



Susan Combs
Texas Comptroller
of Public Accounts

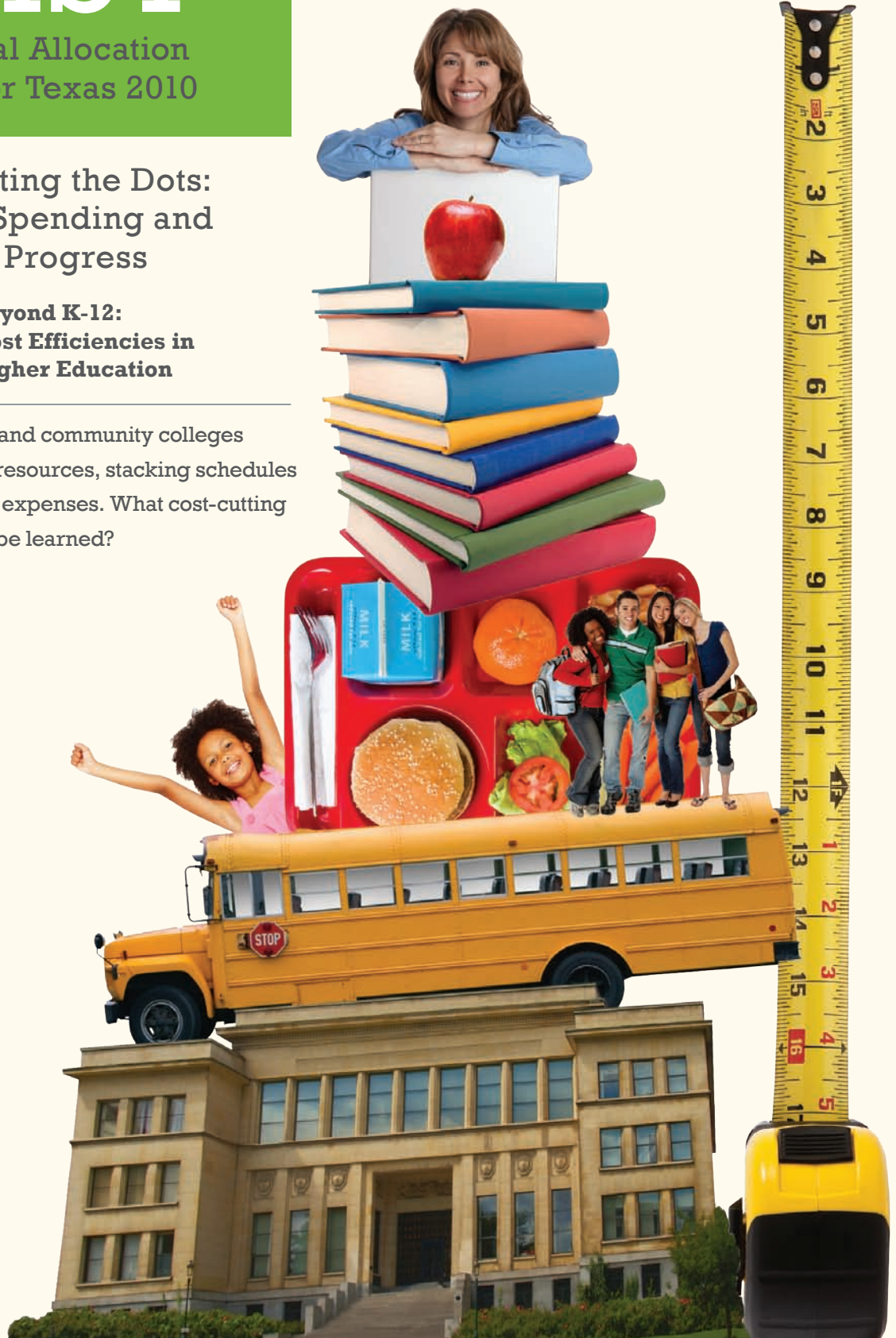
FAST

Financial Allocation
Study for Texas 2010

Connecting the Dots: School Spending and Student Progress

4 Beyond K-12: Cost Efficiencies in Higher Education

Universities and community colleges are sharing resources, stacking schedules and shaving expenses. What cost-cutting lessons can be learned?



FAST

FINANCIAL ALLOCATION STUDY FOR TEXAS

COST EFFICIENCIES FOR HIGHER EDUCATION

This is Part 4 of 4 in the Financial Allocation Study for Texas (FAST) report. The complete version is available online at www.FASTexas.org.

