Student Satisfaction with Computer Facilities
Student Survey Results 2001

These survey results are part of several sets of results from the query of recent students on their experience with facilities and instruction relying on technology at the Maricopa Community Colleges.

More than 340 students (of 500 + replies) responded with agreement levels to statements such as:
"Technical assistants in computer areas were knowledgeable."

Of these, 97 students also responded with agreement to statements comparing other, later college experience with their Community College (CC) experience:
"Technical assistants were more knowledgeable at the community college."

The present sets of results groups the satisfaction statements into those concerning Access, Helpfulness, and Up-to-date equipment at facilities. Also compared are different campus groupings (Group 1 - CGCC, EMCC, PVCC and SMCC; Group 2 - GWCC, RSCC, MSC and PC; Group 3 - GCC, MCC and SCC). Comparisons with other, later colleges were also made.

This and other sets of results are from the Ocotillo 2000-2001 survey conducted by **Doug Sawyer**, analyzed by **Gene Schmidt**, and facilitated by **Alan Levine**.

doug.sawyer@sccmail.maricopa.edu, gene.schmidt@sccmail.maricopa.edu,
alan.levine@domail.maricopa.edu

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Summary of Results of Facilities Satisfaction Ratings

Highlights of Differences among Items Assessing Different Features
of Facilities, and for Different Campus Groupings

Satisfaction ratings were high for community college (CC) lab facilities, for accessibility, helpfulness and currency of instructional technology support.

From ratings of the most critical students it can be seen that currency and reliability of equipment were the highest rated features, and helpfulness and accessibility less so.

In contrast, for a smaller set of critical students also rating other later, college lab facilities, the CC facilities were seen in retrospect as offering *less* current and reliable software and hardware, and *more* access.

Group 1 campuses (CGCC, EMCC, PVCC & SMCC) were seen by their students as offering facilities significantly more accessible, helpful and up-to-date than Group 2 (GWCC, MSC, PC & RSCC) or Group 3 campuses (GCC, MCC & SCC).

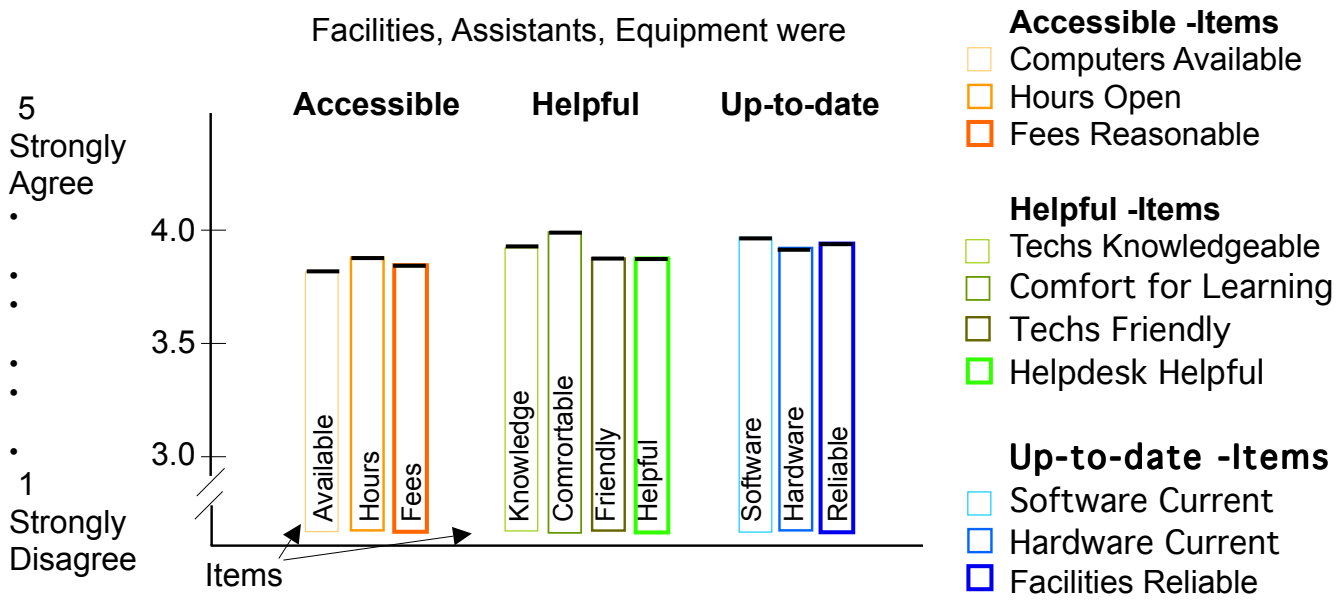
Group 1, smaller, newer campuses, were specifically rated as higher for knowledgeable, helpful staff and up-to-date hardware.

