

## EXECUTIVE SUMMARY

The charges of the Interim Committee on Funding Issues in Education covered a broad spectrum of public and higher education issues. Among the issues studied by the Committee are: student financial assistance and tuition exemption/waiver programs; the appropriateness of current weights, allotments, and set-asides under the Foundation School Program; management, investment, and distribution of certain funds dedicated to public and higher education; factors affecting undergraduate enrollment and graduation rates at public colleges and universities in Texas; need for and allocation of funds for higher education budget special items, medical schools and Texas A&M Service agencies; and, costs of textbooks in the public schools, with an additional review of the use of technological teaching aids in the classroom.

The Committee held three public hearings in Austin, and solicited input from public schools, universities, colleges and interest groups. In addition, with regard to the charge to review higher education budget special items, committee staff conducted extensive on-site evaluations.

The Committee, by majority vote, makes the following recommendations:

### **Student Financial Assistance and Tuition Exemption/Waiver Programs**

- Adopt a state comprehensive grant program, similar to the Georgia Hope Scholarship Program, that is linked to completing the Recommended or Distinguished Achievement curriculum in high school. The programs should include enhanced financial aid packages for qualifying students who also agree to become certified teachers in critical shortage areas, and who teach in these shortage areas for a specified number of years. All existing state grant and scholarship programs, excluding portions of the Texas Public Education Grant program and the Tuition Equalization Grant program, should be consolidated into the new comprehensive program.
- Direct the Higher Education Coordinating Board to review all programs providing exemptions from in-state tuition to determine whether the exemptions are necessary if the state adopts a comprehensive scholarship program. In addition, the state should eliminate the waiver of nonresident tuition for students receiving nonacademic scholarships.

## **Appropriateness of current allotments, weights, and set-asides under the Foundation School Program to fund school districts.**

The committee recommends, with the exceptions listed below, and subject to review in light of new information such as the current interim Legislative Budget Board report on the funding elements, that the 76th Legislature should retain the current system of allotments, weights and set-asides under the Foundation School Program to fund school districts.

- Direct the Texas Education Agency to subtract the set-aside funds from the Compensatory Allotment after calculating each school district's weighted student allocation.
- Re-structure the Gifted and Talented Allotment by directing the Texas Education Agency to use the funds formerly distributed under this allotment to establish awards for schools that increase the number of students completing a college prep curriculum or Advanced Placement courses.
- Increase the Transportation Allotment funding levels to more clearly reflect the state's role as a partner in school transportation funding.
- Appropriate additional funding for the Instructional Facilities Allotment program for new construction projects, in addition to continuing to fund the current state obligation.

## **Management, investment, and distribution of funds dedicated to public and higher education.**

- Provide additional funding to universities to compensate for the disparities in capital and academic excellence resources available to all institutions.

## **Factors affecting undergraduate enrollment and graduation rates at public colleges and universities in Texas.**

- Maximize individual educational opportunity and increase chances for student success.
- Increase the number of students completing advanced high school curricula.
- Improve the curricula offered by high schools.
- Increase the number and quality of certified teachers, especially in critical shortage areas.
- Increase financial aid monies available to Texas college and university students.
- Increase the graduation rates at Texas colleges and universities.
- Improve the collection and analysis of information relating to Texas college and university students.
- Direct the Commissioner of Education and the Commissioner of Higher Education to:
  - ▶ align curriculum and assessment tools directly affecting college enrollment and graduation [i.e., the college-bound curricula, Texas Assessment of Academic Skills (TAAS) and Texas Academic Skills program (TASP)];
  - ▶ adopt compatible information systems for the agencies that facilitate the sharing of information and analysis; and,
  - ▶ recommend appropriate teacher preparation and training programs, including continuing education programs.

- Move the exit-level TAAS to the 11th grade, align it with college-bound curricula, and use it not only as an assessment test but one that can substitute for TASP.
- Place the responsibility for completion of most remedial programs on the public high school and provide the funds to support it.
- Phase out the TASP for students entering college directly from high school and increase reporting required from colleges and universities on student retention and graduation.

**Need and allocation of funds for higher education budget special items, medical schools and Texas A&M Service agencies.**

**Higher Education Budget Special Items**

- Eliminate the majority of special items funded at the universities and Lamar centers, either beginning in 2000 or over time, and distribute a greater percentage of total funding by formulas.
- Adopt other funding mechanisms to address the range of needs of all institutions.

**Health-Related Institutions**

- Construct formulas, similar to the formulas for the universities, to rationalize funding for the health-related institutions.

**Texas A&M University System Agencies**

- To determine space needs of the Texas A&M University System Services, the legislature should implement the recently adopted Higher Education Coordinating Board study “Infrastructure Support For Texas A&M University System Services Facilities Located in Brazos County, Texas.”
- A proposal has been discussed in the higher education community regarding an increase of up to 100% of indirect cost recoveries being

returned to general academic institutions. Whatever policy is adopted concerning the retention of indirect costs for general academic institutions should also be applied to the Texas A&M University System Services, regardless of whether the research grants were awarded through the research foundation.

