

Adult Co-eds: The Nontraditional Struggle

Robin A. Krawza, Business Administration/Library Science
Ms. Laura Jacobs, Library Science, Information Literacy/Archivist

ABSTRACT

Technology has changed the way in which people work. As a result, so many adults are returning to the classroom to remain competitive in the workforce. Referred to as nontraditional students, adults face many challenges including those relating to computer and technology skills. In many instances, colleges and universities assume that students already are technologically competent. However, unlike most traditional students who have had a certain amount of technological training, a large number of nontraditional students have had little, if any, computer instruction. As a result, they find themselves in the precarious position of being expected to already know what they enrolled in school to learn.

Adult Co-eds: The Nontraditional Struggle

Technology has changed the way in which industry manufactures goods by reducing the amount of physical labor required to build and assemble products. Five employees, assisted by computers, can easily produce the same amount that previously required twenty workers. (Knable, 2006, Employment section, para. 12) One of the most obvious examples of this change is in the auto industry, where the use of technology has reduced the number of workers required on assembly lines. Much of the work now performed by machines has eliminated physically demanding positions that historically provided lifelong employment for individuals with limited skills. Workers are realizing that the notion “of working for one company from their teens to retirement is out-of-date.” (Knable, 2006, Employment section, para. 13) “Although it was once true that workers with limited skills could depend on finding jobs in factories and offices performing routine tasks, the growing use of computers to automate simple operations that were once performed by people “has made such jobs largely obsolete.” (Succeeding in the 21st Century, 2003, p. 7)

Globalization

Advances in technology have enabled businesses easy and affordable access to the global market. Computers and technology have not only changed the way people work but also the places in which they work. As a result, “[c]ompanies are no longer limited” by geographic location and “local or regional job pools when competing for talent.” (Cooke, 2002, p. 48) Businesses can be selective when hiring employees because they are no longer limited to the skill level and wage rates of local labor. Computers, the internet, and other technological advancements have enabled people to work at and compete for jobs around the world without leaving the comforts of their home. (Cooke, 2002, p. 48)

“Estimates from the Census Bureau [indicate] the number of workers using computers at work increased from 24.2 million in 1984 to almost 64 million in 1997”and the number is expected to continually rise as new technology becomes available. (Cooke, 2002, p. 48) American workers realize they will need to upgrade or acquire new technological and computer skills in order to remain competitive and marketable in the workforce. Even positions such as those of auto mechanics and real estate agents require an increasing amount of information technology skills. (Cooke, 2002, p. 49) Consequently, growing numbers of adults are seeking postsecondary training and education.

Returning to School

Many of these adults are enrolling in 2- and 4-year colleges to acquire or upgrade skills. Because they are older and have adult responsibilities, they do not fit the profile of the typical college student who enrolls immediately after high school. (Benshoff, 1992, para. 1) The term *nontraditional student* is frequently used to identify these adult learners. “While there is no single definition of a nontraditional student,” the U.S. Census Bureau uses the phrase “nontraditional college-age students” to identify students 25 years or older enrolled in a postsecondary school. (Zafft, p. 1; U.S. Census Bureau, 2003, p. 9) Other terms used when referring to older students include “*adult students,*” *re-entry students,* *returning students,* and *adult learners*” (Benshoff, 1992, para. 1) Regardless of the term used, more and more adults are enrolling in school each year.

According to the U.S. Census Bureau, “Of the 16.6 million college students enrolled in 2003...37% or 6.1 million [were] nontraditional college-age students (aged 25 or older).” (U.S. Census Bureau, 2003, p. 9) As would be expected, the percentage of graduate students over 25 is high; however at the undergraduate level, “of the 9 million [students] . . . enrolled in 4-year institutions 22 percent were 25 and older.” (U.S. Census Bureau, 2003, p. 11) The U.S. Department of Education reported that in 2004 the nontraditional student population increased to approximately 39% of total student enrollment at degree granting institutions. (U.S. Department of Education, 2005, Table 172) The percentages remain congruent between the two agencies for the same periods.

Although the enrollment percentage for adults (25 and older) has remained fairly constant, the actual number of nontraditional students enrolled continues to increase. Kasworm, citing the National Center for Education Statistics, suggests the percentages can be somewhat misleading. She points out that the 6 plus million adult students “enrolled in 2000, [was] more than the *total* collegiate enrollment in 1968.” (Kasworm, 2003, p. 4) The number of nontraditional college students in 1968 was 1,163,000 (17.1%), while women 25 and older only made up 4.8% (325,000) of the entire student body at that time. (U.S. Census Bureau, 2006, Table A6) In 2004, figures from the U.S. Census Bureau reported 37.82% of the college population was 25 and older, more than half of which were women. Females of all ages have consistently outnumbered males on college campuses since 1977, when male vs. female enrollment was almost equal. In 2004, females made up over 56% of college campus populations nationwide; 40% of the women were 25 or older. (U.S. Census Bureau, 2006, Table A6) Prior to this time the profile of the typical college student was male; therefore all women were considered nontraditional. (See fig. 1A)