Group 2, older, urban campuses were seen as lower in availability and comfort for learning, and offering less current hardware at their facilities.

Group 3, larger, suburban campuses were offered less availability of computers and less helpful staff.

Comparisons with other, later college labs indicated that the CC experiences at Group 1 campuses were still seen as high on availability and helpfulness; Group 2 campus labs were seen as high on availability, help, and also currency of software; Group 3 labs were seen in hind sight as offering less availability and less up-to-date software.

Computer facilities users were most satisfied with equipment and support, less so with access.

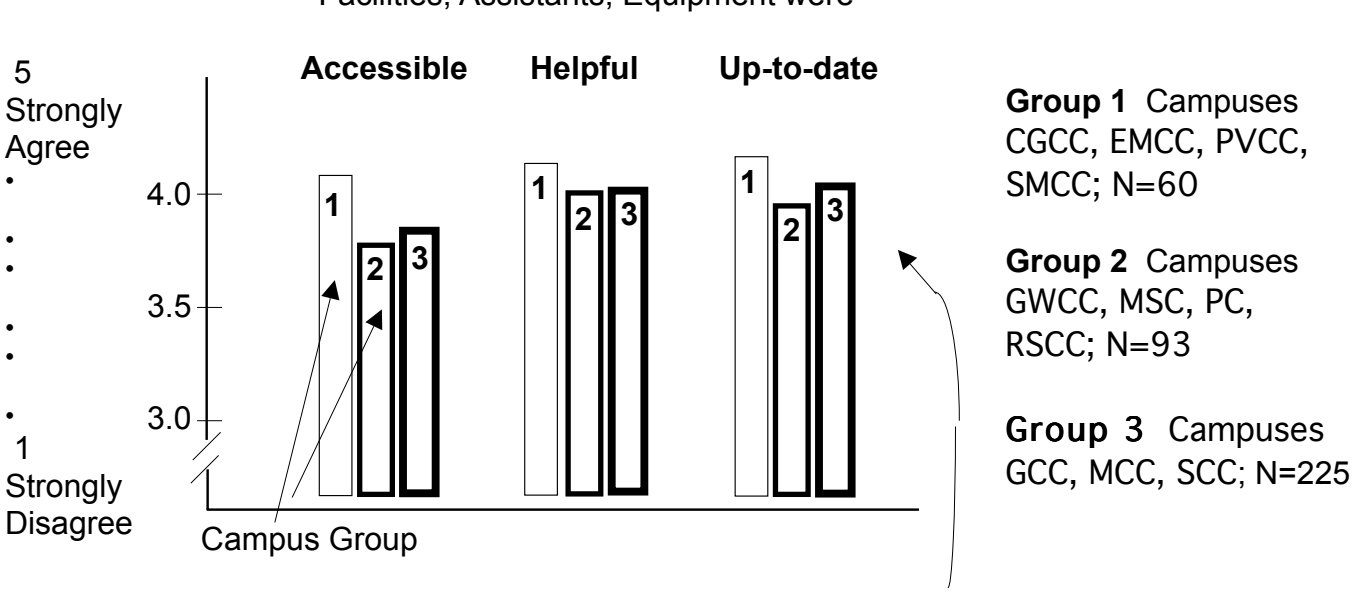


For all students rating facilities, agreement with satisfaction statements was higher for the up-to-date and comfortable nature of the facilities than with the accessibilityof computers or helpfulness of assitants (N = 370).