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PART 2: SCHOOL DISTRICT LISTINGS

PART 3: SMART PRACTICES FOR MINIMIZING COSTS

**APPENDIX: BACKGROUND, METHODOLOGY AND EXPANDED DATA
FOR RECOMMENDATIONS**

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Many public entities offer lessons for school districts seeking to improve their cost-effectiveness while maintaining high academic standards. Section 3 of this report at www.FASTexas.org provides a series of “smart practices” from Texas school districts. This section examines effective practices from higher education that might aid school districts as well. These practices fall into the broad categories of space optimization, online education and purchasing.

I. SPACE OPTIMIZATION

Texas public university facilities encompass more than 186.3 million square feet. Of this space, about 112.5 million square feet are designated as “net assignable square footage” — floor space assigned or available for the use of building occupants. Of that subtotal, in turn, nearly 61.8 million square feet represents space available for instruction, with the remainder representing corridors, lobbies, public stairways, elevators, escalators and loading platforms.¹

THECB evaluates the use of classroom and laboratory space in Texas public universities with a Space Usage Efficiency (SUE) score. The SUE score combines three measures of efficiency:

- *facilities demand*, a measure consisting of the total weekly hours of classroom activities divided by the total number of classrooms available; universities with relatively more activities per classroom score higher on this measure.
- *current utilization rate*, which measures average weekly hours of use per classroom; higher usage rates bolster a university’s efficiency score.
- *average percent fill*, which examines the number of seats occupied when a room is in use as a share of the room’s capacity.²

THECB’s most recent evaluation concerned the Fall 2009 semester. The vast majority of public universities, state and technical colleges scored below target levels on at least one of the three measures, indicating unused hours and space for additional classroom activities. In short, Texas’ higher education classroom space appears to be underused.

Two universities, the University of Texas-Pan American and Texas State University-San Marcos, received the highest possible overall efficiency score of 200 in the Fall 2009 evaluation, indicating a highly efficient use of space. The University of Texas at San Antonio, Texas A&M University and the University of North Texas tied for second place with scores of 192. University of Houston-Victoria scored the lowest due to low scores for classroom and laboratory efficiency.³

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Other states have looked at classroom usage as well. In April 2009, the Florida Legislature’s Office of Program Policy Analysis and Government Accountability conducted a study on classroom usage at the state’s higher education institutions, concluding that classrooms were being underused at universities and state and community colleges. The study also found, however, that some institutions had increased their usage efficiency through strategies such as block scheduling — that is, scheduling classes less frequently but for longer periods of time — and by offering more courses during non-peak times such as afternoons and on Fridays.⁴

Universities also have examined usage efficiency on their own campuses. The University of Texas at Arlington recently hired a consulting firm to assess its classroom usage efficiency to help plan for future growth. Universities in other states are taking similar initiatives. The University of Minnesota, for instance, has developed usage measures similar to THECB’s.⁵

CLASSES IN NON-PEAK HOURS

Classes offered during evenings and other off-peak times allow for more efficient usage of existing educational space, reducing the need for more classrooms in times of high enrollment growth. They also offer schedule flexibility to students who prefer to, or must, take classes during non-traditional hours.

AT COMMUNITY COLLEGES

For some institutions, off-peak scheduling provides a solution for rapid student enrollment growth. To maximize classroom space, for instance, Pearl River Community College in Poplarville, Mississippi has begun offering weekend and online courses in addition to traditional classes during the week.⁶

South Texas College (STC) in McAllen began offering classes from 8 p.m. until midnight during the fall 2010 semester. The college now offers 147 classes in these hours, on subjects ranging from writing skills and basic mathematics to advanced Web design and medical terminology.

STC President Dr. Shirley Reed told the review team that the late classes have proven very popular with some students, and that they allow the school to optimize the use of its resources. Dr. Reed also notes that students are competing in a global economy, and if they are willing to further their education by taking courses at nontraditional hours, the college will take steps to support their efforts.⁷

AT UNIVERSITIES

Many of Texas' universities offer at least some evening courses. The University of Texas at Austin's University Extension, for example, offers evening classes both to enrolled students and others who would like to take them.

In all, however, university hours spent on classroom instruction drop off significantly after 5 pm. In 2008, the University of North Carolina at Chapel Hill conducted a space usage study that found that the state's public research universities (North Carolina State and University of North Carolina-Chapel Hill) offered an average of just 2.2 hours of evening instruction per classroom each week, compared to 24.7 hours of daytime classroom instruction.⁸

Dr. Herman A. Berliner, provost and senior vice president for Academic Affairs at Hofstra University, has written that, in attempting to cater to the preferences of students and professors for classes in high-demand periods, universities pressure *themselves* to build new instructional facilities, when they could instead resolve space issues by scheduling more classes during off-peak hours.⁹

Evening and weekend courses do present some challenges. Most students and professors prefer daytime classes. Tenured faculty, who often have some say in the classes they teach and the times they teach them, may resist teaching off-hours classes. And support workers would have to be present during non-traditional hours, including janitors, technical/mechanical support personnel and security.

