

STUDENT Research CENTER

Fall 1998 / Report 7

Freshman Computer Skills

What Computer Skills Do First-Time Freshmen Bring With Them?

Purpose:

To assess the level of various computer skills among incoming Freshmen at Cal State Fullerton.

History:

This survey was administered for the first time in summer of 1998. Similar items have appeared on other surveys.

In Brief:

Currently, there are no computer requirements for students at Cal State Fullerton. The Academic Senate Subcommittee on Information Technology in the Curriculum is examining a computer competency requirement at Cal State

Fullerton. The committee has discussed incorporating computer technology into the educational curriculum, and therefore wanted to know what abilities students bring with them.

The computer competency requirement would be modeled after the CSU San Marcos program, which requires students to pass an exam, take a computer course at a community college, or take a computer course at CSU San Marcos.

Method:

The Freshman Computer Skills Survey was distributed to first-time freshmen during ten of the "New Student Orientation, Part One" sessions from June 23, 1998 to July 30, 1998. The survey was handed out in conjunction with a program evaluation

form in the morning of the orientation and it was collected at the end of the day. 889 students attended this orientation program during the dates listed above. A total of 301 surveys was retrieved, for a response rate of 34%.

The survey consisted of seven items, six of which used the following rating scale: A = No experience, B = Basic, C = Intermediate, D = Advanced. Item seven was a "Yes" or "No" question regarding computer ownership.

The survey items are listed verbatim in Table 1.

Results:

Freshmen reported having the most skills with Word Processing software (92%); more than 9 of 10 Freshmen in

STUDENT Research CENTER

VERNON R. PADGETT, PH.D., *Acting Director*

E-mail: vpadgett@fullerton.edu

CHERINE M. TROMBLEY, PH.D.,

Research Associate

E-mail: ctrombley@fullerton.edu

Student affairs research is a major priority This research report reflects the Student Affairs commitment to a continual focus on research relating to student affairs.

The mission of the Student Research Center is to administer and support research on students, including campus climate assessment.

Directions for Future Research:

- Sense of community at Cal State Fullerton
- Where Do They Come From; application, admission and enrollment by high school of origin
- Probation, Disqualification and Matriculation

Student Research Center
University Hall 214
California State University, Fullerton
Fullerton, CA 92834
(714) 278-2591
<http://sa.fullerton.edu/studentresearch>

this sample have some familiarity with using Word Processing software. Next most have proficiency with Internet use (82%); and least with Database software (60%). Freshmen reported the most "Advanced" skills with E-mail and the highest response of "No Experience" with Database software. See accompanying charts for actual frequencies.

It should be noted that the "Database software" item may be unclear to students since many new and innovative software programs are now integrated, and include databases. For example, Microsoft Excel is widely considered to be a spreadsheet software program, but it can also be used as a database software program, especially when merged with a Microsoft Word file. Additionally, most computer library retrieval systems are often referred to as databases. Therefore, students who use an electronic card catalog to locate a book may consider themselves experienced database users. In future research this

Table 1

Freshman Computer Skills Survey – Summer 1998

1. Level of proficiency with word processing software.
2. Level of proficiency with e-mail.
3. Level of proficiency with internet use.
4. Level of proficiency with spreadsheet software.
5. Level of proficiency with database software.
6. Level of proficiency with presentation software.
7. I will have my own computer this fall.

NOTE: Freshmen rated their own abilities on this scale:

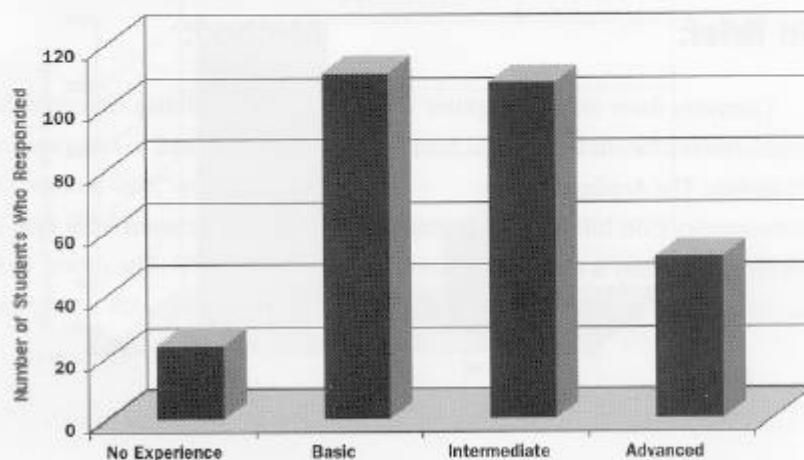
A: No Experience, B: Basic Experience, C: Intermediate Experience, and D: Advanced Experience.

problem of item interpretation will be addressed by the addition of an open-ended question asking the student to indicate which "database software" they use.

