Concordia University, Nebraska 2009-2010 Department Assessment Report College of Education

Identification of one departmental learning outcome that will be assessed by the department during the 2009-2010 academic year.

See Conceptual Framework, LD-S3 "Communication and Technology: The teacher candidate uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom."

Method of Assessment

- A. Data for LD-S3 will be pulled from TED (Teacher Education Data) assessment package.
- B. We will complete a survey of recent graduates who are currently teaching.
- C. Full-time education faculty and selected adjuncts will conduct interviews with a structured selection of students.

TED data represents a combination of assessments by CUNE faculty, cooperating field experience teachers and student self evaluation on the subject of Communication and Technology as demonstrated during the pre-service practical experiences undertaken by our students.

The survey of recent graduates will allow us to assess the level of success of our program in preparing our students to work Communication and Technology as found in the classrooms in which they begin their professional service.

The interviews with current students will allow us to assess the current knowledge base of our students in our various programs and the perceived needs of our students in the area of Communication and Technology. 3 interviews per full time instructors and selected adjuncts will derive approximately 30 cases. The students involved in the interviews will be selected on the basis of their education program and their graduating class year so that a broad representative sample is used.

The TED data and survey will utilize the 5 item rubric developed for the TED assessment. The interviews will complete a qualitative triangulation allowing for the identification and development of themes related to student needs in the area and the perceived strengths and weaknesses of their preparation.

Schedule for Assessment

TED data analysis & survey of recent graduates: Summer 2009, Fall 2009.

Student interviews: Fall 2009

Summary of results and department discussion and analysis, Spring 2010.

Program revision (if warranted), May 2010.

If it is determined that a revision to the program is warranted in light of the assessment results, the assessment target for 2010-2011 will be to determine the initial effectiveness of the program revisions.

Results: Technology Assessment

TED Data

Information was collected through the Teacher Education Database which hold evaluation information on students in the education program at CUNE. Students included in catalog years 2007 through 2010, the current student population, was included in the evaluation. Because most first semester freshmen do not participate in field experiences, the data included only a single freshman and was primarily on evaluations of current juniors and seniors.

We looked at the evaluation score for Conceptual Framework Item LD-S3,

"Communication and Technology: The teacher candidate uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom."

The average score for candidates was a 4.49 on a scale of 1-5 with 5 representing "highly skilled in this area. This is consistent with reports from the field from student self-reports that students feel that they can effectively use classroom technology.

Technology Survey Results

Surveys were conducted in the Fall semester of the 2009-2010 academic year. Three groups were surveyed: Students (n=130), Concordia Education Department Faculty (n=11) and a third froup made up of CUNE faculty who are NOT in the education department (n=5) and area teachers who have supervised a Concordia student teacher within the last three years (n=15). The area teachers were not part of the original assessment plan but were added after the initial Education faculty results were compiled. Since the full-time Education Department faculty numbers were small, we added the additional faculty because of their important interaction with our students during classes in majors and minors in addition to field experiences and student teaching.

The survey (Appendix A) asked individuals to rate themselves on their "Familairity" and "Frequency of Use" of a wide range of technology options.

CUNE Education Faculty Compared to Area Cooperating Teachers.

The CUNE Education faculty as a group had lower scores (-1 standard deviation) than the area cooperating teachers and non-education faculty in BOTH familiarity and frequency of use. (See Table 1.) In particular, CUNE Education faculty scored lower on the item relating to Facebook.

All Faculty (n=35) (CUNE and Co-Ops) Compared to Student Sample

Familiarity with Technology: There were many differences in familiarity in a variety if areas: Advanced Word Processing, Spreadsheets, Advanced Power Point, Online Community, Skype and Blogging. In all areas, students rated themselves as more familiar than faculty rated themselves. Students seem to be generally more familiar with online applications.

Frequency of Use: The differences here were not as pronounced. Only 3 differences were greater than 1 standard deviation (Facebook, Blogging, and Use of Online Resources).

Faculty indicated greater frequency of use in Making/Using Websites than did students. This is the only area in which faculty frequency of use was HIGHER than that of students. Students reported greater much greater use of online resources for teaching. (See Table 2)

"Faculty Familiars" Compared to Students:

A separate sub-group was isolated among the All Faculty group. These were identified as "Faculty Familiars" (n=15) as they were CUNE, or area school faculty members whose familiarity scores averaged higher than a 3 on a 5 point scale (5=High, 1=Low).

When this group of "Faculty Familiars" was compared to the student group, the Faculty Familiars scored higher than students in many areas with the exception of Wikis, Facebook and Blogging, all emergent online community technologies. (See Table 3)

Faculty Frequent Users Compared to Students

An even small subgroup of faculty members whose familiarity AND frequency of use scores were BOTH a 3 or higher was also isolated (n=5). When this small group was compared to students, the scores for both groups were similar.

Faculty Frequent Users Compared to Student Frequent Users

Isolating students whose frequency of use scores were 3 or higher also gave similar results.

Technology Interview Results

After the initial surveys were completed, a set of four follow-up questions was developed by the education faculty as a way of further investigating questions raised by the survey data. 21 students were interviewed by nine different professors during the Spring Semester, 2010, at Concordia University. Below is a summary of the results of the interviews. Specific quotes from students are in italics,

1. What technology (hardware, devices, or software) do you see yourself using when you teach (or serve as a DCE) and how will you use it to make your teaching (ministry) better?

