
An Urban University's Approach to Anywhere, Anytime Learning

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Abstract

Contemporary learners demand and deserve a hybrid approach to learning that blends technology, community space, and faculty talent with the demands of an evolving student population. In the fall of 2000, more than 17,000 college students will benefit from undergraduate education delivered online, in shopping centers and high schools, off-site, on the weekends, and via television. Indiana's most comprehensive urban university creates opportunities for students to enter college, complete degrees, and begin a program of lifelong learning through the IUPUI Community Learning Network.

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Indiana University Purdue University Indianapolis (IUPUI) is located in the heart of a large, dynamic, and diverse urban center. This geographic centrality has helped IUPUI become Indiana's most comprehensive university, with an annual enrollment of more than 27,000 students. Students are enrolled in nearly 200 degree programs ranging from associate to doctoral. IUPUI is home to the nation's second largest medical school and is one of the country's largest centers of graduate professional education. In a state with only an emerging community college system, IUPUI must provide community access to post-secondary education while simultaneously fulfilling the responsibilities of a major research institution. With \$165 million in external support in the past year, IUPUI has one of the broadest missions of any public institution. IUPUI's location in the state's capital has also helped establish its tradition of collaboration with the city's political, economic, religious, and philanthropic leadership to increase educational opportunity for the region's 1.5 million residents. In fact, this commitment to community engagement has been a determining factor in IUPUI's developing a wide range of programs to accommodate learners who cannot change work, family, or other conditions to attend campus-bound classes and programs.

Urban institutions have long recognized that their physical centrality is not enough when it comes to meeting the widely diverse needs and learning styles of adult students. It may seem ironic that universities situated to serve great numbers of students in centralized settings must also engage whole-heartedly in distance education and face-to-face, off-campus learning. Some of the earliest televised distance learning efforts were designed for rural areas, yet urban universities have, by necessity and inclination, led the development of this innovative teaching and learning model to meet the needs of diverse adult populations through an expanding array of styles and formats. IUPUI has been a pioneer in offering courses at high schools, shopping centers, and corporate offices; in using videotape, cable casting, and audiotapes; in offering full associate degrees on the weekend; and, concurrently, in using a range of electronic communication including the internet. Most other urban universities have had similar experiences.

Their leadership in distance learning is a logical progression based both on community need and expanded technologies. In an era of fascination with electronic media, however, we often forget the importance of “need” as a decisive factor in developing programs that truly serve our communities. This is particularly true in the case of IUPUI. Indiana ranks 47th in the nation in the percentage of adults with a baccalaureate degree, 50th in the percentage of the workforce engaged in specialty and professional occupations, and 45th in the most recent national SAT score rankings. Such statistics indicate that despite a university that is ideally located, and despite local leadership deeply committed to accessible higher education, many citizens in Indiana need alternatives to campus-based instruction.

Indeed, in 1999 more than 7,000 learners worked toward an Indiana University or Purdue University degree at IUPUI via face-to-face instruction at off-campus locations or by distance learning offered over the Internet, or through public and cable television. Some of these students used a combination of learning modes adapted to their schedules and circumstances. This suggests an emerging role for urban universities as sites for a hybrid model using face-to-face and mediated, synchronous and asynchronous, and on- and-off campus sites to create flexible and adaptable patterns.

IUPUI began offering courses at community learning centers and instructional sites in the early 1980s. These included classes at an array of public libraries, shopping centers, and high schools, as well as participation in the Indiana Higher Education Telecommunications System (IHETS). At the time, IHETS was beginning to offer one-way video and two-way audio instruction throughout the state for graduate nursing and medical student continuing-education programs.

IUPUI continues to strike this balance between off-campus, face-to-face instruction, and distance education delivered over the Internet and on public and cable television. This strategy builds upon established community resources and blends them with the growing demand among diverse learners for faster and more convenient ways to earn and complete degrees or to receive specialized training. Such a balance must be struck to meet a wide range of learning styles among adult students. This hybrid model offers advantages over a single mode, since learning styles and content may vary with learner need, schedule, or preference.

Off-Campus/Face-to-Face Learning

In 1999, the IUPUI Community Learning Network (CLN) opened a Service Center at Glendale Mall. Located seven miles from the central city campus, the newly renovated shopping and community center environment blends retail establishments with a branch of the Indianapolis-Marion County Public Library, a food court, and a cinema with a high-end learning environment. The Service Center includes 11 large classrooms, half a dozen scholar work stations with high-speed internet access to IUPUI’s University Library, and a full-time staff to schedule classroom space, faculty office hours, and on-site academic advising. This year a high-end 30-station computer classroom was added with high-speed Internet access to accommodate the most advanced learning needs in computer technology, new media, and mathematics.

The Legacy Fund in Hamilton County, 15 miles north of downtown Indianapolis, established a Community Life Learning Center in collaboration with IUPUI and Ivy Tech State College in August 2000. The second Service Center offers a similar number of classrooms and computers to adult students residing in Indiana's fastest growing community. These service centers enrolled 2,444 students for the fall 2000 semester.