The last question asked whether students will have their own computers this fall. 73% responded "Yes" and 27% responded "No."

Each of the following charts indicates the self reported level of proficiency for each computer skill.

Word Processing Software Level of Proficiency



Conclusions:

No demographic data were obtained on this survey and no statistical tests were run. The findings can be used as a preliminary assessment of first-time freshmen computer skills, keeping in mind that 2 of 3 first-time freshmen who attended the orientation did not respond to the survey. This sample was biased as many students did not turn in their surveys. Only those motivated to stay to the end of the day, complete the survey, and turn in the survey remained in the sample. What would these students' responses have been if they participated to the fullest extent in both the orientation program and the survey?

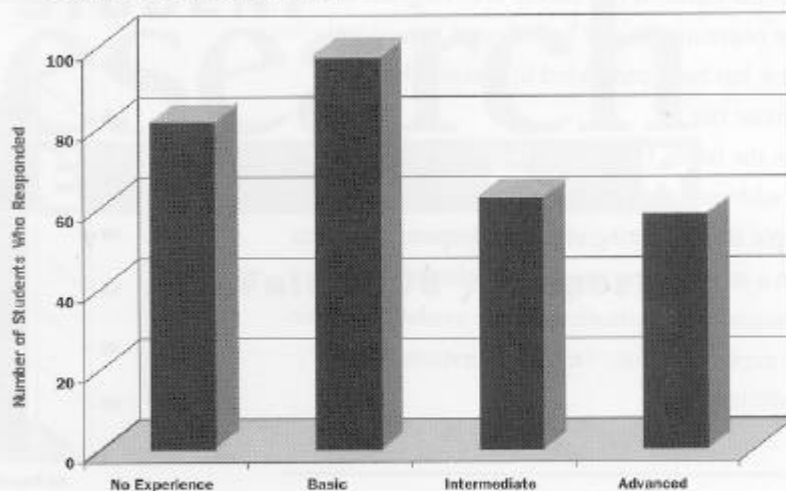
Practical Implications:

In order for researchers, educators, and administrators to evaluate the needs of students in relationship to technology, we need to understand what skills the students currently possess. Computer skills have become a major requirement in the work place as technology continues to advance. It could be beneficial to measure how these skills advance as students move toward graduation, having used Cal State Fullerton's numerous computer resources.

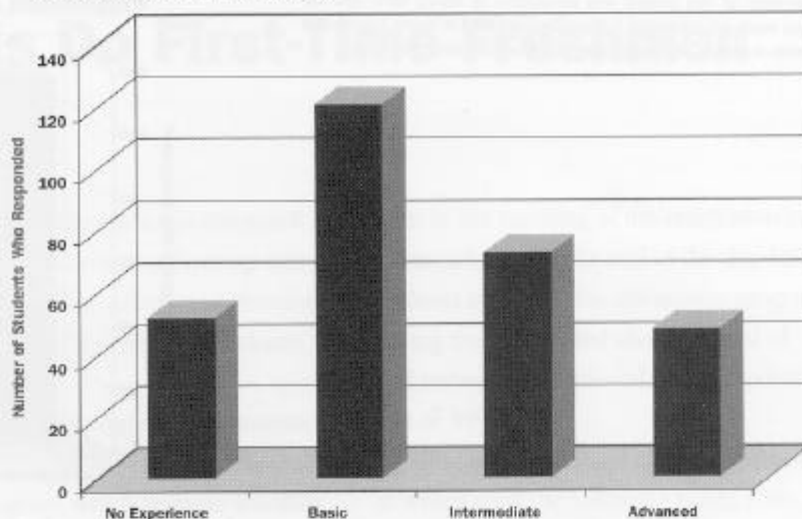
Future Research:

Item seven asked if students will have their own computers in the fall, but did not address those students who may have had access to someone else's computer. It would appear that those who had access, but did not own a computer might have answered the question with a "No." This item will be reworded to ask: "Do you have access to a computer at home?"

