INTRODUCTION

UWF’s University Libraries continue its transition over the past two decades from being primarily print-based to that of an active information mediator, increasing opportunities concerning access and delivery of information in a multiplicity of formats, including electronic. This transition is based upon the ubiquitous availability of personal and enterprise information technologies (e.g., computers), critical/evaluative collection development, and user needs to effectively navigate the increasingly complicated information landscape. In this effort, the University Libraries recognize that the application of automated information technologies is a means to an end. The identified ends include access to the specific resources needed by the University community to meet their information needs; increased user self-sufficiency (skills and fluency) concerning their information seeking, retrieval and evaluation processes; and, for the Libraries’ to efficiently and effectively provide services.

Despite the advances toward the virtual library, the University Libraries remain a physical place. It is a service organization – we help people find information. It is an educational organization – we teach users how to find, retrieve and critically evaluate information. It is a social organization -- we provide space and an environment (such as light and furniture, along with information resources) for the exchange of ideas and scholarly debate.

This document serves as the University Libraries’ guide to support and sustain automated information technologies in relation to its collections, services, and contributions to learning.

USER NEEDS / RATIONALE

Users want electronic resources such as databases and e-books to meet their course and personal needs; they expect these resources to be available and accessible via the Web 24 hours a day, seven days a week, and from any place on the planet. Furthermore, they expect the databases to include full text content.

Users want mobile, untethered access using wireless networking capabilities. Additionally, users want to take advantage of a hybrid of devices to access information resources. Common devices include desktop computer workstations; mobile PCs including laptops, smaller tablet forms such as iPads, and smart phones.

RELATIONSHIP OF THIS DOCUMENT TO THE STRATEGIC PLAN

Objective 1.0 of the University Libraries’ strategic plan is concerned with collection development based upon identified and prioritized information needs:

- Develop and manage relevant intellectual content, balanced across appropriate information formats, to support teaching, research, and service regardless of geographic location.
Objective 3.0 relates to student information skills and fluency:
Coordinate a comprehensive information literacy program that provides opportunities to
demonstrate student learning outcomes in support of academic achievement, career
success, and lifelong learning.

Objective 4.0 is focused on technologies:
Support access to resources and productivity by deploying and managing information
technologies including workstations, the online integrated library system, and the
Libraries’ website.

PRINCIPLES OF APPLYING AUTOMATION TO INFORMATION RESOURCES
AND SERVICES

The University Libraries apply automated information technologies to provide, support and
sustain information resources and services according to the following principles:

Concerning Information Resources and Services
- electronic access to remote information resources should supplement but not substitute for
  local acquisition of materials.
- we purchase/lease (subscriptions) only those electronic information resources that will
  support the curriculum. If we commit to providing availability or access of an information
  resource, we will make every effort to keep the resource from year to year. However,
  leases/subscriptions for little-used resources will be terminated.
- information resources and the information itself should be provided without per use or per
  item fees to the user. However, if costs are not supported fully or in part by the recurring
  library budget, the difference in costs may be passed on to the user.

Concerning Access to Information Resources and Services
- electronic library resources and services should be broadly accessible; electronic information
  services should be available to the user from points inside and outside the library building as
  many hours a day as possible, as many days a year as possible.
- we prefer to make resources available through secured, hosted sites on the Web rather than
  through mounting these resources locally.
- we prefer that our Web-based resources be available to all UWF-affiliated community
  members (defined as faculty, staff and enrolled students) regardless of their physical location.
- we provide chat and text technology to serve remote users.
- we will use a proxy server to authenticate our remote users as legitimate members of the
  UWF-affiliated community.