SHARED FACILITIES

Some institutions use space from other entities to help maximize classroom usage. For example, Texas State University leases space from Westwood High School in Round Rock to provide evening courses to students in the greater Austin area.

In the 1990s, enrollments in the courses at Westwood High reached capacity, prompting the university to build its Round Rock Higher Educational Center. Texas State still holds some classes at Westwood High School, however.¹⁰

Austin Community College (ACC) partners with many Austin-area high schools to hold evening classes in a variety of subjects. At Leander High School, for example, ACC will hold evening courses in health science, biology, computer science, economics, English, government, history, psychology and speech during the spring 2011 semester.¹¹

Lone Star College, based in The Woodlands, offers night and weekend classes at Splendora High School, Klein Forest High School, Cleveland High School and Atascocita High School.¹²

The Texas State University System (TSUS) offers dual-credit courses through agreements with public school districts. Lamar State College-Orange and Sul Ross State University both have agreements with school districts that allow high school students to take courses that give them credit toward two- and four-year degrees.

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IN OTHER STATES

Colleges and universities in other states also are using shared spaces to meet enrollment growth. The University of Michigan-Ann Arbor, for example, leases space to Washtenaw Community College, the local community college, which has experienced double-digit enrollment growth in the past three years. The community college offers classes on the University of Michigan campus at night, when the university's classrooms become available.¹³

Facilities also can be shared within a campus. The University of Michigan-Ann Arbor has adopted a scheduling model that involves sharing classrooms between academic departments. Under this plan, departments with a shortage of space will be able to use otherwise empty classrooms in other departments. The university anticipates that shared scheduling will help to support campus growth without the need for additional construction.¹⁴

II. ONLINE EDUCATION

Recessionary pressures are forcing all sectors of the economy to find new ways to cut costs. Online programs, sometimes called “distance learning,” provide educators with an interesting opportunity to increase access to education while saving on the costs of brick-and-mortar facilities. In Texas and across the nation, a number of colleges and universities have put such programs in place.

A recent report by the Sloan Consortium, a group tracking U.S. online education, found that participation in online classes has soared in the last six years, growing significantly faster than overall higher education enrollment.¹⁵ According to the report, public institutions are at the forefront, offering a greater number of online courses than private schools.¹⁶

In higher education, Texas’ four-year universities have put online programs in place, offering a total of 611,982 semester credit hours of online courses in the 2008-09 school year. The University of North Texas, the University of Houston and Lamar University delivered the highest number of online credit hours. Private institutions do not report distance education numbers to THECB; a number of them, however, do offer online courses and degrees, including Abilene Christian, Amberton University, Our Lady of the Lake and North Central Texas College.

The University of Texas at Austin and Texas A&M-College Station offer online courses, as do other institutions in the UT and Texas A&M Systems.¹⁷ Both systems recently decided to restructure the administration of their distance education efforts.

In April 2010, the UT System announced it was discontinuing its TeleCampus operation in an effort to decentralize this function and move its administration to the system’s member institutions. In June 2010, Texas A&M made a similar announcement.¹⁸ UT’s TeleCampus and A&M’s Office of Distance Education have worked with individual system institutions to put courses online and provide technical support.¹⁹

TRADITIONAL PROGRAMS VS. DISTANCE EDUCATION

Students enroll for online courses in the same manner as for a traditional course, and in most instances, the tuition rates are the same. Distance education courses, however, obviously require more technological infrastructure as well as additional staff effort. Instructors must upload courseware and host message boards for questions and commentary, for instance. Institutions often charge an additional fee to cover such costs. On the other hand, institutions may waive other fees (such as parking or building fees) for online learners.

Generally, however, students pay more for an online course. This is true even at for-profit institutions.²⁰ At the University of Phoenix-Austin, an online undergraduate course in business, arts or sciences will cost \$95 to \$135 more per credit than an equivalent on-campus course.²¹

Online programs, sometimes called “distance learning,” provide educators with an interesting opportunity to increase access to education while saving on the costs of brick-and-mortar facilities.

Distance learning provides other advantages, including increased access to higher education in rural areas and greater flexibility and convenience for students. Students can also save on commuting costs.