One student was simply not convinced that technology would be worth the time and effort. ("I am not a tech person. I am a book person. I'd rather use book references than the internet. The internet is good but it is not very reliable.") When describing the software and technology that they see themselves using, students most frequently described themselves as using technology that they had seen their teachers and professors use. Smartboards, Powerpoint, Video/DVD's and word processing software, were the most frequently mentioned topics in question one and they were also the same one mentioned most frequently in Question 3 where they were asked to rate their professors.

The reasons for using technology were generally not well explained by most students. Many of the students tended to rely on vague generalities such as "I can display things to my classroom that I couldn't with a regular whiteboard." These students also tended to have somewhat restricted lists of ways in which they would use technology.

The students who had more sophisticated lists of technologies or software (longer lists, specific software names) also tended to be better versed in their understanding of the benefits of the use of the software. ("The Smartboard will allow me to interact with my notes and change them while I lecture, but the Smartboard also enables me to use visuals-like graphs. This technology also allows student to come up to the pictures and write on them. After they are done, I can erase their writing and keep the visual.") (By using software "...like what we use in the Music Department lab...my students can compose on the computer rather than by hand, especially if they don't know how to play the piano.")

2. How competent do you feel about your ability to meaningfully integrate technology into your teaching practice/ministry? Rate it on a scale of 1 to 5, 5 being high, and tell why you give it that rating.

The average self-rating given by students is just over a 3.5.

The students' explanations of their ratings were remarkably uniform with most expressing confidence that their prior experiences had made them efficient learners of technology. While they may not know everything about every technology, they are firm in their confidence that they can figure it out.

Several students mentioned a theme that came up again in question 4 regarding what they feel they need to learn. The students see that they have limitations in not knowing how to make <u>classroom</u> use of various forms of technology. (I would rate my ability to integrate technology as a 4. I would rate it this way because I am fairly comfortable with technology and computers but I am not aware of any programs or lessons that correspond..." with the student's subject area.)(I have experience using them in class as a student, but not as a teacher. I don't know how to set these things up or even where to purchase them.)

3. How do you feel about the competence of your professors ands their ability to meaningfully integrate technology into their teaching practice? Again, rate it on a scale of 1-5 and tell me why you give it that rating.

The average rating given by students is 3.5. This is just a little lower than they rate themselves.

Again, there was a great deal of uniformity in the responses of the students. Most were quite charitable in their assessments and were cautious not to be overly critical. It was probably best summarized by the student who said, "Most of my professors use Powerpoint as their main tool and they use it quite well. ...but beside Powerpoint, I believe that my professors lack the knowledge of many other new technologies."

Other students made mention that professors frequently use DVDs or video clips. The science department, the music department and geography classes were singled out by some students for their particularly effective use of technology.

Some comments made by students seems particularly telling: "Textbooks that come with software are not being utilized." And another student who stated, "There are, however, some really dated things that are still being used, like ancient slideshow projectors."

4. In which technology-related areas would you like additional training before you graduate?

The most common specific reference from students was to the use of Smartboards. Smartboards (or comparable technology) is becoming more and more common in the schools in which they do their field experiences and in the schools they attended before arriving at Concordia. There were also several specific references to publishing software that could be used for preparation of parent communication.

Other students made mention of some significant support skills such as knowing how to set up technology, where to buy it and other administrative issues, such as how site licenses work. Still others mentioned a need for training in use of organizational software and applications such as spreadsheets or school management programs such as PowerSchool.

The most common theme was that students expressed a need to learn how to properly integrate technology into teaching. (I would like to have additional training....that would relate to my major. I think that by relating it to my major would be more relevant that just having it be purely technology based. Help us figure out ways to apply it." Regarding the role of faculty, one student stated, "I think that if they integrated more areas like this into their classes...students would become better aware of the possibilities there are with technology.)

Summary and Conclusions

In a review of the data, the following conclusions are warranted:

- 1) Students (on average) seem to be more familiar with technology and use it more frequently than do CUNE Education faculty. Although, when faculty members who identify themselves as individuals who are familiar with technology and who use it frequently, the difference mostly disappears except for the area of internet applications.
- 2) Students are more familiar with internet based technologies (Skype, Wikis, Blogging, Facebook) than are CUNE faculty. As this is the trend in software development, it is something to which attention of the faculty should be directed.
- 4) When considered as a whole, the lower scores of CUNE Education Faculty on software familiarity and frequency of use is seen as an area in need of improvement.
- 3) Students report that they learn about the use of education related software and technology from seeing it modeled in the classroom. Considering that most CUNE faculty only utilize Powerpoint and a small number of other technologies, this is an area of concern.

Recommendations:

- 1) Faculty members in the college of education should establish annual technology goals to help them focus on developing new skills useful for teaching with technology.
- 2) Faculty members in the college of education should seek to model software use by using available resources on campus including but not limited to the Blackboard course interface, publisher-supplied textbook software, offerings available for free and at low cost through the Internet and all the resources available through CUNE computing services and the Instructional Technology Center.
- 3. CUNE needs to supply addition resources for technology hardware, particularly Smartboards.
- 4. CUNE needs to supply additional assistance in helping faculty members to developing effective pedagogical skills that utilize current technology in an effective manner.