Concerning Management of Information Technology
- adherence to intellectual property laws, contracts and licenses will not be compromised.
- the technology applied should employ standards and protocols common in local, regional,
  national and international environments (e.g., TCP/IP).
- the technology deployed must increase a student’s productivity, contribute to their learning,
  or both. An example is a SmartBoard which is a peer group collaboration tool that
  contributes to individual and group learning as well as to the group’s productivity.
• the priority for acquiring automated information technologies for use by library staff should be based upon improvement of service to students and faculty (the more directly the technology would benefit the user, the higher the priority).
• the benefit from application of automated information technologies must at least equal the costs of application.
• the financial basis of the continuing operation of any applied automated information technologies should depend upon general operating funds rather than income from grants, endowments or gifts.

STRATEGIC DIRECTIONS

Information Resources
Students expect the library to provide access to all curricula-required resources, in electronic formats, and expect availability of full text content. Faculty want curricula-required electronic resources as well as additional resources to support their research efforts. Both faculty and students want information in visual and audio formats in addition to full text-based formats.

Information Services
The University Libraries make every effort to acquire and maintain information technologies and services supporting student productivity. The number of desktop workstations has increased each of the past three fiscal years. The libraries continue to purchase and loan laptops installed with productivity software as well as tablets (iPads) and Kindle e-book readers.

It is the Libraries’ intention to have enough user workstations available so that there is always at least one workstation available for student/faculty/community use (also known as the “n+1 queue”).

Instruction Services
The University Libraries provide instruction concerning use of information resources and services. Methods include face-to-face instruction and online tutorials. We are expanding the number of always-available instruction modules and tutorials.

Integrated Library System
The integrated library system (ILS) is shared by the publicly-funded universities and state colleges in Florida. As a result of the 2012 merger of FLCA and CCLA into the Florida Virtual Campus (FLVC), a Request for Proposals (RFP) to replace the current ILS is expected in 2014.

Ongoing Implementation Management
The hardware and software deployed needs to be maintained and updated. Maintenance includes diagnosing problems, updating application and productivity software, imaging hard drives to reduce the time necessary to rebuild identical workstations, and “locking down” and otherwise securing configurations so as to enable its successive use without staff intervention to examine and/or reset the workstation for the next user.

The Libraries will maintain and update hardware and software through its recurring budget and other campus financial resources (e.g., technology fee proposals). Second, it will plan for this
support by monitoring the hardware and software deployed by maintaining a current inventory. We will know what we have, when we last updated it, and be able estimate the costs to maintain it.

We replace out-of-warranty broken workstations with workstations from the spares pool if appropriate stock is available. Broken, out-of-warranty workstations are discarded rather than repaired at a cost.

Identical technologies should be deployed throughout the three physical libraries at the same time whenever feasible. This is intended to provide students and library staff/faculty with the same experiences regardless of location. Feasibility will be conditioned by available funding and infrastructure.

**Backups and Redundancies**
It is inevitable that any mechanical device will fail. The Libraries are committed to backups of content so as to minimize content loss.

**Work Environment**
Library personnel depend upon automated technologies to do almost every aspect of their job. As the jobs have become more complicated and Web-based, the staff needs for appropriately-configured workstations to handle the multitasking required by their operational procedures are always considered when workstations are replaced or upgraded.

**Library’s Web Site**
The Libraries’ Web site is a mission critical resource, requiring ongoing staff review to ensure currency. The Web-based ILS online catalog and the Libraries’ Web site are used as a portal to most, if not all, of the owned and licensed information resources and services provided through the Libraries.

**User and Staff Input into Decisions**
For the most part the Libraries’ Technologies function personnel know and understand the student and staff/faculty needs concerning hardware and software. Additionally, users and staff/faculty are encouraged to identify needs. Input comes from face-to-face conversations, email, and through the suggestion box.