An institution's faculty can influence any decision to offer online courses. At some institutions, the faculty embraces online education. At others, faculty members are more comfortable with the traditional classroom setting and have proven reluctant to teach online courses. A September 2010 study by the U.S. Department of Education, however, found that online education can be more effective than face-to-face methods, and that "blended" instruction, a mix of online and face-to-face teaching, is the most effective learning approach.²²

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BOOSTING ONLINE EDUCATION

Some institutions across the U.S. are moving larger portions of their curricula online. George Washington University, Boston University and the University of Southern California are just a few of the universities working with private organizations to develop and build online programs. In return for building and managing an online program, a contractor will collect a large percentage of tuition revenue from the online courses.²³

At the University of California, university leaders plan to launch a \$5 to \$6 million pilot project to develop a bank of online courses. This project will help leadership determine whether online courses can be delivered at "selective research university standards."²⁴ Another highly visible project is under way in Minnesota, where Governor Tim Pawlenty has challenged the state's public universities to deliver at least 25 percent of all credits online by 2015. This goal is intended to expand student access, increase technology skills and maximize school efficiency.²⁵

SAVINGS

Experts disagree about the cost-efficiency of online programs. Increasing enrollment in online courses may generate savings if it allows institutions to cut back on facility costs. The institutions, however, will have to make additional investments in infrastructure, training, support services and faculty to sustain an online curriculum.²⁶

Initial development costs include course design and development, faculty training and the establishment of a 24/7 support infrastructure. Online course development and design can be more time-intensive than traditional course development because instructors are not as familiar with the process, which can translate into higher costs. An instructional technologist may be required as well, to teach faculty members how to use educational technology and deal with the human side of technology support. Finally, a support structure that can operate and accommodate a 24/7 help desk can be a significant expense, though it can be less expensive than providing a similar support infrastructure for a brick-and-mortar facility.

Ongoing costs include the costs of additional professional and technical support staff.

Over time, online education offers a potential for savings after institutions recoup their initial course development investment. As online enrollment rises, so too will university revenues, in the form of tuition, fees and formula funding based on the total number of contact hours.

In 2005, the *Chronicle of Higher Education* published the results of two Texas studies showing that it costs less to deliver courses online than in a traditional classroom setting. Both were conducted by the University of Texas' TeleCampus operation, which found that it cost \$35 less per credit hour to deliver a course online in 2003.²⁷ The studies, however, did not consider the cost of course development or the amount of time professors must devote to online versus traditional courses.

Over time, online education offers a potential for savings after institutions recoup their initial course development investment.

Under its “Smart Purchasing” program, TSUS negotiates contracts for disaster-related goods such as water pumps, roofing material and generators in advance of natural disaster to avoid paying higher prices after the event occurs.

III. PURCHASING

The Texas State University System (TSUS) has implemented several programs to increase cost efficiency. Under its “Smart Purchasing” program, TSUS negotiates contracts for disaster-related goods such as water pumps, roofing material and generators in advance of a natural disaster to avoid paying higher prices after the event occurs. TSUS also hired an energy company to help negotiate natural gas prices for its campuses and created a centralized procurement system at its San Marcos campus that allows the university to purchase supplies at low cost.

To help minimize construction costs, TSUS refinances bond debt and uses “construction manager at risk” contracts, which require construction managers to provide a “guaranteed maximum price” for a project and keep costs below that level to the best of their ability.²⁸

Through these and other initiatives, TSUS has achieved the lowest cost per student of any university system in Texas. If every public university system in the state spent the same per student as TSUS, together they would save an estimated **\$60.1 million** in the 2010-11 biennium.

In 2007, the UT System established its Supply Chain Alliance to leverage the purchases of the system’s nine universities and six health institutions to obtain better prices on goods and services.

Each of the 15 institutions has appointed a senior management representative from five general spending areas — innovative technology, research, medical/surgical, facility support and business administration — to a “Spend Council.” When a contract is sought, this council selects subject-matter specialists (SMEs) in the relevant spending area to work with the alliance’s Strategic Sourcing Team. These SMEs agree on the scope of work sought and minimum requirements before issuing a request for proposals. Then they evaluate the products or services solicited before contracting with the suppliers that provide the best value.

In 2008, for example, the alliance joined with UT-Arlington (representing the academic institutions) in a competitive bid process for desktop and laptop computers. Through the alliance’s strategic sourcing process, unit prices for desktops went from \$1,000 to \$600 and laptops from \$1,200 to \$800. The alliance also obtained longer extended warranties and “self-maintainer” arrangements in which vendors will reimburse the institutions’ IT departments for repairs they make to covered products, to minimize down time and shipping costs.

Based on projected average savings of 17 percent on purchases, the alliance saved the UT System an estimated **\$6.1 million** a year.²⁹



ENDNOTES

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Texas Comptroller of Public Accounts
Research and Analysis Division
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Austin, Texas 78711-3528

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