

IUPUI Undergraduate Student Information Technology Fund

Midway Transition Report

March 2011

Background and Objectives

Students on all Indiana University campuses pay a fee that helps support information technology (IT) provided for their use. Since 1990 that fee was administered by campus IT organizations, with the exception of IUPUI, which portioned the income to schools and to University Information Technology Services (UITS). The decentralized distribution model at IUPUI coincided with the implementation of Responsibility Center Management. A campus committee annually reviewed school plans for use of the fee, but this review was dropped in the mid-1990s and rolled into the campus's annual planning and budget process.

In 2002 the Trustees doubled the Student Technology Fee on all campuses. The additional income was directed to University Administration for redistribution to campus initiatives being implemented through the first IT strategic plan. The portion of the fee that remained at IUPUI became part of the fee simplification initiative in 2009 and is currently allocated through the student general fee process.

In 2009, IUPUI Chancellor Charles Bantz, Information Technology Vice President and CIO Brad Wheeler, and President Michael McRobbie aligned the administration of the IT portion of the student general fee at IUPUI with that on other IU campuses. The objective was to help ensure undergraduate students on all campuses benefit from a comprehensive and consistent environment of IT resources made possible by the implementation of the university's second strategic plan and the ability to achieve economies of scale in hardware purchases, software licensing agreements, and staffing.

Transition Process

Soon after the decision UITS leaders began working with 18 IUPUI school deans and their representatives, and with faculty groups, campus administration, and Undergraduate Student Government to develop IT transition plans and funding models for the future. Initial meetings defined the transitional process. Between February and July 2009, teams identified and developed transition plans for existing services to be supported by UITS and determined those which would remain within the schools. Plans were successfully developed with each school to be implemented on June 30, 2012, or before. Decisions regarding IT staff positions were deferred for the first year and UITS allocated funds for all staff previously funded from the fee. This allowed time to more fully develop service transitions and ensure the least disruption possible among personnel.

Transition planning posed several initial challenges, including communication, the rapid pace of change, concerns for IT staff and the continuity of services. Each school and UITS worked together to map out a specific transition plan that considered the unique needs of each school. Many plans called for a one-year period of transition, while others required up to three years. The process of collaborating on these plans helped build a foundation for productive working relationships between the schools and UITS.

Partnerships and Project Highlights

Many administrative and service organizations collaborated to assist in successful transition planning and execution. These included:

- University Architect's Office: Oversight of design of renovated physical spaces
- Campus Facility Services: Assistance with room preparations for classrooms and Student Technology Centers (STCs)
- Campus Center: Installation of infostations and laptop checkout for Student Organization
- Office of the Registrar: Scheduling priorities for Student Technology Centers used for teaching
- Office of Communications and Marketing: Communication about student IT services

- Chancellor's Office: Chancellor Chat sessions and periodic evaluations of student and faculty satisfaction with undergraduate IT services
- Faculty Council and the IFC Technology Committee: Review and advice during the transition period
- Undergraduate Student Government: Mechanisms for student input and review of the IT fund expenditures
- University Library: Development of the Rich Media Cluster
- Campus Card Services: Developing the no-cost printing allotment through JagTags

Transition planning has provided the opportunity for schools, UITS, and other units to embark on a number of new projects that could not have been accomplished without the collaborative efforts of those groups listed above. Highlights of selected projects are described below.

Print quota for undergraduate students. By partnering with Campus Card Services and their successful history in facilitating a wide range of services via the JagTag, one of the earliest accomplishments in the fee administration transition was to provide undergraduate students with a 650 page per semester print quota (at no additional cost to the student) and the flexibility to print to any UITS-supported printer across campus. These printers can be easily located through a new printer finder application. Last fall UITS further simplified the printing with the Swipe and Go process that allows students to release their print job with a single swipe of their JagTag rather than requiring them to login to a print release station.

Laptop computers to support IUPUI student organizations. Another early partnership was with the Director of the Campus Center who noted that some of the student organizations housed in the Campus Center did not have sufficient technology to support their work. To meet this need, UITS provided the student organizations with 10 new laptop computers with the full suite of STC software installed. Students are now able to freely check out these laptops to support work with their respective student organizations. A laptop cart was also provided for storage and charging of the machines when they are not in use.

University Library Rich Media Cluster. It became clear early in the STF transition planning process that there was a need for greater access to rich media tools for students. Through a partnership between the IUPUI University Library, a Rich Media Cluster was created in the library that provides high-end video and audio conversion, editing and transfer tools. The area (which also includes four video production rooms that can also be reserved), is located next to the computer consultation desk on the library's fourth level, ensuring multimedia help is close at hand. Equipment available for student use includes nine high-end Windows and nine high-end Macintosh workstations and an assortment of multimedia software. The area also includes collaborative group workspaces for students working on group projects.