Defining Nontraditional

Unless age is considered the only determining factor, there is no exact method available to identify the non-traditional student. Lacking a more concrete definition, articles concerning the nontraditional student can be confusing. According to *AccessEd*, the National Center for Education Statistics define an individual who either “delays enrollment . . . attends part time; works full time . . . is financially independent . . . has dependents other than a spouse . . . [or individuals who have] a GED” all as nontraditional students. (Zafft, p. 1) Others, such as the Office of Student Life Studies at Southeast Missouri State University, expand the definition to include people who are “married/divorced . . . [or] a veteran.” (Student development update, 2001, para. 1)

It is presumed that including these additional definitions would significantly increase the number of nontraditional students enrolled in college. For example, in 1947, “49 percent of college admissions” were veterans. (Born of controversy: The GI bill of rights, 2006, para. 13) Because of the “Servicemembers Readjustment Act of 1944” (the GI Bill), veterans were given access to higher education, “a privilege then reserved for the rich.” (Born of controversy: The GI

bill of rights, 2006, para. 3) The Act made it possible for service personnel to attend college and obtain the “unreachable dreams of the average American.” (Born of controversy: The GI bill of rights, 2006, par. 13) Applying the U.S. Census Bureau definition of a nontraditional college age student, only 18% of the 1947 student population was nontraditional.

Instead of “flood[ing] the job market” for lower skilled positions, the GI Bill provided veterans the opportunity to acquire the educational skills required to obtain better paying jobs. (Born of controversy: The GI bill of rights, 2006, par. 13) Similarly, many adults today attend college to improve their employability in an increasingly aggressive labor market.

Adapting to Change

“In this highly competitive global economy, a college education has never been more important.” (United States Department of Education, 2006, para.2) Many adults find their careers limited because they lack post-secondary training. There is even an increasing demand for computer and other information technology skills in traditional blue-collar occupations. Until the installation of computers in cars, auto mechanics were able to identify engine problems by either sound or a few simple tests. Now, “mechanics [must] use computerized diagnostic devices” to analyze and repair automobiles. (Cooke, 2002, p. 49) Because of changing job requirements, adults are forced “to get additional education to survive or advance in the job market.” (Benshoff, 1992, Why Adults Return to School section, para.1)

According to a nationwide study conducted by The Aslanian Group and reported in Kasworm, most adult students (85%) report that career reasons are their key college enrollment motivation. (Kasworm, 2003, p. 3) Divorce, job loss, or missing a promotion because of education, are all factors in the decision to return to school. (Kasworm, 2003, p. 6) While many adults return to school to continue the college career they began, but never finished, when they were younger (Benshoff, 1992, para.7), most now add the burden of adult responsibilities to their educational challenges.

Everyday adult responsibilities can turn into obstacles for the non-traditional student. Often adults “have difficulties juggling the roles of student, worker, and family member.” (Benshoff, 1992, para. 10) Adults need to consider the pros and cons of enrolling full or part-time.

Attending school fulltime enables the student to complete his/her educational goals more quickly. Programs are designed for fulltime students to complete their degrees in an efficient and timely manner. Fulltime enrollment also allows adult students the opportunity to become “actively involved in the educational process” and develop a comradeship with classmates. (Benshoff, 1992, para. 9) Forming an association with other students helps adult students to identify themselves as students. This self-identification can assist the nontraditional student in dispelling the idea that they are imposters who do not belong to or deserve to be in college (Quarterly summary page 2). Both men and women have “fears of failure and self-doubt” when they return to school; however, women also tend to worry about childcare and feel guilty about taking time away from their families. (Benshoff, 1992, para. 18)

Relearning

Conversely, assuming the role of a fulltime student can be difficult after an absence from the academic setting. Reestablishing or creating study habits and time management skills with a full course load can become overwhelming and may discourage some adults. (Benshoff, 1992, para.9) The nontraditional student must realize that a full course load means less time for work, family, leisure, and other adult responsibilities. By enrolling part-time, adults have the opportunity to gradually acclimate themselves to an educational setting. They can boost self-confidence and obtain a sense of accomplishment by successfully completing a few classes while performing daily responsibilities. However, many adults do not have a choice of whether to enroll full or part-time because of family responsibilities and financial constraints. Low-income women,

many of them single mothers, “are more likely to have extra expenses and demands on their time” than do other adult students. (Morris, 2004, para.3) In most cases the reason they decide go to college is to learn new skills so they can be competitive in the workforce. Yet if they take less than six credits, they often are not eligible for any financial aid. (Morris, 2004, para.5)

Underlying Assumptions

Many colleges and universities assume that students are already technologically competent. (Messineo, 2005, p. 50) Yet, unlike most traditional students, who have had a certain amount of training, a large number of nontraditional students have had little if any computer instruction. “Many adults are so ashamed” and embarrassed because they lack computer skills that they refuse to ask for help. (Moslander, 2000, p.105) As a result, they find themselves in the precarious position of being expected to know what they enrolled in school to learn.