Note, Methods: Strong negative correlations between satisfaction ratings and variance across categories suggest that ratings tended to be at a ceiling, with many respondents rating the highest agreement across all items. Accordingly, later analyses will use ratings only from respondents who show some variation in ratings across items. The respondent sample size will be approximately halved for that reason.

The maximum mean would be 5.0. With elimination of across the board "Strongly Agree" ratings means will be near 3.5 instead of 4.0,but will show more meaningful comparisons between items. Here little can be concluded about relative differences in agreement with one item or another, though most satisfaction is with the equipment and with the helpfulness of the computer lab setting.

Group 1 campus users were significantly more satisfied with access and availability of technology.



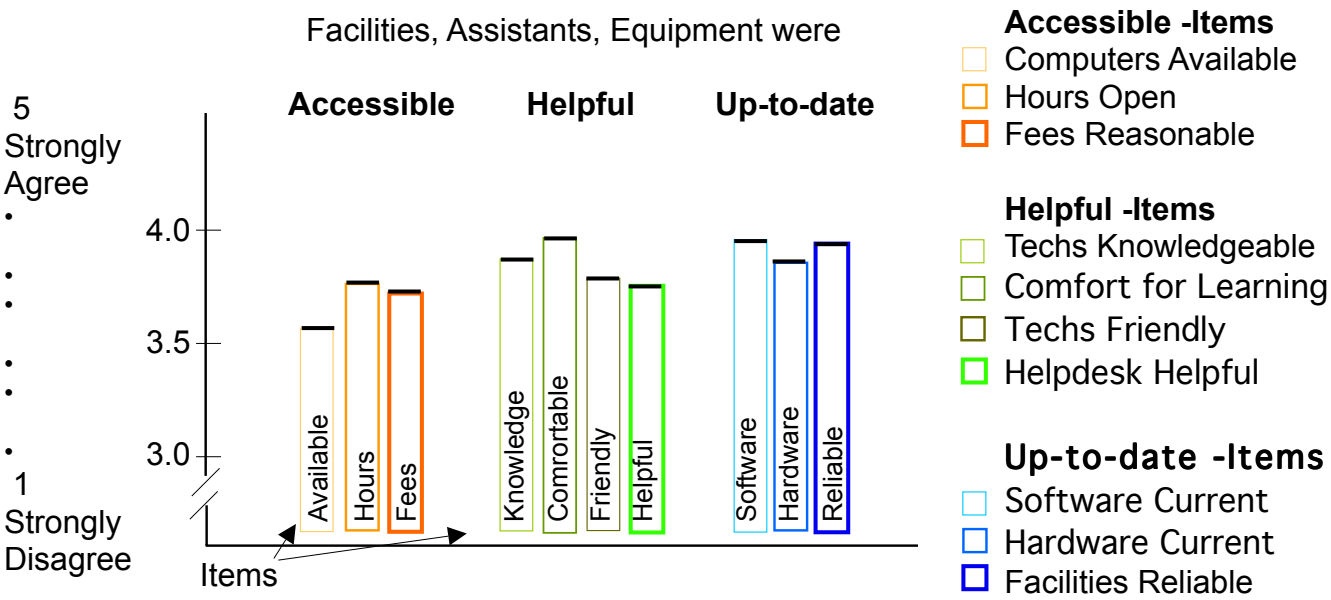
Group 1 campus students agreed significantly more to statements of access (p = .037), helpfulness of assitants (p = .036), and currency of hardware and software (p = .031).

Note, Method: The groupings of campuses was arrived at empirically by rating all campuses separately on different facility satisfaction ratings and noting the clusters of highest, mid and lower ratings. This first was an initial analysis presented to the Ocotillo Chairs meeting where it was also noted that the smaller campuses with high ratings such as PVCC and EMCC had put considerable emphasis on very visually apparent availability of computers for students. Additionally a categorization imposed itself as Group 1 appeared to be all smaller, mostly newer campuses. Group 2 appeared as older urban campuses, and Group 3 as larger suburban campuses.

