Assessing the Effectiveness of a Web-supported Course for Deaf College-aged Students

Linda Gottermeier, Audiology Faculty National Technical Institute for the Deaf Rochester Institute of Technology

Organizational Communication and the Deaf Employee has been taught with an accompanying web site (http://www.rit.edu/~lggnca) for the last two academic years. A teacher-developed survey was given to students in 2000-2001 (n = 18) and 20002-2003 (n = 15) at the conclusion of the course. Students reported that they accessed the site three to 30 times over a ten-week period. They indicated that they utilized the site to:

- 1) Review lecture notes
- 2) Study/review for tests
- 3) Go to electronic reserves for course readings

On a five-point scale, all students rated the site as "1" (Very easy to use) or "2" (Easy to use) as opposed to "5" (Very difficult to use). However, with the goal of providing better and more effective instruction, does this site accomplish this task?

The following measures were to be used to document learning:

- 1) Student reports via the National Technical Institute for the Deaf Student Rating Survey (SRS).
- 2) Pre-post test measures on a 15-item true/false test.

RESULTS

Administration of the NTID SRS (n = 8) produced no data due to technical difficulties encountered in the set up of the database of questions during the winter quarter. In the spring quarter, students (n = 7) had a favorable response to the web site. On a five-point scale with "I" being "strongly disagree" and "5" being "strongly agree" the following ratings were obtained:

- The course Web site helped me to understand the ideas and concepts in the course. Rating mean = 4.56
- The course Web site helped me get a better grade in this course.
 Rating mean = 4.22
- It was helpful having the course materials (syllabus, schedule, handouts, etc.) on the Web site. Rating mean = 4.89
- I understood the teacher when he/she was showing us things on the Web site. Rating mean = 4.78

RESULTS

For the winter quarter, pre-post test measures (n = 8) showed that all students made improvements in a positive direction on the 15-item true/ false test. Scores for six of the eight students improved by two items. Two students' scores improved as many as five items on the measure. The improvements were statistically significant (p = .0001) using a paired Two Sample t-Test. Students in this class attended regularly with few absences.

In the spring quarter, pre-post test measures (n = 7) showed lower scores at the conclusion of the course for two students. One student performed the same on the test both at the beginning of the quarter and at the end of the quarter. These students did not show statistically significant improvements (p = .0000) using a paired Two Sample t-Test. For this group of students, performance on the pre-post test measure may have been influenced by poor class attendance. Five of the students missed more than five of the 20 meeting times while two missed more than ten classes.

CONCLUSION

While students responded favorably to the web site on the teacher-generated evaluation and the NTID SRS, the present results must be interpreted cautiously. While most students showed improvement in a positive direction in winter and spring quarters on pre-post test measures, it is not clear if this is related to the use of the web site of other factors such as class attendance. Also, the course required readings of articles and information from sources such as the *Wall Street Journal* and *Fortune Magazine*. Reading and writing skill prior to taking the course may have influenced final outcomes. Further investigation needs to be completed before conclusions can be generalized.