While a major focus in the past had been to ensure that students had adequate access to computers and other technology, little thought was given to the instruction of technology. “Access to various technologies is of little use if one lacks the” training to effectively use the technology. (Succeeding in the 21st Century, 2003, p. 21) Many students may “use [computers] in their work or home, but are not familiar with searching databases or making efficient use of Internet search engines. (Moslander, 2000, p.104)

Universities are starting to realize that there is a gap between students’ technological skills and faculty assumptions. In response, the Educational Testing Service (ETS) has developed an evaluation to assess “whether (or to what extent) college students have obtained the combination of technical and cognitive skills [required to be successful in academia and in] society.” (Succeeding in the 21st Century, 2003, p.9) This assessment can be a useful tool for colleges to use in establishing a starting point for technological skills training and will alleviate the embarrassment or shame that some nontraditional students feel because they lack skills in technology.

Hypothesis

The project was based on the theory that students under the age of 25 commonly known as traditional students are more computer and technologically skilled than students 25 and older frequently identified as non-traditional students.

The survey results should reveal that non-traditional students use computers and other information technology less than do traditional students due to a lack of familiarity with various technologies.

The focus was to determine whether a significant difference existed between traditional and nontraditional students perceived familiarity, skill, and knowledge concerning computers and other technology.

Method

Description of the Survey

A 35-question survey entitled “Student Perceptions of Skills and Knowledge Survey” was designed by the researcher to determine University of Wisconsin-Superior students’ perception of their technological knowledge of and skills in computers and other technology.

Participants and Subject Pool

The original intent was to distribute surveys to approximately 20% of the 2005 University of Wisconsin-Superior student population of 2,435. (See fig. 2A) The initial rate of return of was expected to be 12.3% of the total student population. Therefore, from the distribution of 500 questionnaires, there was an expected return of 60% or 300 surveys. The distribution was conducted immediately prior to finals week, May 2006, on the university

campus. The number of actual surveys distributed was 370, of which 363 (98.1%) were returned, providing a response from 14.9% of the student body.

The target subject groups were students age 18 and older enrolled in courses across the disciplines. Written permission was obtained from the course instructor to distribute surveys to students in their classrooms.

Procedures

The University of Wisconsin-Superior Institutional Review Board approved the research project entitled “Student Perceptions of Skills and Knowledge Survey” for the Protection of Human Subjects protocol # 199. In addition to IRB approval, written permission was obtained from the Vice Chancellor’s Office and from individual instructors at UW-Superior, granting permission to survey university students. Students were informed that the survey was anonymous and participation was strictly on a volunteer basis. They were informed that they could choose not to participate at any time by merely returning the survey. The students were also asked to refrain from participating in the survey if they were under 18 or had previously participated in the survey. In addition, the subjects were informed that no incentives or enticements for their participation would be provided. The above requests were given verbally to all potential participants. A separate sheet distributed with the survey reiterated the verbal instructions and provided contact information for any concerns or questions.

Results

For the purpose of this study, nontraditional students were considered to be those students who identified themselves as 25 years and older; students under 25 years old were labeled traditional students. Respondents to the survey yielded 76 nontraditional students and 287 traditional students. Gender was as follows:

Nontraditional students: 28 male; 47 female; 1 no response.

Traditional students: 105 male; 178 female; 4 no response.

UW-Superior on-campus enrollment Spring 2005

Undergraduate Population		
Total	25 & Older	Percent
2,201	510	23.17%
Graduate Population		
Total	25 & Older	Percent
234	205	87.61%
Total University Population		
Total	25 & Older	Percent
2,435	715	29.36%

Discussion

The survey results should reveal that non-traditional students use computers and other information technology less than traditional students due to a lack of familiarity with various technologies. The project was based on the theory that traditional students identify themselves as more computer and technology literate than older, non-traditional students.

Reevaluating the data it was discovered that 362 respondents were undergraduate students while only one respondent, in the age bracket 50-54, was in graduate studies. The reevaluation yielded that 16.45% of the undergraduate population was represented in the survey;

however less than 1% of the graduate population was represented. As a result, the sample size for the graduate student population is not statistically significant. Therefore, the discussion will be limited to the undergraduate level and responses from the graduate student were not considered in the evaluation. The surveys produced responses from 75 nontraditional undergraduate students consisting of 9.21% freshmen, 18.42% sophomores, 36.84% juniors, and 34.21% seniors. The 1.32% discrepancy is a result of the graduate student survey dismissed from the tabulations. The 75 respondents represent 14.7% of the nontraditional student population on the UW-Superior campus, a statistically significant number for analysis. The 287 traditional student responses represented 16.97% of the undergraduate student population under the age of 25. The class status of the 287 students under 25 was 40.77% freshmen, 19.51% sophomores, 24.04% juniors, and 14.98% seniors. (See fig. 3A)

In response to the question, "Prior to enrollment how did you feel about using a computer?" a majority of both traditional and nontraditional students indicated that they were either "comfortable" or "could not live without it." Five nontraditional students admitted that they were "scared of the computer," and seven were "unsure how to get it do what they wanted." Only two students 25 and older responded that they were "afraid that they would break the computer." Proportionate numbers of traditional students reported similar responses. There was not an apparent disparity in attitude concerning computer use between the two groups. Responses between the two groups with regard to frequency of computer use prior to enrollment indicated that the 25 and older group had used a computer less frequently than the 25 and younger subjects. The highest disparity between the subject groups was in the "occasionally used" and "often used" categories; 10.64% more nontraditional students selected "occasional used" while 6.78% more traditional students selected the "often used" category. Traditional students also selected the "always" category 4.47% more than did the nontraditional students.