The differences among campus groups for facilities satisfaction items grouped as Accessible, Helpful and Up-to-date were statistically significant. Further analysis of campus group differences below were not run for statistical significance but specific differences are highlighted.

The greatest difference here is between Group 1 campuses and others on measures of satisfaction with Accessibility. This advantage for Group 1, especially for availability of computers and accessible lab times will be seen throughout the analyses below.

Computer facilities users were more satisfied with equipment and support than with access.

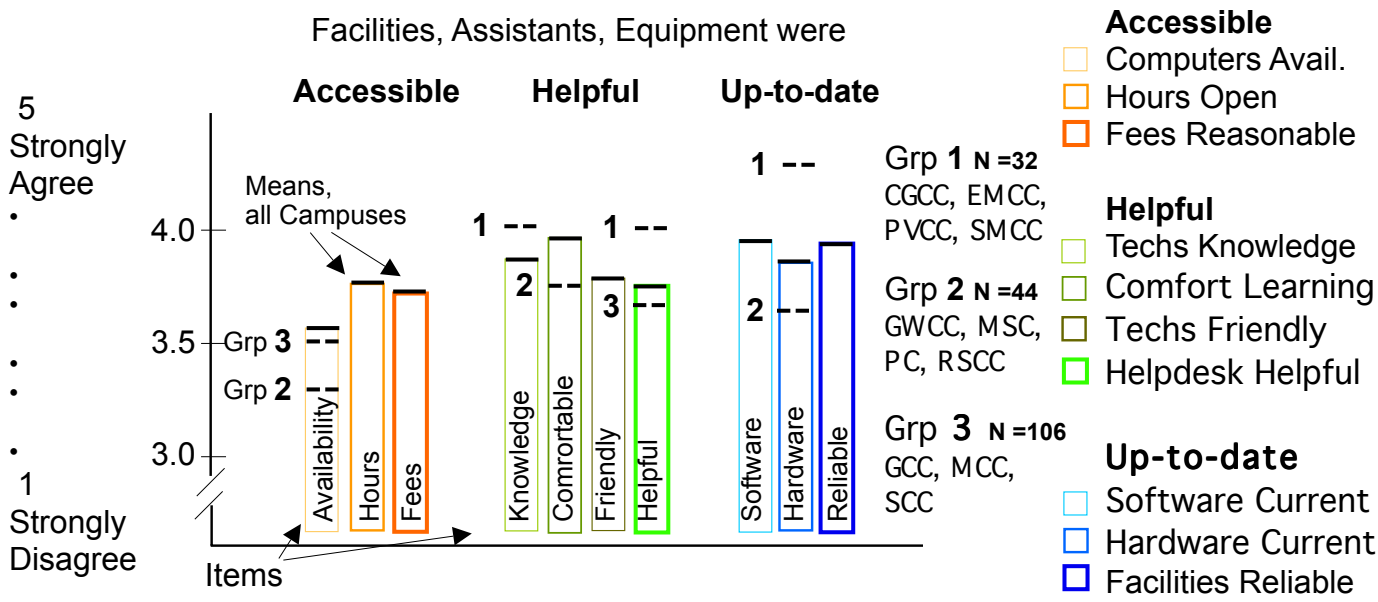


Critical students agreed more about the up-to-date and comfortable nature of the facilities than the accessibilityof computers or helpfulness of assitants. Averages are for more discrimating respondents, all campuses (N = 182).

Note, Method: For all campuses, considering only the most critical ratings by eliminating respondents with the least variance in ratings, differences appear among facilities satisfaction items which would otherwise be minimized.

With the exception of Group 1 campuses (see below) accessibility items were the facilitysatisfaction aspects least agreed upon, while currency and reliability items were some what more strongly agreed upon.

Different campuses, Groups 1, 2 or 3, differered in agreement with computer facilities statements.

