UC San Diego
Books and Book Chapters

Title
Streamlining Library Computer Purchases through a Vision Statement and Purchasing Plan

Permalink
https://escholarship.org/uc/item/0s270969

ISBN
9781538103050

Author
Goodson, Kymberly

Publication Date
2018

Copyright Information

Peer reviewed

Please send final drafts of case studies as a .doc or docx file to Cinthya Ippoliti (cinthya.ippoliti@ okstate.edu) by June 2nd, 2017.

	Author Name	Title	Institution	Email	Phone
1.	Kymberly Anne Goodson	Director for Learning Spaces & Access Operations	University of California, San Diego Library	kgoodson@ucsd.edu	858-534-1271

Title: Streamlining Library Computer Purchases through a Vision Statement and Purchasing Plan

Brief Abstract: Creation of the new Learning Spaces Program at the University of California, San Diego Library in 2013 consolidated responsibility for much of the Library's public computing and technology within the new program. Thereafter, Program staff established a four-pronged Public Technology Vision to guide the way they would serve and support user technology within the library. A complementary Computing Purchasing Plan was developed to support space and budget planning to update technology offerings across the library and to ease related decision-making. The plan included proposed purchases over each of three years for a variety of public computing options. These two documents are described in the chapter, along with highlighted technology-related actions stemming from them.

Lens: (SELECT 1)   ☐**Overview of Emerging Technology Trends**
☐**Building a Culture of Innovation**
 X <mark>**Developing a Technology Strategic Plan**</mark>
☐**Integrating Technology Into the Classroom**
☐**The Role of Technology Outside the Classroom**
☐**Outreach and Collaboration**
☐**Outlining Infrastructure and Logistical Support**
☐**Determining Impact**

Institutional Background (Description of institution including name, type, and size; Description of library name, type, and size; What kind of patrons does your library/institution serve?)

Recognized as one of the top 15 research universities in the world, the University of California at San Diego (UC San Diego) strives to be a student-centered, research-focused, service-oriented public university. Established in 1960, the institution employs over 1,250 instructional faculty and serves nearly 36,000 students at the undergraduate and graduate levels across a full range of disciplines — from engineering, medicine, and oceanography to the arts and humanities, and physical and social sciences. UC San Diego offers a wide range of educational and research opportunities intended to drive "innovation and change to advance society, propel economic growth, and make our world a better place."

Ranked among the nation's top 25 public academic libraries, UC San Diego's Library plays an essential role in supporting and advancing the university's research, teaching, patient care, and public service missions. A staff of 250 serves as stewards for the Library's collection of 7.5 million digital and print and media items. The Library consists of two main buildings totaling roughly 350,000 assignable square feet. The two buildings are each open approximately 344 days (4500 hours) per year, and are visited roughly 2,000,000 times annually, with over 270,000 items checked out each year.

Description of Program, Project, or Space (Ex: Why was this program created, what problem were you trying to solve? How was it developed? When was it implemented?)

Following its 2013 library-wide internal restructuring, the UC San Diego Library established a new Learning Spaces Program (LSP). Among other outcomes, this move consolidated responsibility for much of the Library's public computing and technology within the new program, in collaboration with the Library's Information Technology Services Program (ITS), which retained its larger role with Library staff technology. While also developing a new vision for many of the Library's public spaces and planned refurbishments, LSP staff established a new Public Technology Vision in 2014 to provide direction and focus for its efforts, and to guide the way it would serve and support user technology within the library. "Public" technology in this case refers to high-use, non-specialized computing and related offerings available to students and all users within the university library.

The four prongs of the vision address existing desktop computing and multimedia technology in the library, *Bring Your Own Device* (BYOD) computing and wireless capability, lending of technology-related devices and tools, and exploration of new technologies and innovations.

See Table 1: Public Technology Vision

To complement the new vision statement, a three-year Computing Purchasing Plan was developed to support space and budget planning and decision-making aimed at expanding and updating technology offerings across the library. The plan included proposed purchases over each of three years for a variety of public computing options, including desktop Mac and PC workstations, circulating Mac and PC laptops, laptop docking stations, and more.

