

## SUMMARY CONCLUSIONS FROM ASSESSMENT FINDINGS

### **Summary Conclusions on Objective 2: To evaluate the impact of teaching with wireless technology in a collaborative setting on faculty workload, pedagogy and amount of material delivered.**

#### **Impact on workload and preparation time:**

- The majority of the faculty (85%) who completed the surveys throughout each semester felt that they were adequately prepared to integrate the technology into the coursework. The SOC staff have worked on providing more training for faculty in the form of faculty forums throughout the semesters.
- The assessment results indicated that 20 out of 32 (62%) faculty said preparation time for the laptop section was increased. The reasons for increased preparation time ranged from setting-up lectures with PowerPoint to developing more hands-on activities for students in class. Three faculty said that once the preparation work was completed, then teaching the same course in subsequent semesters did not require additional work. Interestingly, 12 out of the 32 faculty said the preparation time and workload were “about the same” for the laptop and the non-laptop sections.

#### **Impact on pedagogy and amount of material delivered:**

- Although the faculty from the first year of the pilot were much concerned about the “distraction” factor of the laptop in the classroom, after a few semesters, most faculty seemed to have learned how to cope with the distraction factor. They either asked students to close the laptops periodically or disregarded what students were doing during class. Many faculty, however well they cope with it, consider students doing other activities, such as emailing, IMing or surfing the web, as one disadvantage of having the laptops in class.
- Faculty seem to be adding the Internet and problem-solving as part of their pedagogy during class time. Faculty added more complex, real world or technically challenging problems to class time activities. Many faculty incorporated the software appropriate for their course into the classroom activities (e.g. MAPLE, Excel, MATLAB, etc).
- Faculty continue to include teamwork and cooperative or pair learning as part of their pedagogy.
- The fall 2004 surveys indicated that more faculty had increased the pace, included more variety and more depth of material in their course than faculty in fall of 2003. This increase may indicate that faculty have continued to modify their courses over time and that those faculty who have been recruited to teach in this pilot program (not just “early adopters”) are modifying their courses.

**Impact on student learning from faculty perspective:**

- By the end of the semester, compared to students in non-laptop courses, more than half of the faculty agreed that students were more involved in learning in their laptop courses.
- Approximately the same percentage of students and faculty (77-79%) agreed that the laptops in class enhance learning.
- A higher percentage of students (85%-90%) than faculty (62%-79%) felt that the laptop makes learning more enjoyable and stimulating. The students agree that the technology improves communication between instructor and students, while most faculty did not agree that it helped improve communication. (This result is in line with the book: *Educating the Net Generation*, published by EDUCAUSE.)