Appendix A

Student Information Technology Use and Skills in Higher Education: Survey Questionnaire

Issued February 2004

Thank you for your willingness to answer this survey, which focuses on your experiences with and opinions concerning information technology. The information you and other undergraduate students are providing us will be reported in a study that will be available to higher education institutions. The primary goal of the study is to better understand student experiences with information technology and inform the leadership of your institution if the efforts in information technology are focused appropriately.

For the purposes of this survey, information technology refers to “personal electronic devices such as laptops and hand-held computers, cell phones, and institutional devices such as computers and associated devices.” Your answers will be compared with student responses from Colgate University; Drexel University; University of California, San Diego; University of Wisconsin System institutions, and the University of Minnesota.

Your answers are confidential and neither the university nor the EDUCAUSE Center for Applied Research will be able to identify you.

Please complete the survey within the next two weeks. It should take you approximately 15 minutes to complete the survey. As thanks for your time and valuable input, each participant who provides an email address will be entered into a drawing for one of 100 gift certificates of $50 each. Every participating campus will have prize winners.

We appreciate your time and participation. If you have any questions or concerns, please contact your campus representative as noted in the email you were sent.

Click the Next button to begin the survey. Once again, thank you for your input!

**Section 1.**

We can only survey students age 18 or older.

1.1 I am 18 years or older. [Required] <If no, go to end of questionnaire. If yes, go to 1.2>
   - No
   - Yes

1.2 I give my consent to the following. [Required] <If no, go to end of questionnaire. If yes, go to 1.3>
For this survey you were selected at random from a list of freshmen and seniors at your institution. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Prof. Robert Kvavik of the Office of the Executive Vice President and Provost at the University of Minnesota and Glenda Morgan of the Office of Learning and Information Technology at the University of Wisconsin System.

Background Information
This study is designed to explore the issue of student skills with information technology as well as student perceptions of the value and advantages of its use in teaching and learning. We have the following research questions:
- What kinds of information technologies are students using and with what levels of skill?
- What do students perceive to be the value and advantages of the use of information technology?
- To what extent do skills transfer from the use of technology for entertainment?
- What obstacles do students face in their use of technology?

Procedures
If you agree to be in this study, please fill out the attached survey. The survey asks for basic background information, as well as questions about:
- What kinds of information technologies you use and how often
- What your level of skill is at using different information technologies
- How these technologies contribute to your undergraduate experience
- What value information technologies provide in teaching and learning in higher education
- Obstacles to your effective use of information technology

It will take about 15 minutes to complete the survey. Please answer the questions to the best of your ability. There are no right or wrong answers. You only need to fill out the survey once.

Risks and Benefits of Being in the Study
There are no physical, psychological social or medical risks associated with your participating in this study.

The benefit to participation is to inform university officials of benefits of their technology investments for students.

Compensation
We will be holding a raffle for gift certificates of $50 for participating in this survey. If you choose to participate in the raffle you can include an email address in the space provided at the beginning of the survey. Once the survey has closed we will conduct a random drawing from the email addresses of all those who participated from your institution. This will occur within two weeks of the closing of the survey.

Your email address will be kept separately from the data collected in the survey. It will not be used to connect your survey responses with your name. Nor will your email address be used for any purpose other than to contact you should you win the prize.
Confidentiality
The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study
Participation in this study is voluntary. Your decision to participate or not will not affect your current or future relations with your institution (or with any of the institutions participating in this survey including the University of Minnesota; the University of Wisconsin; Drexel University; Colgate University; and the University of California, San Diego or with EDUCAUSE). If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions
The researchers conducting this study are Robert Kavvik, Glenda Morgan, and Judy Caruso. You may direct any questions to them: Robert Kavvik, 612.625-2400 <kvavik@umn.edu>; Glenda Morgan, 608.265-9559 <gmorgan@uwsa.edu>; or Judy Caruso, 608.263-7318 <judy.caruso@doit.wisc.edu>. You can print out a copy of this information to keep for your records.