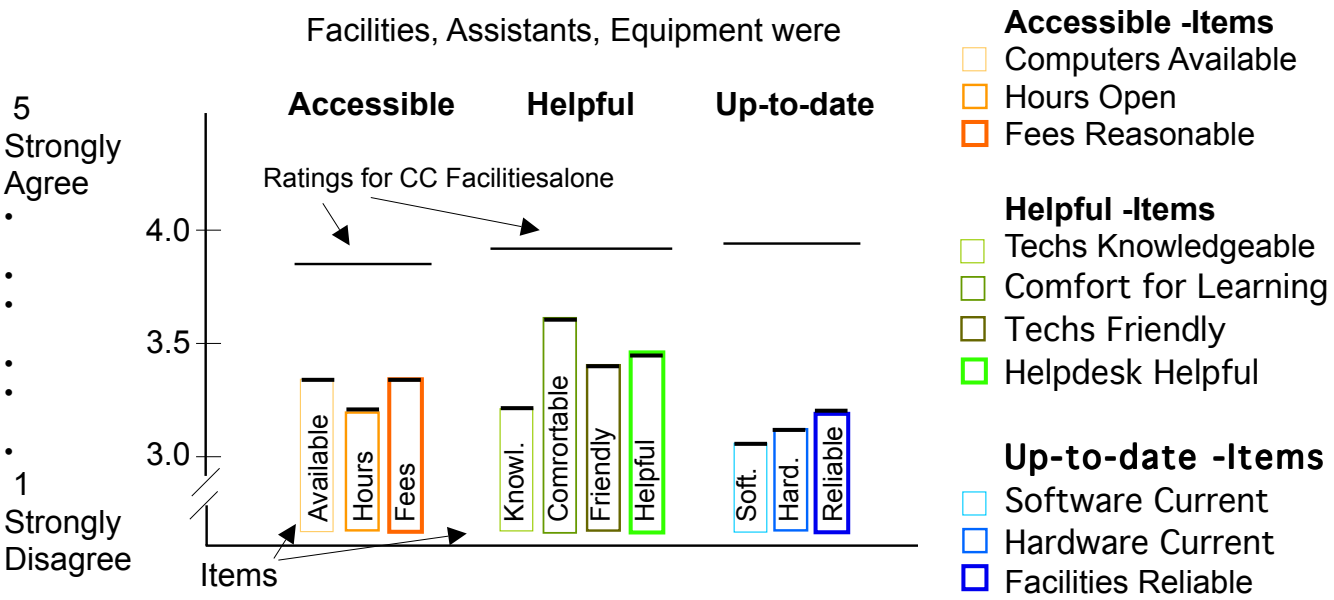


Critical students from campus Group 2 had a much lower mean agreement on Availability, Comfortable Facilities and Up-to-date Hardware; Group 3 was lower on, Availability, Help; and Group 1students rated techs higher on Help and Knowledge, and found newer Hardware.

Note, Method, Interpretation: With this data the same limit was put on respondents to those with adequate variability in their agreement with statements across items, and also here some highlighting is offered of the most remarkable differences in satisfaction ratings for different campus Groups.

Discriminating student users from Group 1 campuses were clearly higher on satisfaction with laboratory technicians and the currency of hardware. Group 2 campuses were clearly lower in satisfaction with availability and currency of computers and also the comfort fo learning of the computer lab setting. Group 3 campus users were somewhat less satisfied with availability of computers and helpfulness of lab techs.

Comparison of CC facilities with other, later colleges showed least satisfaction with equipment.



