

## ***2005 – 2007 LITRE Grant Proposal – Detailed Assessment Plan***

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### **Project Title:**

Digital Recording of Large Scale Structural Testing for use in Undergraduate and Graduate Civil Engineering Classrooms.

### **Project Coordinator:**

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### **Outcomes of the Project:**

This project will have the following outcomes:

1. Increased student knowledge of structural behavior.
2. Increased student attention levels and classroom performance.
3. Consistent usage by NCSU professors and students as a supplement to classroom activities.
4. Consistent usage by non-NCSU professors and students as a supplement to classroom activities.

### **Project Assessment Plan:**

The assessment for this project will take place in two phases. The first phase includes both student and professor surveys collected after a prototype module release in CE327 (Reinforced Concrete Design) and CE 426 (Structural Steel Design). The second phase of assessment will include additional student and professor surveys collected after use of the recorded modules during the Spring 2007 semester and online usage tracking of the project websites during the same period of time.

Phase one of the assessment will take place in late October 2006 after the release and use of the prototype module in CE327 (Reinforced Concrete Design) and CE 426 (Structural Steel Design). The instructors of these courses will be asked to provide their candid assessment of the students' knowledge of structural behavior and their attention levels within the classroom (outcomes #1 and #2) with reference to previous semesters. We will encourage the instructors to include

questions related to the structural behavior highlighted in the first module on their first exam. This will assist with establishing the effectiveness of the prototype module to increase the students' knowledge of structural behavior. The student and instructor surveys will include questions directly related to the prototype module to assess the need for improvements in the format, presentation and accessibility. The results of these surveys will be used to improve and finalize the format of the additional modules.

Phase two of the assessment will be conducted in May 2007 for outcomes #1 and #2 and throughout the Spring 2007 semester for outcomes #3 and #4. Additional surveys will be collected at the end of the Spring 2007 semester from the students and instructors of CE327 (Reinforced Concrete Design) and CE 426 (Structural Steel Design). These surveys will aid in the assessment of outcomes #1 and #2. In addition, the instructors of these courses will be encouraged to include questions directly related to the aspects of structural behavior that were included in the recorded modules on their class exams. The results of the exam questions will aid the instructors in providing a candid assessment of the effectiveness of the recorded modules.

Included in phase two of the assessment will be tracking of the online usage statistics for the recorded modules throughout the Spring 2007 semester. These statistics will be used in the assessment of outcomes #3 and #4.