

Student Technology Needs Assessment Results

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Process

- SBCTC performed a literature review to examine existing research on the technology needs and wants of today's higher education students, particularly in community and technical colleges.
- SBCTC conducted focus groups around Washington to:
 - validate Student Technology Needs Assessment literature review findings, and
 - identify Washington-specific issues and themes.
- Four community colleges and one technical college participated:
 - Lower Columbia College in Longview
 - Seattle Central Community College
 - Walla Walla Community College
 - Spokane Community College; and
 - Bates Technical College in Tacoma.
- Colleges were selected to provide geographic diversity, urban and rural diversity and mission diversity.
- Participating colleges selected an average of 16 students to take part in each focus group.
- Focus group students represented diversity of college intent, as well as ethnic, gender and age diversity. A few participants were Running Start students.
- Students were asked to discuss the following technology availability and issues
 - What technologies they currently use at the college
 - What technologies they wish were available at the college for their use
 - What technologies are available in other parts of their lives, and what makes them useful and valuable to them
 - How they might envision those technologies applying to their college experience
 - Other specific technology expectations they want in their education experience

Results

Overall Focus Group Results

- The results solidly validated the key findings from the student technology needs literature review.
- A number of Washington-specific issues also arose in the focus groups.
- Student responses and issues were very consistent across the participating colleges.

Key Literature Review Findings Verified by Focus Group Results (*Literature review findings are shown in red*)

- ***Students want training on technology for faculty and for themselves.***
 - Focus groups students believe faculty proficiency should be a requirement of employment, beginning with new faculty hires.
 - Some students asked for proficiency testing for faculty.
 - Students commented that instructors without technology expertise waste their learning time struggling to use technology in class, such as PowerPoint slides.
 - Alternatively, some students noted that technologically advanced instructors expected similar competence of the students without any instruction to the students.
 - Students pointed out that in many cases, faculty are not making full use of the technologies they have available.
 - Students perceived that there are vast differences in the abilities of different course management systems (CMS), based on the extensive use of CMS in online classes and more restricted use of a different CMS in hybrid classes.

Considerations and Recommendation:

The need for professional development and training on the use of learning technologies, particularly for faculty, was the most collectively mentioned issue in the focus groups. Students want their faculty to be as proficient as they are, so that class time can be used more efficiently. Training and professional development would likely increase the use of existing technologies by faculty. Similarly, students want training for themselves so that they are also able to take advantage of available technologies. Students who had taken certified online classes from fully trained instructors were very positive about the CMS that was used. Those same students who had taken hybrid classes from instructors at their college with no required training perceived that the CMS used in the hybrid classes was inferior. Those students pointed out that the CMS used by the college in its hybrid classes did not allow the same features as the one used for online courses. In fact, the two CMS tools are comparable, suggesting that additional faculty training would yield better use of the college's CMS.

Recommendation: Invest in professional development and training on the use of learning technologies for all faculty and students.

- ***The majority of postsecondary students who have used course management systems (CMS) in their classes report positive experiences, and students want instructors to use CMS more extensively and consistently.***
 - Less than half the students had experience with CMS in their classes.
 - The students who had taken online or hybrid classes did report positive experiences.
 - Students who had not taken classes where a CMS was used indicated they wanted online features similar to those provided by a CMS.
 - Students praised the flexibility and ease of using a CMS. Students also noted that a CMS in a web-enhanced class allowed the instructor to spend less class time on administrative matters and quizzes. They also liked the ability to monitor their grades and interact in real time.
 - Students with experience using CMS pointed out the different levels of expertise and different features used by varying instructors. Those students asked for consistency in the proficiency of instructors and the use of CMS.

- ***Use CMS tools in a standardized manner.***
 - Students in all focus groups asked for consistency in both technology and expertise across classes and across colleges.

Considerations and Recommendation:

Students indicated they want consistent learning technologies and expertise across classes and across colleges. Currently, colleges possess a disparate array of learning tools and inconsistent expertise across faculty and across colleges.

Recommendation: Examine implementing a system-wide CMS. Develop system-wide training for all faculty and students.

- ***Students want interactive technology to improve convenience and collaboration and learning spaces to accommodate teamwork.***
 - Focus group students asked for technology that will allow them to interact with other students, such as student chat rooms, open only to students.
 - Students asked for ways to connect to other students in their college, nationally and internationally.