CLN operates a third IUPUI Service Center at a high school on the city's near westside. Due to increasing community demand, and in conjunction with Ivy Tech State College and the White Lick Heritage Community Foundation in Hendricks County, a dedicated community education facility roughly 12 miles west of the downtown campus is under negotiation for 2001.

These service centers complement IUPUI courses offered at nearly 20 area high schools across central Indiana, serving 2,042 learners in fall 2000. Off-campus, face-to-face instruction has historically mirrored on-campus curricula, and is delivered through faculty appointed by their respective academic units. Coursework was initially designed to allow completion of associate degrees within three to four years and to draw four-year degree seekers to campus after they had taken 100-level and 200-level courses off-campus.

Video

In the 1990s, the market began to shift as more and more adult learners wanted to complete undergraduate degrees quickly and on their own time. IUPUI recognized that more than 75 percent of Indianapolis households had cable television connections in their homes, and homes without at least one VCR were virtually non-existent. In a strategic attempt to engage underrepresented student populations, IUPUI developed a series of video courses for broadcast on cable and public television systems. With the assistance of the Annenberg/CPB New Pathways to a Degree initiative, IUPUI was able to create multimedia courses for delivery to students who experienced physical and psychological barriers to coming to campus, including irregular job schedules, family commitments, or fear of high density traffic, parking problems, crime, or even a perception that the campus was unfriendly. Among other initiatives, facilities for group work and technology access (television monitors, computers, and fax machines) were established in Hispanic and African-American neighborhoods, co-hosted by community centers and churches. Thus, the use of technology, which could provide anonymity and asynchronous connectivity, increased educational access for students who felt uncomfortable in a majority culture environment.

Today, IUPUI offers nearly 20 videotaped undergraduate courses over public and cable television, and videotapes in subjects ranging from web page design to African-American art history. More than 1,700 IUPUI students enrolled in televised courses last year, and 1,950 registered in the fall of 2000. One of the unique features of IUPUI's most recent venture into broadcast television has been an explicit effort to reach historically underserved populations.

Oncourse: Online Learning Environments

Incoming freshmen surveys in 1995 indicated that learners in central Indiana reported a dramatic increase in the ownership of home computers and reliable dial-up Internet

access from home and work. This shift enabled IUPUI to migrate video distance education courses to a web-based environment. As part of CLN's distance education strategy, a partnership was established between CLN and a web-based research and development laboratory on the IUPUI campus to provide a living laboratory connecting learners to courseware around the clock and throughout the year. While the on-line teaching environment, Oncourse, was initially designed to reach distance education students through the research and development efforts of Dr. Ali Jafari and David Mills, it was deployed in 1999 to reach all IUPUI students. The environment enabled faculty and students to access course materials, bulletin boards, and even chat rooms with little more than a computer, modem, decent web browser, and a password. Today, as many as half of on-campus courses use Oncourse to some degree, and nearly all courses have minimal course outlines or post their syllabus online (<http://www.oncourse.iupui.edu>).

Oncourse Features and Benefits

Accessibility: 24 hours a day, 7 days a week, through both Internet Explorer and Netscape browsers.

Applicability: All course sections taught at IUPUI now automatically have an on-line component. The degree to which the faculty members use the on-line environment is at their discretion.

Linkages: Oncourse is dynamically linked to the university data systems. This connection enables each student or faculty member to be recognized as a unique individual and provides him or her with immediate access to courses.

Ease of Use: Faculty and students who know how to use a web browser and Microsoft Word can activate a course within minutes.

Statistics from the initial deployment of Oncourse indicate that a majority of students access course content and interact with other students and faculty between the hours of 11 p.m. and 2 a.m. during the week and throughout the weekend. The weekend statistics suggest a new pattern of use. With more than 4,440 students enrolled in undergraduate web-based distance education courses in fall 2000, it is clear that students are not online continuously for long periods of time on weekends, but they intermittently use Oncourse over an extended period of hours and days. There may be an interesting pattern of intensive learning during the weekend, complemented by more frequent but shorter and sporadic interactions during the week. Some faculty have begun to consider the organization of course content and even learning objectives that take these patterns of interaction into consideration.

A recent survey of IUPUI faculty reports that more than 30 percent of all faculty now regularly substitute other forms of interaction for regularly scheduled classes; in the next year 40 percent estimate that they will use this practice. While web-based interactions account for only a part of these alternative "meetings," faculty say this use of web interactions as an alternative to class meetings will double in a year or so. If distance education strategies were not available to meet the time constraints of these learners, students might choose to delay the completion of their degrees or place undue stress on their work and family lives. Extending the hours of the university's teaching and learning environment enables learners to concentrate on course content when they have uninterrupted learning time at home, at work, in the library, or on the road. The hybrid

model may come into its own or become the dominant form of learning in environments like this, where faculty can use a combination of face-to-face and online interactions.

