INTRODUCTION:

Dr. Paul Esqueda, Associate Dean for Academic Affairs, and the Berks Senate charged the Joint Senate-Academic Affairs Committee on e-Learning to formulate and draft a road map for Penn State Berks’ approach to e-learning. The following report is based on interviews with faculty and students in Fall 2006, on the Educause Center for Applied Research national survey from spring 2006, and upon committee deliberations. The Committee’s Preliminary Report is attached as Appendix A.

RATIONALE:

In December 2006, the Committee presented its preliminary report to Berks faculty (see Appendix A). Based upon surveys of and interviews with faculty and students in fall 2006, the preliminary report found that:

1) Faculty and student responses to e-Learning depended upon whether they defined it as a supplemental tool to traditional on-line instruction or as strictly on-line instruction. Responses to the former were generally positive; responses to the latter were almost always negative (except for a very narrow group of students).

2) Faculty and student concerns about e-Learning were related to: student motivation and technology preparation, technological reliability, financial and technological support for e-Learning instruction.

3) The possible advantages of e-Learning that faculty and students described were non-pedagogical (e.g., flexibility and convenience).

In the spring of 2006, the Educause Center for Applied Research (ECAR) [The ECAR Study of Undergraduate Students and Information Technology, 2006; Attached] conducted a national survey with 28,724 student respondents. The respondents were predominately freshmen and seniors from four-year colleges and universities with 3,380 respondents from two-year institutions. Over 80 percent of the respondents were from public institutions and almost 40 percent of the respondents came from institutions with more than 15,000 students. The Committee believes that the student respondents have many similarities with those at Berks. Several of the key findings from the ECAR study may be pertinent to discussions of e-learning at Penn State Berks:

- First-year students enter college as experienced social and recreational users of information technology (IT) (Facebook, instant messaging, gaming). However, these same students are often not well-versed in the academic uses of information technology tools such as Excel, PowerPoint, course management systems.
Students expressed frustration with often being required to self-teach the academic uses of information technology because faculty frequently assumed students already knew how to apply the technology tools.

- The majority, about 56 percent, of students preferred to have only moderate use of IT in their courses. Few students preferred either no IT or exclusive IT use in their courses. This is consistent with the findings from the Committee’s Preliminary Report that while a few were open to replacement of traditional instruction with e-learning, the vast majority of “faculty and students agreed that e-learning should be used to support traditional teaching but not replace it.”

- About 72.7 percent of student respondents have used a course management system (CMS) and over three fourths of those students like using a CMS. These findings reflect the sentiments of Berks Campus students. In Spring 2007, the Berks Campus Student Government Association (SGA) made a recommendation that, “Every faculty member shall be strongly recommended to activate their ANGEL accounts for every class they instruct, even if they do not intend to use ANGEL.”

- Approximately two-thirds of the students either agreed or strongly agreed that the use of IT in their courses has improved their learning and also resulted in more prompt feedback from their instructors. Over half of the respondents agreed or strongly agreed that “IT helps me better communicate and collaborate with my classmates” (p. 6). The report notes that “learning theory generally suggests that instructor feedback and peer collaboration contribute significantly and positively to learning” (p. 10).

- Student respondents highly appreciated the convenience afforded by information technology use in courses. Many Berks Campus students hold part-time or full-time jobs, and their desire for ANGEL use may be in part a reflection of their desire for access to course information at times and places convenient to them.

- Many students in the survey expressed frustration that faculty members were not proficient in the academic uses of IT. Students also indicated that additional faculty training is needed.

**RECOMMENDATIONS:**

The Joint Senate-Academic Affairs Committee on e-Learning makes the following recommendations based on surveys and focus groups conducted during Fall 2006 and upon the results of the spring 2006 ECAR study:
1. When a course is significantly revised to include e-Learning elements, the faculty member's student evaluations (SRTE's) should be assessed in light of the new method of teaching.

2. The administration is encouraged to provide appropriate training and support resources for faculty including release time for e-learning initiatives.

3. Faculty is encouraged and supported in the use of ANGEL as a mechanism for communication and feedback.

4. Faculty is encouraged to explore the options for providing training to students on the academic applications of information technology tools. Possibilities include workshops offered by the IT department and coordination with the First Year Seminars. Trainers might also be invited to classes for training on specific topics.

5. Faculty is encouraged with the Center for Learning Technologies Staff to explore appropriate uses of instructional technology in their classes, and ways to create a learner-centered environment to enhance the learning experiences of their students. Faculty should be rewarded for these efforts.