When asked to rate their computer skills "prior to enrolling in school" using a scale of 0 to 5, with 0 meaning no skills at all and 5 meaning excellent, 67.11% of the nontraditional students rated their skills from 3 to 5 inclusive, while only 1.32% indicated that their skill was 0. The remainder of the 31.58% was dispersed between 1 and 2 (percentage discrepancy due to rounding). However, 89.90% of traditional students reported that they felt their computer skills fell in the 3 to 5 range (inclusive). This variance in perceived computer skills prior to enrollment could indicate that, although computer usage was similar, the nontraditional group felt less skilled and comfortable with computers. Interestingly, a higher percentage of the 25-29 and the 30-34 year old age groups indicated skill levels lower than the older groups in the nontraditional category. This runs counter to the underlying assumption in the hypothesis that the older the student, the less technological competence they exhibit.

As anticipated, when students were asked to indicate their skill level after enrollment, the perceived skill levels increased in both groups. The nontraditional group increased by 14.47% to 81.58%, while the traditional group increased 4.88% to 94.78%. For this question, 2.63% of nontraditional students, and 1.05% of traditional students did not record a response. The increase in perceived skill level was to be expected because, while in school, students are expected to use computers frequently.

When subjects were asked about the various technologies and programs they used prior to enrollment, most subjects in both groups as was expected, had used Microsoft Word. The survey specified Microsoft applications because they are the applications supported by the University. Excel produced similar responses between both categories, as did copy machines, searchable databases, and writeable compact discs. Among the 25 and older category, the percentage-indicating familiarity with most of the technology tools decreased as the respondents' age increased. This suggested that as the students' age increased, their use and familiarity with other than the basic Word decreased. This reasoning would be in agreement with the hypothesis, although the numbers are not large enough to draw a definite conclusion.

When asked whether individuals had previously used a graphing calculator, only 22.37% of the nontraditional students indicated in the affirmative. Of these, 15 of the 40 respondents were in the 25-29 subcategory, and 2 of 15 were in the 30-34 group; no other positive responses were recorded in the “25 and older” subcategories. Among traditional students, the positive response was 56.10%. The findings for the use of graphing calculators among nontraditional students are in alignment with the focus of the survey. One possible explanation for the disparity in this response is that graphing calculators are common and even required technology for current high school graduates but, due to the often prohibitive expense of newer technologies, it is unlikely non-traditional students were ever exposed to them. Worth noting is the seemingly low percentage (56.10%) of graphing calculator use by students under 25 years old. Since some of these students are likely to be in majors that will require such use, one possible explanation may be related to disparity in the size and type (rural or urban) of K-12 school district from which the students derive. Further investigation into the causes of use / non-use of graphing calculators is indicated.

Further Research

Although it was anticipated that the research findings would reveal that older students are technologically disadvantaged, further research would be required to validate the conclusion. More specifically, questions designed to determine students’ ability to complete assignments that require the use of technology would be more conclusive. Insight could also be gained by interviewing instructors across the disciplines and various academic levels. In addition, a determination of the specific type of technology the student used in previous employment or educational settings could lead to conclusions that are more definitive.