Statement of Consent
1.2 I have read the above information. I have asked questions and have received answers. I consent to participate in the study. [Required]
  ☐ No
  ☐ Yes

1.3 If you are interested in entering the drawing for one of 100 prizes of $50 each, please enter your email address.

Section 2. Your Use of Electronic Devices
2.1-2.11 Which of the following electronic devices do you own? Check all that apply. [1.2 “Yes” respondents; multiple responses]
  2.1 Personal desktop computer
  2.2 Personal laptop computer
  2.3 Personal digital assistant (PDA), e.g. Palm device
  2.4 Smart phone (combination cell phone and PDA device)
  2.5 Cell or digital phone

2.6-2.11 How many hours each week do you normally spend on each of the following activities using an electronic device (computer, Palm device, etc.). (Do not use, Less than an hour, 1-2 hours, 3-5 hours, 6-10 hours, 11 or more hours)
  2.6 Classroom activities and studying using an electronic device
  2.7 Playing computer games
  2.8 Downloading or listening to music or videos/DVDs
  2.9 Chatting with friends or acquaintances using instant messaging
  2.10 Surfing the Internet for pleasure
  2.11 Online shopping
2.12 How many hours each week do you normally spend on using an electronic device (computer, Palm device, etc.) at your place of employment?
- I do not work
- Do not use
- Less than an hour
- 1–2 hours
- 3–5 hours
- 6–10 hours
- 11 or more hours

2.13-2.21 How many hours each week do you normally spend on each of the following activities using an electronic device (computer, Palm device, etc.)? (Do not use, Less than an hour, 1-2 hours, 3-5 hours, 6-10 hours, 11 or more hours)

2.13 Creating, reading, sending email
2.14 Writing documents (Word Processing)
2.15 Creating spreadsheets or charts (Excel, etc.)
2.16 Creating presentations (Powerpoint, etc.)
2.17 Creating graphics (Photoshop, Flash, etc.)
2.18 Creating and editing video/audio (Director, iMovie, etc.)
2.19 Creating web pages (Dreamweaver, FrontPage, etc.)
2.20 Completing a learning activity or accessing information for a course using course management systems (WebCT, Blackboard, Desire2Learn, Learn@UW, etc.)
2.21 Using a library resource to complete a class assignment (e.g., a library resource on your official university library web site)

2.22-2.32 What is your skill level using the following computer programs and applications? (Do Not Use, Very Unskilled, Unskilled, Skilled, Very Skilled)

2.22 Email
2.23 Instant messenger
2.24 Web surfing
2.25 Word processing
2.26 Spreadsheets (Excel, etc.)
2.27 Presentation software (Powerpoint, etc.)
2.28 Graphics (Photoshop, Flash, etc.)
2.29 Creating and editing video/audio (Director, iMovie, etc.)
2.30 Creating web pages (Dreamweaver, FrontPage, etc.)
2.31 Course management systems (Web-CT, Blackboard, Desire2Learn, Learn@UW, etc.)
2.32 Online library resources

2.33 During the academic year what is your most frequently used method for access to the internet?
- Commercial dial-up modem service (e.g., AOL, Earthlink, etc.)
- University-operated dial-up modem service
- Commercial broadband service (e.g., DSL modem, cable modem, etc.)
- University-operated wired broadband service
- Broadband wireless network
Section 3. Your Use of Technology in Classes
3.1 Which of the following best describes your preference with regard to the use of technology in your classes?
   - I prefer taking classes that use no information technology.
   - I prefer taking classes that use limited technology features (e.g., e-mail to instructors and limited use of PowerPoint in class).
   - I prefer taking classes that use a moderate level of technology (e.g., e-mail, several power-point presentations, some online activities or content).
   - I prefer taking classes that use technology extensively (e.g., class lecture notes on-line, computer simulations, PowerPoint presentations, streaming video or audio etc).
   - I prefer taking classes that are delivered entirely “on-line” with no required face-to-face interactions.

3.2_3.7 To what extent do each of the following describe your experiences in your classes? (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)
3.2 I spend more time engaged in course activities in those courses that require me to use technology.
3.3 The use of technology in my classes met my expectations.
3.4 The instructor’s use of technology in my classes has increased my interest in the subject matter.
3.5 I primarily use information technology in courses to improve the presentation of my work.
3.6 I get better grades in courses that use information technology.
3.7 Faculty need to give us more in-class training for information technology they are using in the class.

3.8_3.14 To what extent has the use of information technology in classes helped you? (Strongly Disagree, Disagree, Agree, Strongly Agree)
3.8 The use of information technology in classes has helped me better understand complex or abstract concepts.
3.9 The use of information technology in classes has helped me to better communicate with the instructor.
3.10 The use of information technology in courses has helped me communicate and collaborate with my classmates.
3.11 The use of information technology in courses has resulted in prompt feedback from the instructor.
3.12 The use of information technology in courses provides more opportunities for practice and reinforcement.
3.13 Classes that use information technology are more likely to focus on real-world tasks and examples.
3.14 Classes that use information technology allow me to take greater control of my class activities (e.g., planning, apportioning time, noting success and failure).
3.15 Have you taken a class that used a course management system (such as WebCT, Blackboard, Desire2Learn, or Learn@UW)? [Required] <If no, go to 3.26. If yes, go to 3.16>
   ◆ No
   ◆ Yes