24x7 Student Technology Center. This 24x7 STC in IT 131 is one of the most widely used technology centers on campus. To meet the demands of students for better support for collaborative learning, the facility was redesigned and now provides increased group collaboration space, configurable individual seating, and space to support mobile technology users (e.g., new individual soft seats with laptop surfaces). The space also provides collaboration tables with shareable flat-screen displays, along with the redesign of three additional rooms in the rear of IT 131, providing areas (which can be reserved) for group study and practice.

Experimental classroom space in IT 121. This space, designed to immerse students in a technology-rich collaborative learning environment, includes group collaboration tables (with a 40" flat panel display for each group), twenty-five laptop computers, portable whiteboards to further enhance group work and a variety of collaborative software applications. Professor Jacqueline Blackwell of the School of Education, who taught in this room in the fall 2010 semester, saw the classroom's impact on her students immediately. "Students talked more than in our usual group discussion periods in our regular classroom," she says. "At the same time, the collaborative technology offered our entire class the opportunity to see and reflect on each other's work."

Comprehensive IUPUI testing facilities. Computer-based testing continues strong growth. The pedagogical advantages include more time for classroom instruction and the ability (through more detailed, efficient feedback) to use tests as powerful learning tools. To meet the increasing need for testing at IUPUI, two testing facilities in SL 070 and BS 3000 are being developed in partnership with the current IUPUI Testing Center and the School of Science. These newly renovated testing facilities will provide multipurpose environments that support a wide

range of computer-based testing in addition to general student computing. The facilities will be available to all schools interested in using these facilities for testing beginning in fall 2011.

Engineering and Technology collaborative work areas. In partnership with the School of Engineering and Technology, UITS created collaborative work areas with shareable flat-screen displays that were added to existing booths to provide greater support for students working on group projects.

Laptop charging lockers in the Campus Center. Another problem that every user of mobile technology at some point faces is a low battery compounded by difficulty to securely charge a laptop computer or the time to wait for it to charge. This can be especially difficult for students, who face tight schedules moving from class to class, as well as from campus to work and home. To help meet this need, laptop charging lockers will be placed in the Campus Center that will allow students to securely lock their laptop in the charging locker, go to class or attend other activities, and return to pick up a fully-charged laptop.

New IUPUI Multicultural Center Student Technology Center. In partnership with the IUPUI Multicultural Center, a new Student Technology Center will open in the summer of 2011. This new facility will provide tables for collaborative work, individual seating space for mobile technology users, new computer workstations, black and white printing, and ergonomic chairs.

New classroom space in the School of Liberal Arts. A partnership with the School of Liberal Arts and campus administration is being planned to provide 5,300 square feet of new classroom space in the former bookstore area in Cavanaugh Hall.

Budget

The table below summarizes the budget over the three-year transition cycle. Funds returned to schools are approximately 60 percent, 32 percent, and 20 percent for Fiscal Years 2010, 2011, and 2012 respectively. On page four is a chart that illustrates the distribution of IT funds across services. Another chart illustrates the distribution of the IUB IT student fee. Neither the IUPUI nor IUB chart represents the anticipated future use of the technology fee. Rather, funding priorities will evolve along with changes in technology, with changing student needs, and with progress in meeting the goals of *Empowering People*, the second strategic plan.

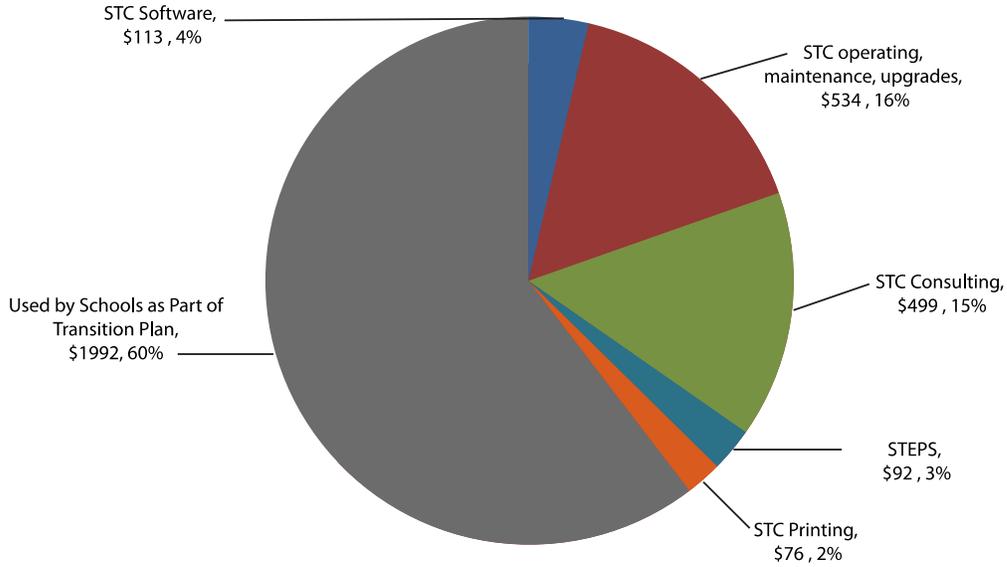
	YR 1 (FY 2010)	YR 2 (FY 2011)	YR 3 (FY 2012)	YR 4 (FY 2013)
PROVIDED TO SCHOOLS	\$ 1,992,000	\$ 1,072,043	\$ 656,940	\$ -
TRANSITIONAL STAFF	\$ 1,077,806	\$ 410,725	\$ 290,651	\$ -
FUNDS TO SCHOOL	\$ 914,194	\$ 661,318	\$ 366,289	\$ -
UITS STUDENT SERVICES	\$ 1,314,341	\$ 2,234,298	\$ 2,649,401	\$ 3,306,341
TOTAL UNDERGRADUATE STF	\$ 3,306,341	\$ 3,306,341	\$ 3,306,341	\$ 3,306,341