References

- Benshoff, J. M. & Lewis, H. A. (1992). *Nontraditional college students*. ERIC Digest. Ann Arbor, MI: ERIC Clearinghouse on Counseling and Personnel Services. (ERIC Document Service No. ED347483). Retrieved July 24, 2006, from ERIC database.
- Chao, R., & Good, G. E. (2004). Nontraditional students' perspectives on college education: A qualitative study. *Journal of College Counseling*, 7(1), 5-12.
- Chisholm, I. M., Carey, J., & Hernandez, A. (1998). University minority students: Cruising the superhighway or standing at the on-ramp? *Technology and Teacher Education Annual*. Phoenix, AZ: Arizona State University West. (ERIC Document Service No. ED421104). p. 187-190. Retrieved April 25, 2006, from ERIC database.
- Choy, S. P., & Premo, M. K. (1995). *Profile of Older Undergraduates: 1989-90. Statistical Analysis Report*. Washington, D.C.: National Center for Education Statistics. Retrieved March 10, 2006, from <http://nces.ed.gov/pubs95/95167.pdf>
- Cooke, S. D. (2002). Jobs in the new economy. In The United States Commerce Department, *Digital Economy 2002* (pp. 41-50). (ESA Publication No. DE2002). Washington, D.C.: Economics & Statistics Administration, U.S. Department of Commerce.
- Hagedorn, L.S. (2005). Square pegs: Adult students and their "fit" in postsecondary institutions. *Change*, (Jan./Feb.), 22-29.
- Houser, M. L. (2002, Nov.). "They have no idea what I need": An investigation of nontraditional student expectations of instructor communication behavior. (ERIC Document Service No. ED474583). Paper presented at the Annual Meeting of the National Communication Association, New Orleans, LA.
- International ICT Literacy Panel. (2003). *Succeeding in the 21st century: What Higher Education Must Do to Address the Gap in Information and Communication Technology Proficiencies*. (Information & Communication Technology Publication). Washington, D.C.: Educational Testing Service.
- Kasworm, C. E. (2003). Setting the stage: Adults in higher education. [Electronic version]. *New Directions for Student Services, Summer* (102), 3-10. Retrieved July 7, 2006, from Academic Search Elite database.
- Kasworm, C. E. (2005). Adult student identity in an intergenerational community college classroom. *Adult Education Quarterly*, 56(1), 3-20.
- Kavenik, F. M., & Robinson, J. D. (2003). UW-Parkside's ACCESS project. *Teaching with Technology Today*, 9(7), 1+. Retrieved February 06, 2006, from <http://www.uwsa.edu/tt/articles/kavenik.htm>
- Knable, T. (2006). *Why are baby boomers returning to college?* About.Com. Retrieved February 6, 2006 from http://adulted.about.com/cs/studiesstats1/a/boomers_p.htm
- Lynch, J. M., & Bishop-Clark, C. (1998). A comparison of the nontraditional students' experience on traditional versus nontraditional college campuses. [Electronic version]. *Innovative Higher Education*, 22(3), 217-229. Retrieved May 20, 2006 from Academic Search Elite.
- Messineo, M. & DeOllos, I.Y. (2005). Are we assuming too much? Exploring students' perceptions of their computer competence. *College Teaching*, 53(2), 50-55.
- Mironesco, M. (2004). How do women's studies classes affect adult students? *Women in Higher Education*, 13(9), 37-38.
- Morris, M. L. (2004). Low-income women and the higher education act reauthorization. [Electronic version]. *On Campus with Women*, 33(3-4), 1. Retrieved June 19, 2006, from http://www.aacu.org/ocww/volume33_3/national.cfm
- Moslander, C. (2000). Helping adult undergraduates make the best use of emerging technologies. *The Reference Librarian*, 69, 103-112.
- National Center for Education Statistics. (2005). *Higher education general information survey, table 172: Total fall enrollment in degree-granting institutions, by attendance status, age,*

- and sex: Selected years, 1970 through 2014*. Washington, D.C.: U.S. Department of Education. Retrieved June 21, 2006, from Lexis-Nexis Statistical Universe database.
- Oblinger, D. G. (2005). Learners, learning, & technology. [Electronic version]. *Educause Review*, 40(5), 66-75. Retrieved April 16, 2006, from <http://www.educause.edu/ir/library/pdf/erm0554.pdf>
- Oblinger, D. G. & Hawkins, B. L. (2005). The myth about students: "We understand our students." *Educause Review* 40(5), 12-13. Retrieved April 16, 2006 from <http://www.educause.edu/ir/library/pdf/ERM0558.pdf>
- Powers, P. J., & Redding, K. L. (1995). *Traditional Versus Non-Traditional Graduating Seniors' Perceptions of a Comprehensive State University Learning Environment*. Superior, Wisconsin: University of Wisconsin-Superior. (ERIC Document Service No. ED388207). Paper presented at the 13th Annual Meeting of the Northern Rocky Mountain Educational Research Association, Jackson, WY.
- Rendón, L. I. (1998). Helping nontraditional students be successful in college. *About Campus*, 3(1), 2.
- Rifenbary, D. (1995). Reentering the academy-the voices of returning women students. *Initiatives: Journal of the NAWA*, 56(4), 1-10.
- Saunders, L. F., & Bauer, K. W. (1998). Undergraduate students today: Who are they? *New Directions for Institutional Research*, 98(Summer), 7.
- The status of diversity. (2005). *ASHE Higher Education Report*, 31(1), 1-20.
- Student development update: A quarterly summary of challenges to student learning - adult learners on campus. (2001). *Student Life Studies*, 4(3), 1-4.
- United States Census Bureau. (2003). *Current population survey: College* (Current Population Survey. Washington, D.C.: U.S. Census Bureau.
- United States Census Bureau. (2006). *Current population survey. Table A-6. Age distribution of college students 14 years old and over, by sex: October 1947 to 2004*. Retrieved March 7, 2006 from <http://www.census.gov/population/www/socdemo/school.html>
- United States Department of Education. (2005). *Table 172: Total fall enrollment in degree-granting institutions, by attendance status, age, and sex: Selected years*. Washington, D.C.: U.S. Department of Education. Retrieved June 21, 2006, from Lexis-Nexis Statistical Universe database.
- United States Department of Education. (2006). *Higher education for a highly competitive world*. Retrieved July 10, 2006 from <http://www.ed.gov/print/teachers/how/prep/higher/highered.html>
- United States Department of Veterans Affairs. (2006, January/February). Born of controversy: The GI bill of rights. *Vanguard Magazine Online*, Retrieved July 8, 2006 from <http://www.gibill.va.gov/>
- University of Wisconsin Market Research. (2002). *Survey of Adult Students: Undergraduates*. Madison, WI: University of Wisconsin.
- Office of the Registrar, University of Wisconsin-Superior. (2006). *Enrollment by Age Group, 2001-2006*. Superior, WI: University of Wisconsin-Superior Information Technology Service.
- University of Wisconsin System Office of Policy Analysis & Research. (2003). *Informational Memorandum: The New Freshman Class: Fall 2003*. Madison, Wisconsin: University of Wisconsin System.
- Yetter, G., Gutkin, T. B., Saunders, A., Galloway, A. M., Sobansky, R. R., & Song, S. Y. (2006). Unstructured collaboration versus individual practice for complex problem solving: A cautionary tale. *Journal of Experimental Education*, 74(2), 137-159.
- Zafft, C., Cain, M., & Bisceglia, T. (2006). Supporting Non-Traditional Students. *AccessEd: Women in Government*, 2(1), 1-4.

