relationship of student participation to persistence and achievement?
- Are there differences in persistence and achievement by student academic background and demographic variables?





Data Used in Retention Study

For each enrolled student:

- Aggregate number of and time on task for
 - content pages viewed
 - discussion posts viewed
 - original posts created
 - follow-up posts created
- Course Grade
- HS GPA
- SATV and SATM
- Gender





Results of Retention Study

- Students who spend more time viewing content and participating in discussions are more likely to persist.
- Frequency and duration of content pages and discussions viewed are excellent predictors of student success.
- Frequency and duration of original and follow-up discussions created are also good predictors of student success.
- Only high school GPA is a good demographic predictor of student success.





Why Do We Care?

- Faculty can use individual student tracking data to identify students who may be at risk early enough to intervene.
- Students and advisors can make more informed choices based on time for success.





Studying Faculty Roles Online

Research Questions

- How do instructors perceive their roles in the online environment?
- What roles do instructors enact in the online environment?





Data Used in Faculty Study



- Number of faculty discussion posts
- Number of student discussion posts
- Interviews with faculty





Results of Study

- Discrepancies between interview data & archival analysis
 - Almost everyone claimed to be a facilitator
 - Frequency & type of participation varies
 - Three types of faculty participation
 - Monitor (N=6): managerial/social
 - Facilitator (N=3): pedagogical/managerial/social
 - Teacher (N=1): mainly pedagogical





Why Do We Care?

- Awareness of faculty roles can assist online instructors in balancing demands in this environment.
- Faculty development professionals can assist new and experienced instructors to improve teaching based on analysis of course component usage.





Preparing for Accreditation



Areas of Concern

- Administrative Effectiveness
- Academic Effectiveness





Data Used for Accreditation

- Administrative Effectiveness
 - Institutional, Group, & Course Reports
 - Tool Usage
 - Course Components Usage
 - Content Usage
 - Overall Usage
- Academic Effectiveness
 - Pre-, Post- and Intra Course Assessments
 - Discussions
 - Assignments
 - Student Tracking Reports





Results of Study



- Reports used for administrative effectiveness can be analyzed for trends over time.
- Outcomes data can be tracked across courses, programs and institutions through assessments, discussions and content viewing.





Why Do We Care?

- Continuing emphasis on accountability at the state and national levels.
- Changes in professional accreditation standards to outcomes measures.
- Desire to improve learning experience for students and faculty.
- Increasing number of courses and programs using technology.
- Continuing costs of technology.





Assessment Benefits of WebCT Vista



- New quantitative evidence
 - Complements survey, grades, and portfolio data
 - Very detailed information about engagement and learning process
- Reduce burden on faculty and staff
 - Automatically collects evidence
 - Leverages tools already in use





New evidence for...?



- course-level reviews
- internal and external program reviews
- college-wide curricula reviews
- institutional accreditation





Conclusions

- Data collected in elearning and other systems can be used to improve academic analytics.
- New sources of data offer opportunities to study perennial questions from different perspectives.





Questions?

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