Facilities, Hardware, and Software

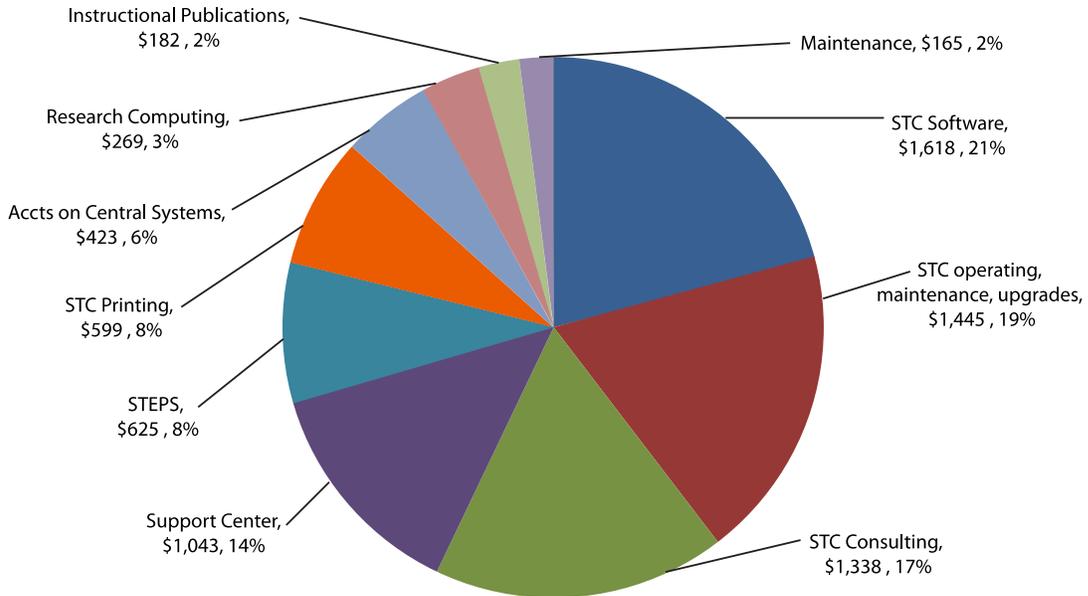
Good progress has been made updating out-of-date technology and creating a larger pool of IT resources for students. Some early benefits resulting from the transition include:

- *Better print management.* Since the STF transition, UITS has simplified printing at IUPUI and implemented a print allocation for both undergraduates and faculty.
- *Remove barriers to student access to technology.* Resources that were restricted to a particular discipline are now open to all students, making access more convenient and increasing utilization. IUPUI now has 54 STC locations managed by UITS, providing a total of 917 seats.

**IT Services Supported by Student Fee, IUPUI, FY 09-10
(\$ in thousands)**



**IT Services Supported by Student Fee, IUB, FY 09-10
(\$ in thousands)**



- *More homogenous desktop environment.* Standardization of desktop environment and start menu structures across public infostations, instructor stations in general inventory classrooms, Student Technology Centers and computer classrooms provides a consistent end-user experience.
- *Broad availability of applications.* Campus-level management of instructor software requests and application licensing allows more efficient pooling of application licenses and broad availability of most applications.
- *Registrar scheduling.* IUPUI's Registrar now schedules 18 computer classrooms, including 14 PC classrooms and 4 Mac classrooms. Schools continue to receive priority scheduling, while opening these scarce resources during available times to other schools, increasing overall utilization.
- *Leveraged hardware and software purchases.* UITS purchasing of hardware and software provides increased leverage in negotiating volume pricing with discounts beyond the standard education pricing available to IU.