3.16 How would you describe your own overall experience using a course management system (such as WebCT, Blackboard, Desire2Learn, or Learn@UW)? [3.15 “Yes” respondents]
   ◆ Very negative
   ◆ Negative
   ◆ Neutral
   ◆ Positive
   ◆ Very positive

3.17_3.25 For each of the online features used in your classes, how did the features help you improve learning or your ability to manage your class activities? (Did not use, Negative effect, No effect, Improved learning, Improved my management of my class activities, Improved Learning and Improved my management of my class activities)
3.17 Syllabus
3.18 Online readings and links to other text-based course materials
3.19 Online Discussion board (posting comments, questions and responses)
3.20 Access to sample exams and quizzes for learning purposes
3.21 Taking exams and quizzes online for grading purposes
3.22 Turning in assignments online
3.23 Getting assignments back from professor with comments and grade
3.24 Sharing materials among students
3.25 Keeping track of my grades on assignments and tests

3.26_3.27 Which of the following benefits from using information technology in your classes was the most valuable to you?
   ◆ Improved my learning
   ◆ Saved me time
   ◆ Convenience
   ◆ Helped me manage my class activities (e.g., planning, apportioning time, noting success and failure)
   ◆ No benefits
   ◆ Other
3.27 describe “other” (optional)

3.28_3.39 What are the barriers for you (if any) to using a computer or information technology in your classwork? Check all that apply. [Multiple responses]
3.28 It feels like extra work with little connection to the course
3.29 I don’t have the necessary skills
3.30 I don’t have the technical support I need
3.31 It is too expensive
3.32 I don’t have sufficient access to a computer
3.33 I don’t have sufficient access to a printer
3.34 The applications don’t run on my computer
3.35 I have trouble connecting to the Internet from my place of residence. (I don’t have reliable access to the Internet.)
3.36 I have to set-up and trouble-shoot too many browser variations
3.37 There are no barriers
3.38 Other
3.39 Describe “other” (optional)

Section 4. Information About You

4.1 Which one of the following statements best describes you?
- I learn best by working alone and thinking through concepts and problems myself.
- I learn better by working alone in some situations.
- I learn equally well by working alone and by discussing concepts and problems with others.
- I learn better by discussing concepts and problems with others in some situations.
- I learn best by collaborating with others and discussing concepts and problems with them.

4.2 What is your gender?
- Male
- Female

4.3 What is your age?
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30-39
- 40-49
- 50-59
- 60-69
- 70 or over
- Decline to answer

4.4 What is your cumulative Grade Point Average (GPA)?
- Under 2.00
- 2.0-2.24
- 2.25-2.49
- 2.5-2.99
- 3.0-3.24
- 3.25-3.49
- 3.50-3.75
- 3.76-4.00
- Don’t know

4.5 Are you a senior or freshman? [Required]
- Senior
- Freshman
4.6 Are you a full time or part time student?
- Full Time
- Part Time

4.7 Do you reside on campus or off campus?
- On campus
- Off campus

4.8-4.16 What disciplines are you majoring in? Check all that apply. [Multiple responses]
- 4.8 Social Sciences
- 4.9 Humanities
- 4.10 Fine Arts
- 4.11 Life Sciences, including Agriculture and Health Sciences
- 4.12 Physical Sciences
- 4.13 Education, including Physical Education
- 4.14 Engineering
- 4.15 Business
- 4.16 Other or undecided

4.17 What is your ethnic group?
- African American or Black, not of Hispanic origin
- American Indian or Alaskan Native
- Asian or Pacific Islander
- Hispanic, Chicano, Mexican American, Latino
- White, not of Hispanic origin
- Other
- I do not wish to provide this information

4.18 Which institution are you attending? [Required]
- Colgate
- Drexel
- University of California, San Diego
- University of Minnesota, Crookston
- University of Minnesota, Twin Cities
- University of Wisconsin–Colleges
- University of Wisconsin–Eau Claire
- University of Wisconsin–La Crosse
- University of Wisconsin–Madison
- University of Wisconsin–Milwaukee
- University of Wisconsin–Oshkosh
- University of Wisconsin–River Falls
- University of Wisconsin–Stout
- University of Wisconsin–Whitewater
Section 5. Thank You.
Thank you for taking the time to answer this survey. Comments that you might wish to make about the use of technology would be most welcome.

5.1 If you have any other comments or insights about your information technology use and skills, please feel free to share them with us below. [Paragraph memo field]

Your survey responses will be submitted when you press the Finish button. Please do so now.

- END SURVEY -