Figure 1A
National Student Enrollment
25 and Older

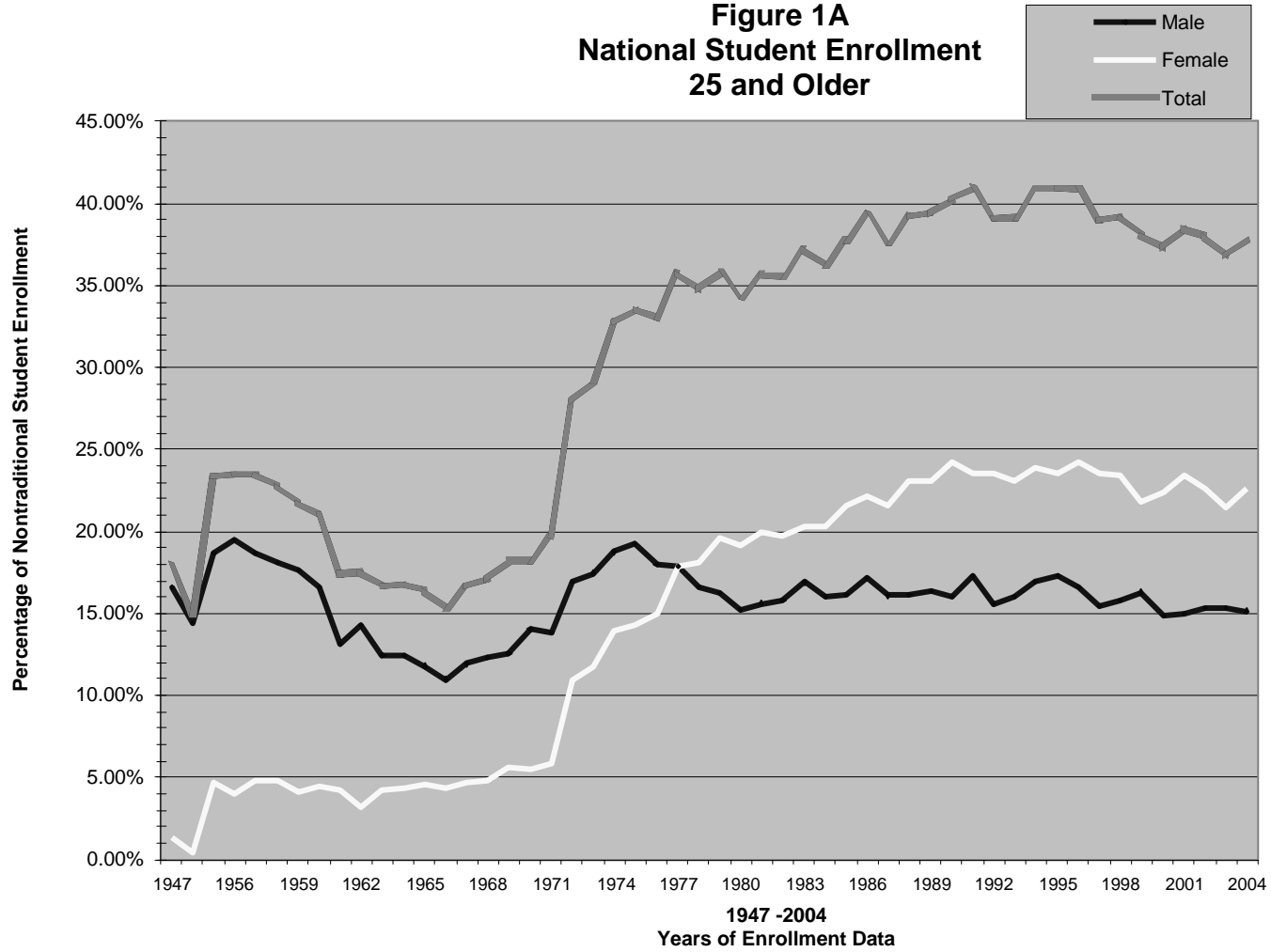
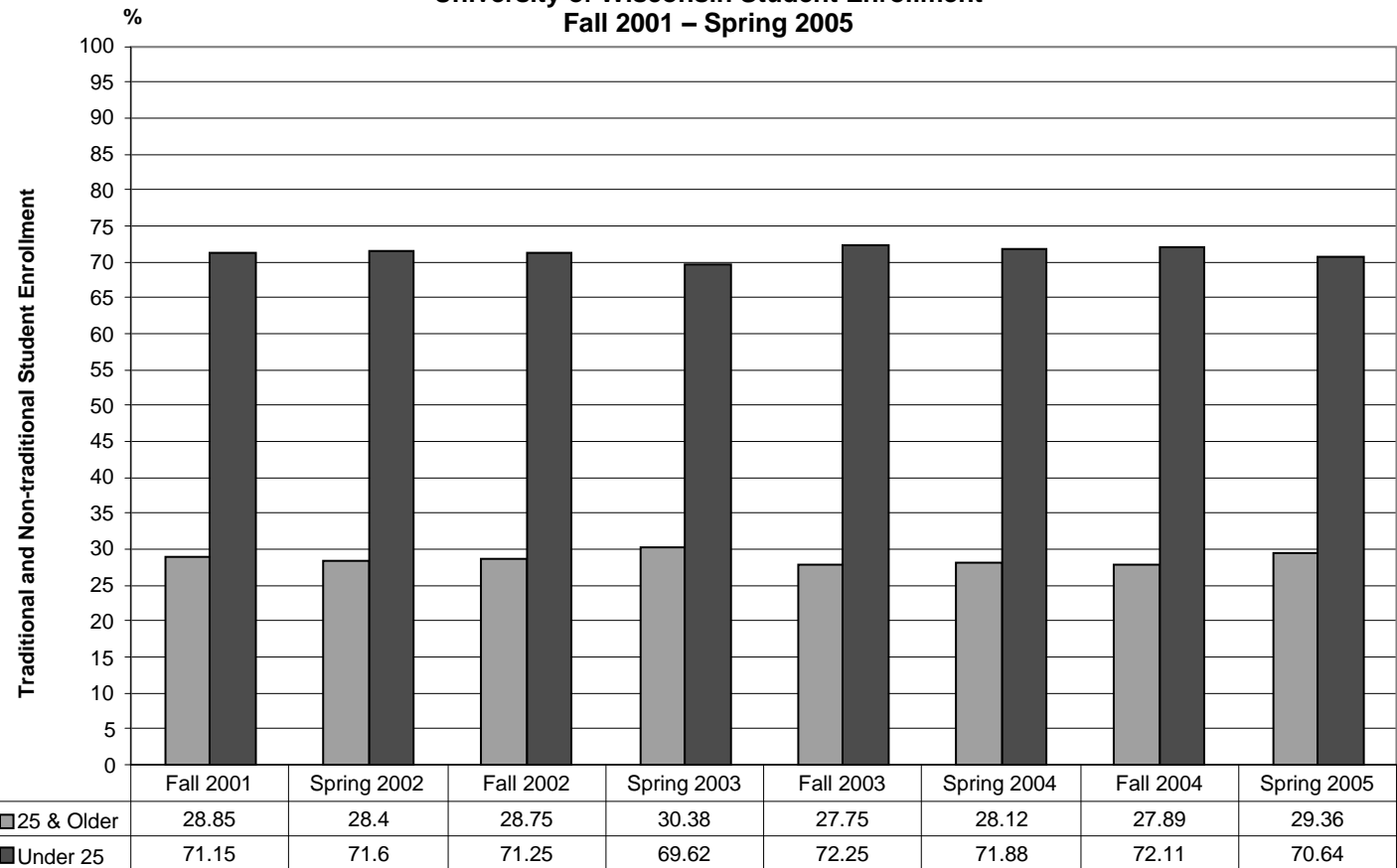