Mohamad A. Ansari, Chair          Michelle Mart
Nancy Dewald                     Joni Queen
Pat Kohrman                     Sue Samson
Abdullah Konak                  John Shank

APPENDIX A

Preliminary Report

Joint Senate-Academic Affairs Committee on e-Learning

Dr. Paul Esqueda, Associate Dean for Academic Affairs, and the Berks Faculty Senate charged the Joint Senate-Academic Affairs Committee on e-Learning to formulate and draft a road map approach to e-learning. The Committee Charge was as follows:

“Determine the experience and level of interest in e-learning among faculty, identify existing resources, recommend an approach for involving and supporting faculty in e-learning, recommend an approach to prioritizing e-learning development projects, recommend appropriate incentives and rewards for e-learning efforts. It is suggested that the committee use a combination of individual and small focus group interviews as its primary survey tool. The committee will produce a report describing faculty interest in e-learning, resources available at Berks and within the University, recommendations for how to begin, recommendations for prioritization of e-learning projects, appropriate incentives and rewards, and assessment of outcomes.”
As the first step in this process, the Committee invited Penn State Berks faculty and students to participate in surveys and/or forums to determine knowledge of, experience with, and attitudes toward e-learning. Faculty participated in the surveys by division. Faculty survey respondents included thirteen from EBC, nine from HASS, and thirteen from Science. Thirty faculty members of the HASS division participated in a discussion group, and three members participated in a separate focus group. Twenty-four students responded to the same survey and three additional students representing each of the three divisions participated in a focus group. The following summary represents the responses that the Committee received to the survey and the discussions.

**Question 1: How would you define the term e-Learning?**

The majority of faculty respondents mentioned some form of online learning. Specific technologies included web-based, Internet, networks, and computer-aided technologies. E-learning may be the primary means of instruction, but many indicated that it should supplement traditional face-to-face instruction. Interaction was also included as important by several respondents.

Most of the students specified use of the Internet for e-learning to varying degrees, i.e., exclusive, primary, or supplemental. Additional specified technologies included computer software applications and CD-ROMs. Activities or processes included independent and/or self-paced study, building upon class activities, posting and collecting assignments, and communicating via email. Face-to-face contact may be employed to varying degrees, including minimally or not at all.

**Question 2: What educational tools do you associate with e-Learning?**

Technologies mentioned, either in this question or in other survey questions can be categorized into hardware and software. Faculty and students had similar lists. The Internet, the web, and ANGEL were mentioned more than any other technology.

Some software applications mentioned may be applicable to distance activities while others may be either for distance or local use. Examples of tools given were search engines, webcasts, wikis, and communication tools (email, blogs, IM, message boards). Other examples included animations, audio, video (including conferencing, streaming, downloads, podcasting), databases, and MS Office components. Course-specific tools included course websites, posted notes, assignments, test, assessments, text materials, and tutorials.

Common hardware technologies included CD-ROMS, DVDs, computers, networks, and online storage space. Some respondents mentioned equipment such a electronic boards, computer lab instructional tools, classroom response tools, lab equipment, writing tablets, MP3 players, tape recorders, television, and calculators.
Question 3: What do you perceive to be the benefits or advantages of e-learning for faculty and students?

Faculty and students offered similar benefits and advantages. Several respondents emphasized flexibility and convenience (access, time, travel, individual pace, etc.), decreased costs, and as an additional learning tool to support or reinforce concepts. Other benefits or advantages mentioned were increased efficiency for faculty (class management) and increased communication efficiency between faculty and students.

Some instructional objectives were also mentioned. Students would gain the ability to work independently, and working in an e-learning environment would assist students as they prepare for transitioning into the corporate world.

Question 4: What do you perceive to be the risks and disadvantages of e-learning for faculty and students?

Many faculty expressed concern for e-learning students and the potential lack of interaction between faculty and students and among students. Also, group work would be more difficult. There would be increased difficulty for those who do not have convenient access to adequate technology or have not attained a comfort level with the technology. Faculty and students alike would be subjected to potential technical failure. Some faculty noted that e-learning may not be appropriate for less motivated, less disciplined students, and may be boring for many students. Two concerns were the potential for increased academic integrity issues, and the impression that online learning may be deemed as inferior to face-to-face instruction.

Faculty reported potential disadvantages and risks for e-learning instructors. Some of the risks and disadvantages for students mentioned above also apply to faculty, e.g., technical failure, increased need for technology training. Also, not all courses may readily lend themselves to e-learning.

However, some concerns were unique for faculty. First, several mentioned that increased prep time would be required for e-learning courses. Several faculty reported concerns that e-learning would be mistakenly viewed by administrators as a way to save money. Faculty emphatically rejected this characterization, concluding that the only way it would save money would be by exploiting faculty and shortchanging students. One faculty member warned that the e-learning enhancements and online courses had the danger of reshaping education along a consumerist, corporate model, losing the real purpose for education.

Students expressed many of the same concerns expressed by faculty such as lack of student motivation, technical problems, inadequate access to technology, and the lack of knowledge or skills. Additional concerns expressed by students included security issues (hacking, privacy concerns), an increase in the amount of work required (online writing replacing face-to-face discussion), some preferred learning styles being
disadvantaged, and some course requirements not easily adapted to e-learning (e.g., writing complicated formulas, hands-on lab work).