**Innovative**
The Libraries strive to be innovative and “ahead of the curve” when it comes to planning and deploying technologies. In all instances, innovation must have an end that will serve as a catalyst for students and library staff/faculty to support learning, or to increase their efficiency/effectiveness/productivity in the classroom or workplace. While we do not have a formal area serving as an “innovation sandbox,” examples of innovation in the Libraries’ include the Skylab; its equipment loaning program including laptops, iPads, Kindles and scientific calculators; its introduction of a Microsoft PixelSense and ten SmartBoards at the Pace Library in 2012; and, an eleventh SmartBoard at the Professional Studies Library in 2013. Another example is that all users are given full administrative rights on all desktops and laptops so that they may install and test programs/applications as long as it does no physical damage to the
hardware or interfere with the operations of the network for other users. The Libraries’ use pilot projects in order to gauge success before operationalizing the activity.

**Standards Compliant**
The Libraries will deploy international/national standards compliant hardware and software if such codified standards exist. If not, the use of best practices will take the place of codified standards. These include the established hardware, software and network standards from UWF’s Information Technology Services (ITS).

Internally, the Libraries have its own standards for staff including desktops, printers, monitors (quantity and screen size) and software implemented.

**Organizational Structure**
Technology Services resides within the Libraries’ Administration unit. Fred Barry is responsible for most of the technology services provided by the Libraries including servers and workstations. John Barksdale in the Skylab is responsible for academic support by helping students and faculty with the application of hardware/software technologies for courses and programs. Matt Meehan in the Circulation Department is responsible for the management of technologies loaned to students such as laptops, tablets, e-readers, and AV equipment.

**Supporting Staff Training and Development**
Staff are continuously updating their familiarity with the procedures and processes to employ technology in their day-to-day jobs or learning new skills. Although there are several ways in which staff training may occur, webinars and face-to-face training are among the most frequently used. Webinars may use Elluminate Live! -- the annual license is supported by the Libraries’ recurring budget. Speakers are available on most staff telephones to support the audio track of the webinars. If necessary, staff may use the audio-visual capabilities available in the Pace Library’s conference room. Training may also include “learning from the trainer” in which one staff member trains others based upon their experience or attendance at a virtual or synchronous training.

**Technology-Concentrated Areas in the Libraries**
- Instruction room on the first floor of the Pace Library. The Pace Library’s instruction room was redesigned and re-equipped in 2013 to better align its utilization with improving and increasing student learning supporting information literacy outcomes. 31 computer workstations (30 “student” machines and 1 “instructor” machine) are available for use. The Library’s instruction room may be reserved by UWF-affiliated community members (defined as faculty, staff and enrolled students) for one-time use, depending upon availability; recurring requests by the same group cannot be accommodated. UWF student groups may reserve the room in advance for two hours at a time for academic purposes such as practicing for presentations when a reference librarian is on the Reference desk. UWF Departments (faculty and staff) may reserve the Library instruction room in advance for training and other academic purposes. Students may use the room as a computer lab when not being used for instruction. There is one Smart Board in this room and it is configured to be controlled by the instructor’s computer workstation.
- First floor of the Pace Library has 41 public use computer workstations (one of which is specifically configured to support users with disability needs). Flatbed scanners are attached to select computer workstations. There are 2 Smart Boards located on this floor. UWF-affiliated community members (defined as faculty, staff and enrolled students) may also check out laptops from the Circulation desk on this floor (92 laptops are available for checkout).
- Second floor of the Pace Library has 50 public use computer workstations (3 of which have dedicated hardware to support the use of the microfilm collection). Flatbed scanners are attached to select computer workstations. There are also 8 Smart Boards on this floor.
- Fifth floor of the Pace Library (aka “Skylab”) provides UWF-affiliated community members (defined as faculty, staff and enrolled students) with staff and resources to create and edit content and multimedia presentations not available elsewhere in the Pace Library. 32 computer workstations on this floor are configured in an open lab environment and 8 other workstations are specifically designated as multimedia workstations. Flatbed scanners are attached to select computer workstations.
- Professional Studies Library in Building #86 on the Pensacola campus has 12 public use computer workstations and one SmartBoard. UWF-affiliated community members (defined as faculty, staff and enrolled students) may also check out laptops from the Circulation desk (4 laptops are available for checkout).
- The Emerald Coast Campus Library has 19 public use computer workstations. UWF-affiliated community members (defined as faculty, staff and enrolled students) may also check out laptops from the Circulation desk (13 laptops are available for checkout).