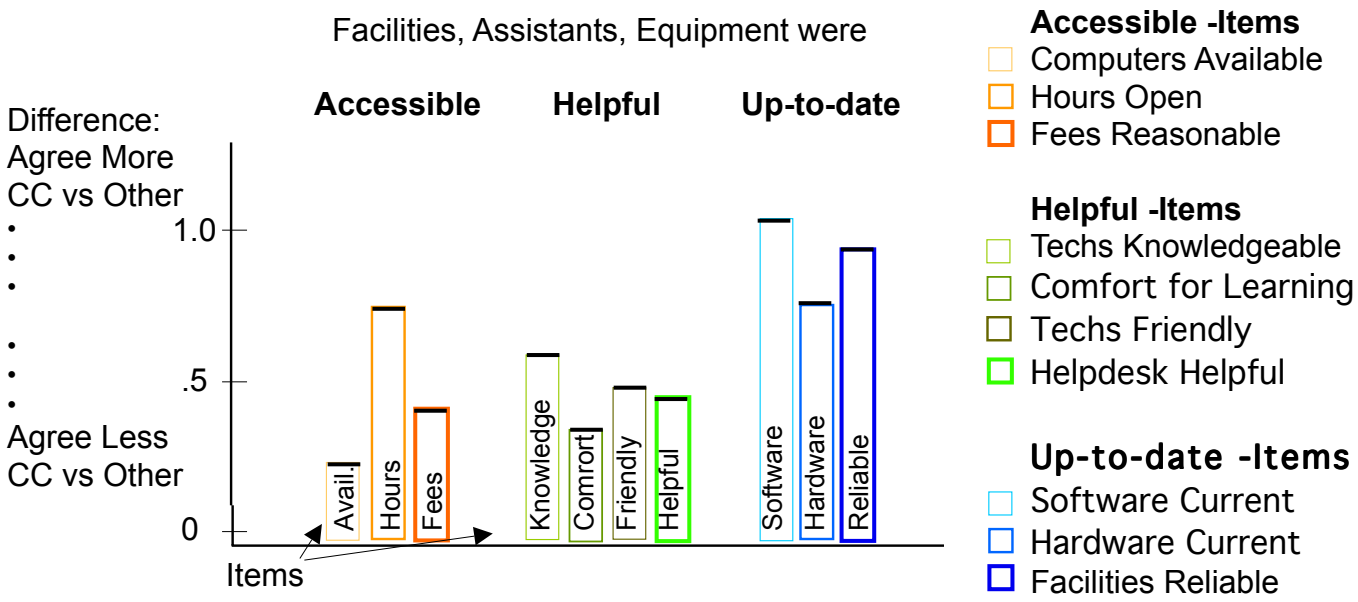
For all students rating other, later college facilities, satisfaction statements for CC compared to other was least for the up-to-date and hours of access features of the CC facilities and higher for the comfort and help in the CC labs compared to other labs.(N = 97).

Note, Interpretation: The second set of satisfaction statements with which respondents were asked to agree concerned a contrast of the community college experience with computer facilities of any other, later college or university such as ASU. These statements ask for agreement that the community college (CC) experience was more satisfactory than the other, later college experience.

In retrospect, the CC equipment seemed less current and reliable than that of the other college. Also hours open and the knowledge of the lab technicians were less easily agreed to as better at the CC computer labs than the other labs.

The Comfort for Learning of the CC facilities still seemed very satisfactory compared to other, later college facilities, as did the helpfulness of the CC lab technicians.

Differences in ratings showed other colleges had new, reliable equipment, but not more available.