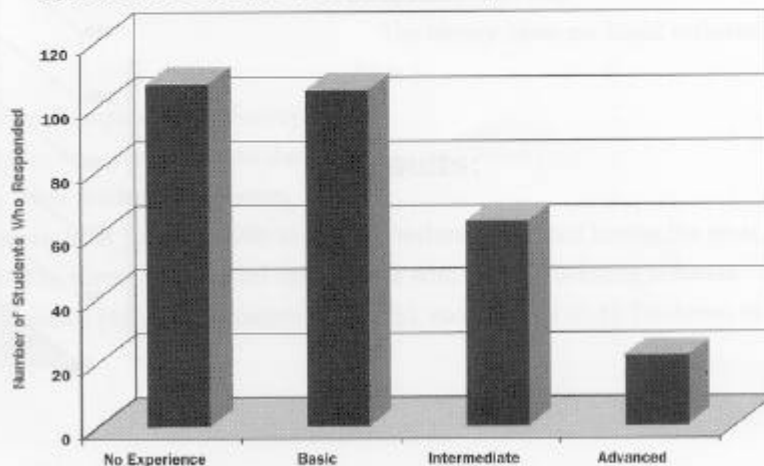
E-Mail Level of Proficiency



Internet Level of Proficiency



Spreadsheet Software Level of Proficiency

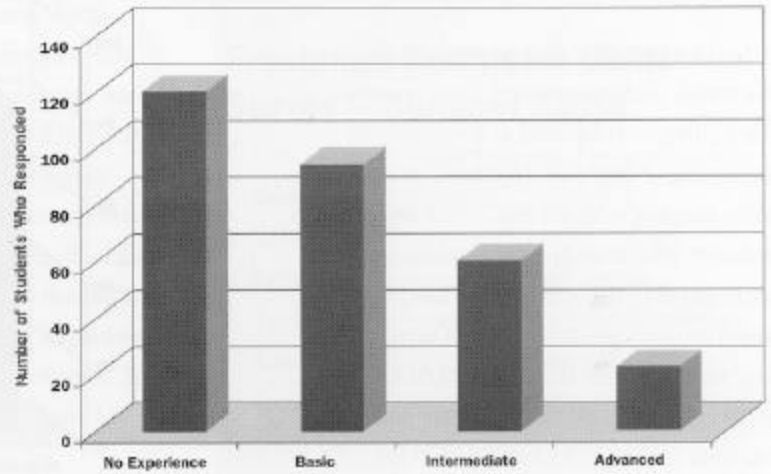


In the future, if this survey is to be given at the same orientation it will be collected immediately after it has been completed to ensure a higher response rate.

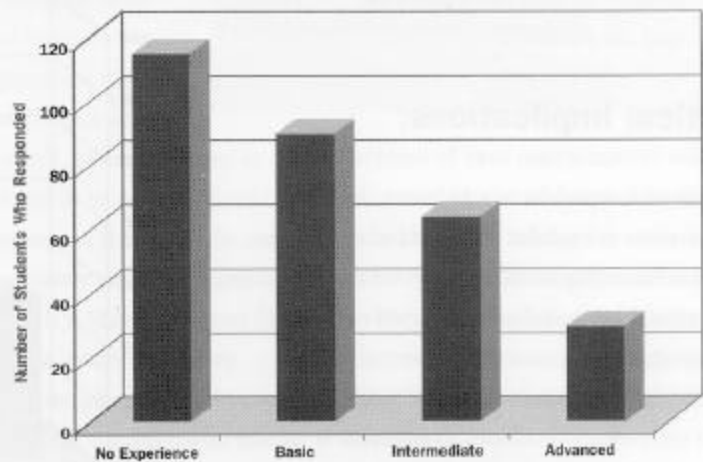
In the fall of 1998, the Campus Climate Survey will address these same questions with a larger sample size consisting of more complete responses from a more diverse student population. Demographic information will be available and further exploration into the same questions will be conducted.

NOTES: This report was written by Cherine M. Trombley and Vernon R. Padgett. The project was conceptualized by Carol Bednar, Chair of the Subcommittee on Information Technology in the Curriculum. Coordination of this project was conducted by Kandy Mink and the surveys were administered by Juanita Razo and Anthony Hayes. We also wish to thank Dr. Curtis Swanson for reviewing this report.

Database Software Level of Proficiency



Presentation Software Level of Proficiency



"I Will Have My Own Computer This Fall"