**Funding**

In the past the Libraries expended funds allocated from the state-funded Florida Center for Library Automation (FCLA: replaced by the Florida Virtual Campus (FLVC) in July 2012) to support the additions to, and improvements in, the automated information technologies used by the Libraries’ staff and users. FCLA/FLVC funds are no longer available to support the hardware/software needs of UWF’s Libraries.

It is hoped that the student technology fee funds continue to be directed to replace/refresh existing student-used equipment on a four to five year cycle. The Information Technology Planning and Advisory Committee (ITPAC) is likely to be the appropriate advisory committee to provide guidance to ITS and the University concerning the need to maintain a replacement cycle for computers funded through the student technology fees.

New and replacement technologies used by the Libraries’ staff are not funded through the student technology fees program. Therefore, it is expected that the Libraries’ recurring budget will be required to provide the funds necessary to support staff productivity as well as the library functions (e.g., circulation, public service desks) supporting user services.

**Community Users**

As a publicy-funded institution, many of UWF’s resources are available for use by the general public. Members of the public community use the physical spaces and resources of the three UWF libraries to supplement/support their information needs. To the extent of the technology resources available, community members may use the public use computers in the library.
facilities. They may logon using the guest password which limits their administrative privileges on the computers. They may also be asked to surrender a workstation during peak use times based upon the needs of our students. Public community members may also bring their personal technology devices to the libraries to access to the University’s wireless network through a guest login account.

EVALUATION

The University Libraries are utilizing existing statistical measures, and seeking new ones, to evaluate its success in supporting information and learning needs by applying automated information technologies. These measures are collected and reviewed within the library’s statistical-based management information system.

Input measures include, but are not limited to:
- number of workstations
  + public desktops
  + laptops
  + tablets (e.g., iPads)
  + e-reader devices (e.g., Kindles)
  + scanners
  + microform reader/printers
- initial and recurring costs concerning the acquisition and maintenance of technologies
- staff levels available to support the technology needs
- number of licensed databases made available for access
- number of articles in these licensed databases available for viewing/downloading
- number of online tutorials available
- availability of equipment to use in the library, or to borrow
- number of public seats
  + at equipment
  + not at equipment
- number of user-available electrical outlets near public seats
- number of user-available network jacks near public seats

Output measures include, but are not limited to:
- number of times the desktop workstation(s) are used
- number of laptops loaned
- number of tablets loaned
  - number of e-reader devices loaned
- number of proxy server logins
- number of community guest logins
- number of sessions conducted on licensed databases
- number of pages from licensed databases downloaded or viewed
- number of full text articles requested / downloaded
- number of searches conducted
- number of results per search (if available)
- number of online tutorials used
- number of tutorials created/maintained
- number of repairs to technologies made
- mean time to repair
- number of digital projects completed
- number of pages printed
- queue time for a user to wait for a computer (e.g., n+1 queue)
- number of upgrades installed
- total expenditures for technologies
- number of digital products available for remote access

Outcomes
- students rate online tutorial as educational
- hardware and software is current (true or false)
- user satisfaction with technologies
- percentage uptime of technologies deployed
  + availability, in hours, of technologies deployed
- upgrades installed resulted in improved performance (true or false)
- user can access collections from all user locations
- students choose the Libraries’ web interface as their starting point
  + users characterize the Libraries’ interface as intuitive
  + users judge the Libraries’ interface as a reason for their success
- length of time spent in the library
- amount of time user logged in

Metrics
- ratio of public computer workstations / student FTE and headcount
- clock time of proxy server login (e.g., availability of resources when Libraries are closed)
- average number of search results per search
- cost per student FTE to acquire and maintain equipment each academic/fiscal year
- cost per student FTE to acquire access to licensed databases
- ratio of seats at equipment to those not at equipment