See Table 2: Computing Purchasing Plan

In the past decade, many Library staff had anticipated that student demand for desktop computing would decrease as a larger percentage of students came to own their own laptops. However, use of the library's desktop computers has not gone down, and student feedback continues to show an appreciation for these computers from students who prefer not to carry throughout the day the laptops they do in fact own. Conversely, students who do transport and use their laptops throughout the day need and appreciate an environment that helps them maximize its use. An effective such environment would include docking stations that also provide a second monitor to those using laptops, charging cords and capabilities for a variety of hardware, and charging lockers where devices can be stored briefly when not in use. Both the vision and purchasing plan contributed to identifying the right balance between these dual, and sometimes competing, needs.

The documents were intended to address a variety of additional problems.

- Funding for the library's technology is largely limited to that set aside in advance for replacement of existing computers. While valuable for ensuring needed funding is available for computer replacement, this model discouraged consideration of future needs, advances, and broader possibilities with regard to user technology.
- Formally, the library's public computing was almost completely limited to PCs, with only 7 of its 350+ computers being Macs. The vision and plan sparked debate about why this was the case and how to increase the percentage of Macs offered in the library.
- Each summer, campus-wide Educational Technology (ET) staff contact the library to discuss replacement of any library computers reaching the end of their five-year life cycle. Occasionally, the decision about how many computers to purchase/replace had to be made quickly, after determining the library's available funds. This sometimes left little time for fuller consideration of possible alternatives to simply replacing the designated number of PC computers with new PCs.
- The documents provided formal acknowledgement of the broader needs that the library should consider and possibly address, beyond simply offering desktop PCs.

Instead of being reactionary, the library wished to prepare in advance of the contact from Campus ET, thoroughly discussing evolving and growing user needs and how to address them by creating a roadmap of public computing goals and how to advance toward those targets. Even if new purchases needed to stay within the already allocated funding amount, *what* was purchased with those funds could potentially reach beyond just PCs. The Purchasing Plan, in particular, narrowed decision-making each year to a few targeted decisions or confirmations, thus reducing the time needed to make final decisions, and making the process more manageable for library decision-makers. For example, in Spring 2017, the library had funds equivalent to the amount needed to replace the 56 PCs at the end of their life cycle. However, instead of simply purchasing 56 new desktop PCs, the decision was made to move toward the goals in the plan, within the allocated funding, by purchasing only 40 PCs, while also adding 10 more docking stations and 6 more desktop Mac computers. In essence, 56 computing options replaced the expiring 56 machines, while achieving a greater balance between Macs and PCs and offering additional support for those carrying laptops (docking stations can also support circulating laptops, should the library ever begin providing that service).

Tackling the Technology Planning Lens (How did your project/program address this specific lens? What priorities did you set? What problems did you encounter?)

Drafting a Public Technology Vision helped staff in the newly established Learning Spaces Program think about technology support holistically, rather than just focusing on the Library's large existing collection of desktop computers. It allowed and encouraged staff to think broadly about a wider variety of technology options and about how user needs continue to evolve. It also opened the door for the formerly taboo discussion of support for Macs in the library, and enabled staff to consider how to use existing, and possibly new, funding to effectively broaden the Library's technology offerings. Because the ultimate actions taken each year are also recorded on the Purchasing Plan, the tool also created a more formal way to document and track computing changes over time.

Simultaneous to the creation of the Public Technology Vision in 2013 and 2014, the Library was planning for the launch of its inaugural Digital Media Lab, which would become a nexus relatively shortly after its opening for many emerging and innovative technologies and for helping members of the university community learn to effectively incorporate them into their teaching, learning, and research. In addition to launching the Digital Media Lab, priorities stemming from the new vision included the following.

- Establish a more user-centered approach to the library's technology offerings
- Introduce lending of a variety of technology tools and accessories, at least on a limited basis, expanding offerings as funding allowed
- Provide at least limited access to Lynda.com online tutorials
- Increase Mac computers available in the library
- Offer much needed and demanded charging capabilities
- Pilot a small number of docking stations and monitor their use
- Increase the number of electrical outlets and USB ports in the library
- Expand technology offerings over time as new needs were identified and funding made available

Highlighted outcomes aligned with the new vision as of Spring 2017 include:

- Launching the Digital Media Lab (including 3D printing and virtual reality services)
- Establishing a Tech Lending service which circulates approximately 300 items (of 57 unique types) roughly 1,900 times monthly
- Purchasing numerous charging stands in mobile and semi-permanent models
- Purchasing an initial bank of 20 charging lockers
- Increasing electrical capability in selected areas of the 1970-era library building
- Working to unify software across the library's 350+ public computers
- Introducing docking stations and ultrawide monitors

- Offering access to the LyndaPro suite of tutorials

The philosophical Vision continues to guide thinking about the library's public technology. Financing of the more concrete Purchasing Plan has been challenging however, and thus limited. A lack of new money thus far has delayed progress toward installation of circulating laptops, which remains a hope for the future. Nonetheless, the plan will be reviewed annually to determine areas where further progress can be made. Additional challenges encountered include:

- Trying to address the wide range of elements in the vision with limited funding, including balancing heavy use of desktop computing with the need to offer alternate technology options
- Absence of abundant funding to wholly update the library's technology offerings in the immediate or near term
- Working within campus constraints and practices where library computer purchases intersect with campus-wide Educational Technology Service responsibilities
- Getting library administrative buy-in for a move away from the library's traditional technology offerings
- Determining the appropriate number of Macs versus PCs that would be ideal for the UC San Diego Library's user population
- Making choices about which and how many items to offer through the Tech Lending Program, and partnering with the Library's Access Operations Program to implement this new service
- Deciding how to effectively offer technology educational services and resources with limited staffing
- Developing staff and student worker expertize with a variety of technologies
- Confronting the Library's limited space and balancing the need for user seats for both computing and general study

Lessons Learned (ex: What did you learn as a result of this project? What would you do differently if you had a chance to do it again? Looking back, which aspects of your project/program would you have emphasized, and which would you have scaled back?)

While the Vision and Purchasing Plan have both been useful in guiding the ways in which Learning Spaces staff approach technology support and oversight, a variety of lessons learned have emerged from the process of creating and implementing them.

The initial version of the Purchasing Plan (for 2015-2018) included additional details such as anticipated costs, notes, computer locations, and precise targets for each category as percentages of overall computing which are not included in the updated 2016-2019 plan shown here. That level of detail proved not only difficult to decipher and explain to others, but also to accurately update. As a result, the latest version was abbreviated for greater clarity and usefulness. Still, the plan includes estimated costs for various elements included in the plan so that overall costs for a proposal in any given year can be easily calculated based on the number of each item proposed for purchase. For example, the following prices are estimated in each category: $2,700 per desktop Mac, $2,500 per circulating Mac, $1,700 per PC whether desktop or circulating, $1,000 per ultrawide monitor, and $525 per laptop docking station.

Initially intended to guide Learning Spaces Program staff actions, the Vision and Purchasing Plan excluded more specialized technology outside the program's purview, such as the Data & GIS Lab, media viewing stations, digital exhibits, digital scholarship-related technologies, and research data curation software or equipment. To the extent that these could be forecast in advance, including purchases for these additional technology types could streamline annual purchasing decisions even further.

Additional suggestions for those considering this approach include:

- Be patient with how long it can take to implement new projects and major changes to technology offerings. Start small, if needed, making progress where you can.

- Do your homework; be able to justify your vision and/or purchasing plan and to explain how the elements included in them would benefit Library users.
- Ensure wide buy-in among library stakeholders, especially those involved in funding approvals.
- Focus and prioritize efforts in order to sift through the ever-changing landscape of exciting new technologies.
- Solicit user feedback before making major changes and find areas where you can sustainably supply what users need.
- Document how you've supported users and what they appreciate about your efforts, using that insight to justify expansion and subsequent funding requests.
- Assess any new offerings, gathering user feedback and tracking statistics of use, to inform future decision-making and growth.
- Don't be afraid to change course based on user feedback, data, observation, or other evaluative measures.
- Celebrate and share your victories, which helps to reinforce the value of one's initial plans and to support future proposals.

Do you have any additional materials you would like included (handouts, lesson plans, etc…)? If so, please provide a brief description below.

Title of Document/Material	Description
GOODSON-Table 1-Public Technology Vision	Public Technology Vision Statement developed upon establishment of the Library's Learning Spaces Program in 2013
GOODSON-Table 2-Computing Purchasing Plan	Revised Three-Year Computing Purchasing Plan updated in the spring of 2017 to cover 2016-2019