Figure 2A
University of Wisconsin Student Enrollment
Fall 2001 – Spring 2005



Fall 2001 – Spring 2005

		Under 25		25-29		30-34		35-39		40-44		45-49		50-54		25 & Older Total
		Age Group														
1	Age Group	287		40	52.63%	15	19.74%	8	10.53%	6	7.89%	3	3.95%	4	5.26%	76
		Prior to enrolling in school, did you use a computer on a regular basis?														
10	Never	2	0.70%	1	1.32%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
	Occasionally	45	15.68%	8	10.53%	5	6.58%	3	3.95%	0	0.00%	2	2.63%	2	2.63%	20
	Often	95	33.10%	11	14.47%	3	3.95%	1	1.32%	3	3.95%	0	0.00%	2	2.63%	20
	Always	145	50.52%	20	26.32%	7	9.21%	4	5.26%	3	3.95%	1	1.32%	0	0.00%	35
		Prior to enrollment, how did you feel about using a computer? (Circle all that apply)														
11	It scared me	0	0.00%	1	1.32%	0	0.00%	2	2.63%	0	0.00%	1	1.32%	1	1.32%	5
	Unsure how to get it to do what I want	7	2.44%	2	2.63%	1	1.32%	0	0.00%	0	0.00%	2	2.63%	2	2.63%	7
	Could do a few things	32	11.15%	5	6.58%	4	5.26%	2	2.63%	0	0.00%	1	1.32%	2	2.63%	14
	Afraid I would break it	3	1.05%	1	1.32%	0	0.00%	0	0.00%	0	0.00%	1	1.32%	0	0.00%	2
	Frustrated	14	4.88%	3	3.95%	1	1.32%	2	2.63%	0	0.00%	1	1.32%	1	1.32%	8
	Unsure	4	1.39%	1	1.32%	1	1.32%	1	1.32%	0	0.00%	1	1.32%	1	1.32%	5
	Somewhat comfortable	29	10.10%	7	9.21%	3	3.95%	1	1.32%	1	1.32%	1	1.32%	0	0.00%	13
	Comfortable	168	58.54%	17	22.37%	4	5.26%	4	5.26%	4	5.26%	0	0.00%	0	0.00%	29
	Could not live without it	91	31.71%	12	15.79%	6	7.89%	1	1.32%	1	1.32%	1	1.32%	1	1.32%	22
	No opinion	1	0.35%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
No Response	2	0.70%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	
		My computer skills prior to enrollment were:														
12	(None) 0	0	0.00%	0	0.00%	0	0.00%	1	1.32%	0	0.00%	0	0.00%	0	0.00%	1
	1	6	2.09%	4	5.26%	1	1.32%	2	2.63%	0	0.00%	1	1.32%	2	2.63%	10
	2	23	8.01%	5	6.58%	4	5.26%	1	1.32%	2	2.63%	1	1.32%	1	1.32%	14
	3	89	31.01%	7	9.21%	4	5.26%	1	1.32%	1	1.32%	0	0.00%	0	0.00%	13
	4	117	40.77%	15	19.74%	2	2.63%	0	0.00%	2	2.63%	0	0.00%	0	0.00%	19
	5 (Excellent)	52	18.12%	9	11.84%	4	5.26%	3	3.95%	1	1.32%	1	1.32%	1	1.32%	19