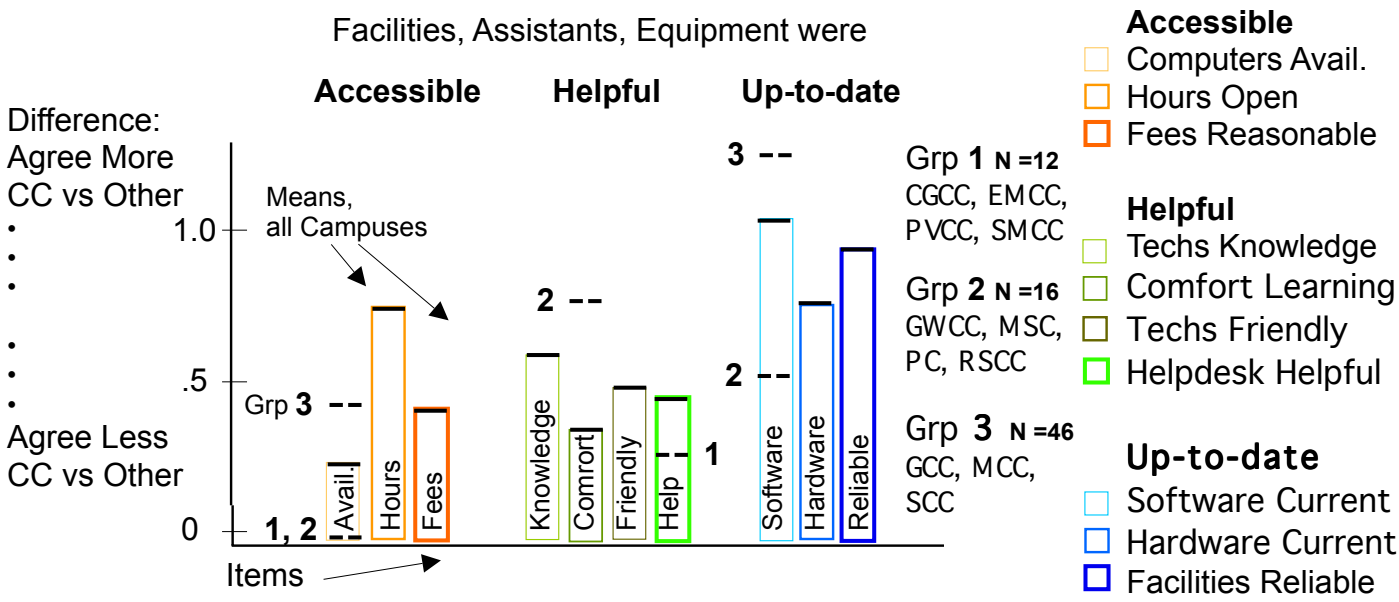


Critical students who also rated CC campuses compared to other, later college facilities still found CCs techs helpful and machines available, but were less in agreement that CCs had the most up-to-date equipment and software (N = 74).

Note, Method: Of 97 student respondents who offered satisfaction ratings of both CC and other, later college facilities, 74 showed adequate discrimination in ratings to amplify differences among satisfaction items. The difference values here are the rating for the CC lab minus the rating for the other college lab, so that a larger difference indicates less satisfaction with the CC lab relative to the other college lab.

From this data it can be seen that other, later college labs seemed to offer more current and reliable software and hardware, and more hours of access, but apparently less availability of computers for student use.

Different campuses, Groups 1, 2 or 3, found contrasting features of other, later college facilities.



Contrasts with other, later colleges from campus Group 2 found more Comfortable Facilities elsewhere, but much less Up-to-date Software; Group 3 saw less Availabilityat other colleges but more Up-to-date Software; Group 1 found less Availability and less Help elsewhere.

Note, Interpretation; From the same set of discriminating students who rated both their CC lab experience and other, later college computer lab experience, some clear differences in campus Groups are seen. Students from Group 3 campuses found relatively more current software and more availability of machines at other college labs. Group 1 campuses were much more pleased with availablity of machines and helpfulness of techs at their CC labs. Group 2 campus students were pleased with their CC lab availability and software, but were not satisfied with the comfort level for learning of their CC labs compared to other colleges.

Recapitulation

Group 1 campuses (CGCC, EMCC, PVCC & SMCC) appear to have arranged the availability of computers and assistance in such a way as to impress students very positively and permanently.

At Group 2 campuses (GWCC, MSC, PC & RSCC) availability, comfort and currency of hardware are points of dissatisfaction.

Group 3 campuses (GCC, MCC & SCC) were seen as limited in availability and helpful staff, though hours open were OK. In hindsight, after comparison with other, later colleges, they were seen as lacking up-to-date facilities, though adequate accessibility.

Other bases for comparisons, such as differences in facilities support in one's major, are covered in other summaries.

Most prominent is the superiority of instructional technology support facilities at the smaller, newer, Group 1 campuses.