To meet the needs of companies seeking university-supported training, universities must use both face-to-face and distance learning course delivery at remote instructional sites or campuses. Off-campus learning centers will continue to provide special services, including computer laboratory experiences or opportunities to collaborate with other professionals. And, as universities become more attuned to the learning styles and demands of business clients, value must be added to face-to-face instruction. Interactivity must increase and students must have the opportunity to engage experts. Indiana University's Kelley School of Business recently created an online MBA program, originating from IUPUI. Now in its second year, the fall 2000 cohort of 40 students includes some learners who would have had to drop their classes or seek a transfer of credits to another university in the past, because their companies transferred them, or their job requires out of state and global travel. Because this program is designed to cover the same material addressed in face-to-face instruction, students can move around the country and throughout the world and remain enrolled. These and similar advantages to corporate sponsors will lead to further innovations based on distributed education and training. For example, intensive formats are being designed for corporate clients based on faculty experience with web-based teaching and learning.

Model Organizational Structure for Distance Learning

The best distance learning strategy enhances the expertise of faculty to provide learning-on-demand for clients. The most successful models use a centralized funding source for the origination and deployment of distance education technologies, but rely on schools and colleges to assume continuing responsibility for distributed education. A few universities have concentrated course development for faculty, continuing pedagogical and curriculum innovation, and financial return. The model emerging at IUPUI uses CLN as a central support unit to help identify market demand, share in the cost of technology, and assist faculty in the development of web-based teaching solutions. The undergraduate client base is developed by CLN, yet responsibility for the integrity of the curriculum and student evaluation rests with the academic unit. For universities adopting the hybrid model, distributed education must become everyone's responsibility because this format of learning is central—not peripheral—to its mission. For example:

There must be a direct connection between distance education strategies and the strategies of the school, college, or institution. If a university is well regarded for its engineering education, distance education solutions build on that expertise and enable a distance education strategy to strengthen the position of the academic unit locally, nationally, or internationally. IUPUI has built upon the expertise of the Purdue School of Engineering and Technology at IUPUI and now offers students the opportunity to earn a comprehensive Information Technology Certificate entirely online. The Kelley School of Business offers a complete MBA, and the IU School of Nursing offers nearly all courses online.

Revenue generated through distance education product delivery must be reinvested to maintain quality course design, and easy-to-use technology deployment. At IUPUI, significant front-end costs for videotaped courses are paid for with tuition revenues

generated from the first year of the class. Tuition revenue from videotaped courses, which air, on average, three to four years, then reverts to the appropriate academic unit. The existing university structure must be used in any reasonable way to keep startup costs to a minimum. This includes:

- Cross promotion of distance education offerings in existing publications. Distance education courses are listed in all IUPUI course offering publications and within the online course offerings.
- Cross promotion and special marketing efforts must be deployed to engage the learner who intends to earn the full degree at a distance. The role of a central service unit such as CLN can facilitate such marketing.
- Registration and enrollment through existing means. Ensuring that student transcripts do not include special indications that the course was taken at a distance.
- Engaging existing faculty in the effort to teach courses already approved at a distance, and trying to involve as many faculty as possible in some aspect of distributed learning so that they may become advocates, experts, and key contributors.
- Educating the faculty, advisors, and staff who come in contact with existing and incoming students on the merits and possibilities of learning at a distance.
- Considering interaction with the university from the learner's perspective to identify entry and access barriers to resources available to on-campus students.
- Conducting research on the effectiveness of learning at a distance.
- Effort must also be made to integrate existing academic services long available to students on campus into the distance learning model. Students learning from remote locations should get academic advising to help them persist in their education, and they must be asked to evaluate both the performance of their instructor and the institution in meeting their needs.
- Staff with special expertise, such as university librarians, should be invited to participate in distance learning initiatives. From the outset, librarians in particular can help to determine what resources are best suited to meet the needs of learners at a distance for key courses, including online resources and the use of electronic course reserves. Similarly, advisors, admissions officers, and student service professionals can be helpful at the outset. Institutional researchers can assist in framing assessment measures and collecting data, which can lead to continuous learning improvement.
- Support structures for distance education must contain both traditional and new elements. These include adequate professional development for faculty as well as a technology-rich environment to support learning at distance. An easy-to-use online environment such as Oncourse enables faculty to update course materials and respond to students at flexible times and places. Other structures that support distance learning are telephone and computer-based help desks, online enrollment, and advising.

Conclusion

Urban universities have traditionally attracted a richly diverse student population. Our institutions must embrace change and engage faculty in the evolution of teaching and learning pedagogy. Distance education and technology will open new vistas on how, why, when, and where students learn. The constraints of time, travel, culture, careers, and families have produced a new type of learner. Universities that strategically recruit and retain students must respond to the demands of an evolving student population in a technology-advanced society. Removing barriers to entry will enable educational institutions to gain a competitive edge in a highly competitive learning environment. The creation of anywhere, anytime learning is but one solution. The future of engaging learners is to expand and deploy the hybrid model blending technology and talent, while maximizing precious assets.

Author Information

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