

**ASSESSMENT METHODS**  
**LITRE Faculty Grants**  
**19 Funded Projects: January 2005-June 2006**

Direct Assessment of student learning; outcomes related to:

- Critical thinking
- Documentation of social case work
- Applying knowledge to problems

Direct Assessment, with comparison of student work in “technology” and “non-technology” sections.  
Outcomes related to:

- Understanding of basic concepts (n=4)
- Analytical skills (n=2)
- Critical thinking
- Ability to write (n=2)
- Knowledge construction
- Problem solving and retention of knowledge
- Ability to do lab experiment

No direct assessment activity planned: 4 out of 19 projects

Indirect assessment activities:

- Survey of student engagement and collaboration
- Student satisfaction/confidence in technology (n=6)
- Student self-assessment of ability
- Student or faculty attitude toward technology (n=3)
- Readability, quality, usability of technology work from faculty and student viewpoint
- Amount of use of technology (n=3)

**20 Funded Projects: January 2006-June 2007 and June 2008**  
(Directions for assessment improved in RFP)

Direct Assessment Methods:

- Homework questions (on-line or not online)
- Quizzes and final comprehensive exam (on-line; not online).
- On-line tracking (# of hits, amount of time spent, purpose).
- Rubrics – scores for each dimension – for each student
- Short papers
- On-line discussions
- Student work in a portfolio
- Comparison of student work ( e.g., exams, homework, papers) from this time to previous  
Pretesting students on prior knowledge
- Amount of content generated by students
- Student reflections (discussions or essays or journals) on perceived effort, impact on classroom  
time and student/teacher interaction, teaching strategies
- Faculty observational journal

- Performance data: hours of up time, amount of activity, hours required to manage resources, scalability of the project
- Classroom observation
- Focus group
- Checkpoints will be taken the first time the course is tested to see how quickly and correctly students proceed through laboratory.
- Improvement in learning concepts over time

Outcomes related to:

- Specific course outcomes (n=9)
- Problems solving (n=4)
- Use web resources (n=3)
- Improved visualization (n=3)
- Use of specific software to improve problem solving (n=2)
- Data manipulations
- Depth of learning
- Critical thinking
- Writing skills

No direct assessment activity planned: 3 out of 20 projects

Indirect Assessment:

- Attitudinal survey by students
  - Ease of use
  - Learning effectiveness
  - Impression of software/technology
  - Time spent on activity
  - Student engagement
  - End-of-course perceptions
  - Attitudes toward collaboration
  - Feedback to improve and finalize the format of the prototype system
- Attitudinal survey by faculty
  - Ease of use
  - Learning effectiveness
  - Impression of software/technology
  - Time spent on activity
  - Student engagement
  - End-of-course perceptions
  - Attitudes toward collaboration
  - Feedback to improve and finalize the format of the prototype system
- Exit interview questions
- Instructor survey of student abilities
- Students log use and satisfaction.
- Students' self-assessment: 10-15 minute in-class exercises
- Analysis of student question log
- Index of learning styles questionnaire