Considerations and Recommendation:

Today's students gravitate toward group activity, are highly social, and work in teams. In all of the focus groups, students asked for more forums in which to be able to interact with other students.

Recommendation: Encourage colleges to expand social learning tools and provide access to and encourage the use of student-initiated group spaces. Provide online forums for student interaction.

- ***Invest in wireless coverage throughout campus.***
 - Focus group students asked for more electrical outlets throughout the campus, increased wireless coverage and more computer lab space.
- ***Provide staff for around the clock support.***
 - Students asked for increased technical assistance and tutoring on available technologies.

Considerations and Recommendation:

At all of the focus group colleges, students have asked for increased resources related to technologies, such as more electric outlets, broader wireless availability, enhanced technical support and more computers and computer labs. In one instance, a student indicated that technical support can spend no longer than 3 minutes on any one issue in the college's computer labs. That student had been working with a technician who was not able to resolve the student's issue because he had exhausted the allowable 3 minutes.

Recommendation 5: Invest in additional technology resources for students, such as computer hubs, enhanced wireless coverage, greater technical support and more availability of computers for student use.

- ***Students want cutting-edge technology.***
 - Focus group participants noted that they wanted to be trained for the workplace with exposure to the software and hardware businesses currently use.
 - Students in technical programs asserted unanimously that they want to be trained on the latest equipment and technology to be ready for the workplace.
 - Students want software friendly to both PCs and Macs.
 - Students asked for a way to use one card or one number to access one account from which they could charge anything on campus and into which student financial aid would be deposited. Students asked for the ability to buy their books prior to financial aid disbursement, and to have the book cost deduction made from the financial aid payment.
 - Students want their colleges to make better use of their existing technologies, such as ITVs for meetings and shared courses.

Considerations and Recommendation:

All focus group students talked about wanting the most up-to-date technology. For students in technical programs, this was their most vital issue. They fear not being work-ready when they complete their programs.

Recommendation: Wherever possible, invest in the most currently used technology and plan for rapidly changing technology in the business world.

Explore the best use of existing and current technologies. Develop partnerships with businesses to assist colleges in keeping technology up to date.

- ***Students want a learning environment with moderate amounts of technology aimed at supplementing instruction, but still desire the face-to-face interaction that a classroom provides.***
 - Students in our focus groups like and want technology, but value class experiences and like interacting with other students.
 - Focus group students whose instructors use online grading found the computer-generated feedback impersonal.
 - Students who had taken computerized self-pace tutorial classes with computer-generated feedback were frustrated with the lack of instructor interaction and feedback.

Considerations and Recommendation:

Based on the discussions in all focus groups, students desire human interaction in their coursework wherever possible. They value the ease and flexibility of online classes, but in some cases, still need the interpersonal interaction of a classroom setting.

Recommendation: Expand the use of web-enhanced classes.

Other Focus Group Findings

- Students want greater online access to class information and materials, college shared drives, and their student accounts that they can access anytime from anywhere.

Considerations and Recommendation:

Students in all of the focus groups want access to information and files at any time of the day and from their homes as well as at the campuses. Many of the students work and/or have families, so they noted that late at night from their homes was the only time they could get online to conduct activities related to their college classes. In some cases, students perceived the online tools were not available after hours and or from remote locations. In some cases, verification from the colleges yielded that student perceptions were incorrect. Shared drives, however, are not accessible from remote locations. Similarly, library tools are not available in some cases after hours.

Recommendation: Ensure online college services are available to students 24 x 7 x 35 and remotely. Make sure students are fully aware of the availability of online services.

- Focus group students asked for online books to mitigate the high cost of college and to help reduce paper use.

Considerations and Recommendation:

Students in all of the focus groups noted that the high cost of textbooks is burdensome and unnecessary. They also expressed concern for the waste of paper. Students asked for online books to help defray the cost of college and contribute to the environment.

Recommendation: Explore open textbook models.

- Students asked for more global online library research databases available to them.

Considerations and Recommendation:

Many students commented that they desired additional research databases. Students noted that the search capabilities of current databases available at their colleges are limited. Students asked to have the same databases available to them that students at the 4-year institutions currently have.

Recommendation: Invest in additional online library research databases for students.