As a student my computer skills are:																	
23	0 (None)		0	0.00%	0	0.00%	0	0.00%	1	1.32%	0	0.00%	0	0.00%	0	0.00%	1
	1		0	0.00%	1	1.32%	0	0.00%	1	1.32%	0	0.00%	0	0.00%	0	0.00%	2
	2		12	4.18%	3	3.95%	3	3.95%	0	0.00%	1	1.32%	1	1.32%	1	1.32%	9
	3		66	23.00%	9	11.84%	2	2.63%	3	3.95%	0	0.00%	0	0.00%	0	0.00%	14
	4		134	46.69%	17	22.37%	4	5.26%	0	0.00%	3	3.95%	1	1.32%	3	3.95%	28
	5 (Excellent)		72	25.09%	10	13.16%	4	5.26%	3	3.95%	2	2.63%	1	1.32%	0	0.00%	20
	No Response		3	1.05%	0	0.00%	2	2.63%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2
Before enrolling at UW-Superior I previously used (circle all that apply)																	
14	Microsoft word		281	97.91%	40	52.63%	14	18.42%	6	7.89%	6	7.89%	3	3.95%	3	3.95%	72
	Excel		176	61.32%	27	35.53%	6	7.89%	4	5.26%	4	5.26%	1	1.32%	2	2.63%	44
	PowerPoint		202	70.38%	20	26.32%	4	5.26%	3	3.95%	3	3.95%	1	1.32%	1	1.32%	32
	Access		54	18.82%	10	13.16%	2	2.63%	2	2.63%	1	1.32%	1	1.32%	1	1.32%	17
	Transparencies		62	21.60%	5	6.58%	2	2.63%	2	2.63%	2	2.63%	1	1.32%	0	0.00%	12
	Front Page		31	10.80%	2	2.63%	0	0.00%	2	2.63%	1	1.32%	1	1.32%	0	0.00%	6
	Graphing calculator		161	56.10%	15	19.74%	2	2.63%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	17
	Scientific calculator		143	49.83%	23	30.26%	2	2.63%	2	2.63%	2	2.63%	1	1.32%	0	0.00%	30
	Scanner		180	62.72%	23	30.26%	4	5.26%	2	2.63%	3	3.95%	1	1.32%	2	2.63%	35
	Copy machine		187	65.16%	30	39.47%	6	7.89%	5	6.58%	4	5.26%	2	2.63%	1	1.32%	48
	Floppy disc		208	72.47%	29	38.16%	9	11.84%	5	6.58%	5	6.58%	2	2.63%	2	2.63%	52
	Writeable compact disc		134	46.69%	20	26.32%	6	7.89%	3	3.95%	1	1.32%	2	2.63%	1	1.32%	33
	Pen/jump drive		67	23.34%	6	7.89%	1	1.32%	0	0.00%	0	0.00%	1	1.32%	0	0.00%	8
	Searchable database		91	31.71%	15	19.74%	4	5.26%	3	3.95%	3	3.95%	1	1.32%	0	0.00%	26
No Response None		4	1.39%	0	0.00%	0	0.00%	2	2.63%	0	0.00%	0	0.00%	0	0.00%	2	
Status:																	
	Freshman		117	40.77%	5	6.58%	2	2.63%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	7
	Sophomore		56	19.51%	8	10.53%	3	3.95%	2	2.63%	0	0.00%	1	1.32%	0	0.00%	14
	Junior		69	24.04%	13	17.11%	5	6.58%	5	6.58%	3	3.95%	0	0.00%	2	2.63%	28
	Senior		43	14.98%	14	18.42%	5	6.58%	1	1.32%	3	3.95%	2	2.63%	1	1.32%	26
	Graduate		0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	1.32%	1
	No Response		2	0.70%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0