Below is a summary of specific actions taken. Included is a list of resources that have been added, replaced, or changed during the first year.

- Installed upgraded instructor packages (include projection, document cameras, sound systems, and control systems) in 10 classrooms
- Installed 528 new workstations (413 PCs and 115 Macs) with a complete refreshing of hardware in all UITS student facilities
- Installed 55 infostations in locations where students gather
 - Installed 20 infostations, five open study workstations and four printers in the Campus Center
 - Installed nine infostations and a printer in the Lecture Hall
 - Installed seven infostations and a printer in the Math Assistance Center
 - Created two new print locations in Engineering and Technology
- Installed 30 printers and a large format scanner in Student Technology Centers and in informal learning spaces
- Established a laptop check-out program for student organizations
- Established a printing allocation of 650 black and white pages per semester for undergraduates
- Developed Swipe and Go print release service for releasing print jobs with single JagTag swipe
- Developed software that may be downloaded from IUWare and applications for IU Mobile (m.iu.edu) for iPhones and other hand-held devices to help students on the go find information about campus resources, including:
 - A printer finder application for locating and selecting printers
 - A seat finder application to help students find computers available at any particular time
- Expanded the suite of software applications for common use across all Student Technology Centers. All student-use computers now include:
 - 175 Windows applications
 - 112 Mac applications
 - 40 Windows and 17 Macintosh applications in select locations to meet instructional needs of schools
- Created an experimental classroom in IT 121 to explore unique approaches to collaboration in a classroom environment. The data gathered in this classroom will help guide decisions on the layout and functionality of future classroom technology at IUPUI.
- Updated the 24-hour Student Technology Center (IT 131) to enhance support of mobile users and created collaborative stations and presentation practice rooms
- Installed four collaborative work areas with large displays in the lower level of the Engineering and Technology building
- Placed all UITS-managed workstations on a four-year replacement cycle

Assessment

Undergraduate student satisfaction with the IUPUI technology environment is evaluated through satisfaction surveys and focus group discussions conducted by the campus administration and also contracted by UITS through the Center for Survey Research. The UITS survey includes a random sample of 800 undergraduates, 400 graduate students, 400 faculty, and 400 staff. These results are posted on the web at <http://www.iu.edu/~uitssur/>.

Undergraduate satisfaction scores from the 2010 survey will serve as benchmarks for observing trends in the coming years. As the 2010 survey was conducted early in the transition process, these scores do not yet fully reflect impact from the transition. Satisfaction scores in four categories are especially relevant: Student Technology Centers (4.30 on 5-point scale), software (4.31 on 5-point scale), printing (4.28 on 5-point scale), and consulting (4.15 on 5-point scale). Undergraduate scores in these categories have been trending upward since 2007.

Comments and anecdotal data also provide useful information. Several hundred comments and suggestions are received through the UITS survey. These are posted on the web at the address listed previously. Additionally, in April and May 2010 the IUPUI Office of Information Management and Institutional Research interviewed students about IT resources for students. Additional feedback is received through the Student IT Ambassadors, a student liaison group recently established at IUPUI and IUB.

Conclusion

A solid foundation has been established for fruitful collaboration between UITS, schools and units. This will be important in years to come to provide an IT environment that meets the evolving needs of students, the schools, and the campus. As the transition continues students will find more hardware, software, and support available to them. Given the four-year hardware replacement cycle, students will use computers that are up-to-date and functional. Students can expect a standard software build in UITS-supported STCs and classrooms.

The evolution of technology and the directions set in *Empowering People* will change the ways students use IT, and in how the student IT fund supports that use. The convergence of several trends points to new models of supporting student learning. Virtualization technologies promise new and cost-efficient ways to deliver operating systems and software to laptop computers. Continuing developments in mobile and tablet computing may lessen student reliance on traditional STCs with installed software and hardware. Increased mobility will create new demand for storage lockers with laptop charging stations.

Online learning and social networking encourage collaboration and discussion online and in person. The campus master plan suggests that new construction will trend toward flexible areas where students can arrange seating, or find seating arranged for conversation or collaborative work with various display possibilities including flat-panel screens and collaborative whiteboards. Informal learning spaces that support use of technology are increasingly important. The growth in sophistication and functionality of various digital reader devices such as iPads, Droids, Kindles, and laptops, and expansion of digital educational content provide opportunities for expanded modes of learning. As IU's etext initiative (<http://etexts.iu.edu/>) moves forward, growing etext adoption may call for new devices that provide larger-format options for mobile users with small screens.

Submitted to the IUPUI Faculty Council (IFC) by
Garland C. Elmore
Deputy CIO and Dean
Office of the Vice President for Information Technology
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