Students also stressed the potential for the loss of faculty/student and student/student interpersonal relationships. Students stated increased difficulty in explaining and/or demonstrating concepts, increased boredom, and the increased potential for miscommunications due to facial expressions, body language, etc., as possible ramifications. An increase in anxiety due to not having the instructor present was also stated.

**Question 5: What experience, if any, have you had using e-Learning?**

While some faculty indicated no experience, the majority reported employing e-learning to varying degrees. Technologies included ANGEL, email, online conferencing, postings, Internet databases, webcasting, virtual teams, online text, online assignments, and video conferencing. Two faculty indicated teaching fully online, including one who used Penn State’s World Campus.

Several students said they had no e-learning experience. Others reported online quizzes, submitted assignments, online research, accessing posted class materials, and email. Students reported specific positive experiences of convenience, traveling less, lower cost, and time flexibility. Students reported negative experiences with unreliable or difficult to use technology, and the lack of instructor availability. Two students commented on the need for the instructor to be available for additional help, when necessary.

**Question 6: What conditions would be required for you to make use of e-Learning? (check all that apply)**

Many faculty mentioned the need for additional time to prepare and/or manage an online course, including increased release time. Support for various aspects was emphasized, such as training (technical and instructional), technical assistance, and materials development (postings, data management). Technology requested included webcasting, video, technology for office and home use (broadband, adequate hardware and software), and assured reliability of technologies employed. Funding was mentioned for increased compensation, materials development, and additional seminar expenses. Ownership of any electronic or online materials was considered important. One person inquired about the exclusion of SRTEs for online courses.

Students stated other concerns such as support from the Learning and Writing centers, and the ability to see the instructor in person once a week. Students also requested additional on-campus technology and advanced knowledge of online requirements before registering for a course.
7. Additional Comments or Questions

Faculty and students offered both positive and negative comments. Many of the additional comments/questions offered by faculty and students have already been addressed in the preceding questions. Other faculty comments/questions included:

- Show specific cases where e-learning has been successful, and check the literature before implementing
- Can be a valuable, complementary tool but face-to-face interaction is necessary
- May result in initial lower SRTEs
- Perhaps appropriate for shorter summer courses
- Training, adequate technology, and support are crucial
- One more way to make Berks an engaged culture of learners
- Will require a team approach to successfully implement
- Way to go!
- Define “e-learning” and clarify the administration’s goals

Additional student comments/questions included:

- Can be a powerful supplement but combine with face-to-face learning instead of using as a substitute
- Frequent tests would help motivate
- Offering foundation courses in online format was not recommended
- Provide for the integration and interaction of online students and on-campus students
- Definitely integrate more at Penn State because technology is only going to increase in our lives
- Wouldn’t like online because classroom experience is enjoyable
- Online homework can frustrate students, especially when the instructor’s feedback is not available and material is not covered
- Do not eliminate on-campus support services (tutoring, office hours, etc.)
- Not a one-size-fits-all tool

Summary Findings:

After analyzing the survey responses and the comments from discussions with faculty and students, a number of important observations surfaced. The first of these is that one group of faculty views e-learning as a supplemental tool to be used in support of traditional classroom instruction. Another group principally defined e-learning as a strictly online mode of instruction and, consequently, had a very negative response to e-learning.

Discussions of possible disadvantages produced some consensus among faculty and students. First was the perceived loss of face-to-face interaction between students and faculty. Second is the concern that our students do not all have the same level of technology experience, comfort, or opportunity. Other perceived disadvantages or concerns included faculty workload, academic integrity, and the reliability of
technology and support services. Finally, faculty and students agreed that e-learning was not appropriate for all students; it best suited self disciplined, location bound, non traditional, and mature students.

Among both faculty and students, the perceived benefits of e-learning were not pedagogical in nature. Potential benefits listed included flexibility, convenience, and efficiency in class management and communication.

Most faculty and students indicated that they had had some experience with e-learning. However, few students or faculty have had experience with taking, teaching, or developing a fully online course. Faculty said that if they were to make greater use of e-learning, they would need more time, financial compensation, and technical support. Students reported that they would need more technology resources and support services.

Responses to the surveys and the group discussions reveal that faculty and students who have had experience with fully online courses have less favorable attitudes about e-learning as a pedagogical approach. Faculty and students who have had traditional courses supplemented with e-learning resources have a more favorable attitude toward e-learning. Although there appears to be a diversity of opinions on this subject, faculty and students agreed that e-learning should be used to support traditional teaching but not replace it.

Mohamad A. Ansari, Chair    Michelle Mart
Nancy Dewald                 Joni Queen
Pat Kohrman                  Sue Samson
Abdullah Konak               John Shank

ECAR Report is attached