- The appropriation of programmatic funds for both the research and service oriented agencies should be based on demonstrated need provided by the Texas A&M University System Services. These programmatic funds will be evaluated by the Legislature in a manner similar to other state agencies.
- The Legislature should appropriate the Texas A&M University System Services' research and general funds in the same manner as the general academic institutions' educational and general funds are appropriated.

**Costs of textbooks for public schools and examination of the use of computers and other technological resources as alternative teaching.**

- Encourage the Texas Education Agency and the State Board of Education to align the textbook adoption process with the curriculum revision process. Adoption should, to the extent practicable, encompass single subject areas or like subject areas.
- Encourage the Texas Education Agency and the State Board of Education to revise the adoption process so that not all subject areas are on a six-year adoption cycle. Certain subjects, such as social studies, might be considered for shorter cycles. Other subjects, wherein the subject matter does not change greatly over certain time periods, could remain at a six-year or longer cycle.
- The Texas Education Agency should issue a request for proposals (RFP) from vendors with the goal of selecting three to five of the best proposals for the use of laptop computers and other technologies in the class room. These systems should then be piloted in a variety of sizes and types of school districts in Texas. In addition to cost, the principal criteria used to evaluate the proposals should be based upon which proposals show the most promise of increasing the classroom achievement of students.

## **CHARGE #1**

*Study the current status of student financial assistance and tuition exemption/waiver programs. Identify possible criteria to be considered by the Legislature in evaluating such proposals and to establish priorities for these programs in the future.*

### **Student Financial Aid**

#### **The Present System**

Student financial aid in Texas and across the country comes in the form of loans, grant aid, and work-study compensation. According to the Texas Higher Education Coordinating Board, state financial aid for 1998 totaled \$214.7 million. This included \$126 million for grant aid, \$86.8 million for loans, primarily from the Hinson-Hazlewood Student Loan Program, and \$1.9 million in work-study funds.

In addition to state financial aid, the federal government provides substantial funding to Texas students. In 1996, federal grant aid to Texas students totaled \$344.4 million, and \$1.1 billion was provided in federally backed loans. Federal work-study funding was \$44.6 million in that same year.

As is the case nationwide, the majority of federal and state financial aid being provided to Texas students is in the form of loans. For Texas students, loans represented 64 percent of total financial aid in 1997, while gift aid accounted for 33.3 percent. Work-study funding constituted 2.7 percent of all financial aid.

Nonresident and Texas students also receive financial aid by qualifying for a variety of tuition exemption and waiver programs. There are currently 40 such programs in state law.

Several of these programs allow nonresident students to pay resident tuition charges while attending a Texas institution. The waiver of nonresident tuition applies primarily to teaching and research assistants, residents of bordering states and countries, and military personnel and their dependents. State law also allows nonresident students to pay resident tuition if the student receives a competitive scholarship. These can be academic or nonacademic scholarships. The total amount of nonresident tuition being waived under all programs in 1997 was \$123.8 million.

In addition, state law allows several categories of Texas residents to be exempt from paying tuition to attend a college or university. This applies, for example, to veterans, senior citizens, and blind and deaf students. These exemptions totaled \$17 million in 1997.

Texas has a variety of state financial aid programs. The Texas Public Education Grant program is the single largest source of state grant aid to students at public higher education institutions. The program is funded from dollars set-aside from tuition and is distributed by campus financial aid offices to needy students. The Texas Public Education Grant program accounted for \$58.5 million in grant aid in 1997. The next largest program is the Texas Equalization Grant program. These grants are provided to students attending private colleges and universities. Funding for Texas Equalization Grants totaled \$47.2 million in 1998. The state also provided just over \$10 million for 1998 and 1999 for the Texas Tuition Assistance Grant program. These funds provide gift aid to needy students who graduate from high school with at least a B average.

The remaining programs receive limited funding and generally have different eligibility requirements. Some are targeted to certain students, such as nursing or accounting students. These factors can contribute to inefficiencies in administering the programs and lead to confusion on the part of students and parents about qualifying for certain programs.

## **Discussion of Issues**

Making higher education in Texas affordable for its citizens has become a mounting challenge. The average tuition and fee charges at state public universities rose from \$973 in 1990 to \$2,119 in 1995. Tuition and fees as a percentage of median household income in Texas rose during those same years from 2.57 percent to 4.82 percent.

In addition to tuition and fees, college and university costs include room and board, books and supplies, transportation, and incidental personal costs. This adds \$8,412 to the average cost annually.

Increasing the amount of financial aid resources available to Texas students can expand access to higher education for many students. However, in addition to the

financial difficulties many students face, a lack of preparation for college work can pose an equally challenging obstacle.

In response, states are adopting financial aid programs that are tied to academic performance in high school. An example of this is the Georgia Hope Scholarship Program. Students in Georgia who graduate from high school with at least a 3.0 grade point average in the college preparatory curriculum track, or a 3.2 grade point average in other curriculum tracks, receive a scholarship that covers tuition, fees and books. Students continue to receive this scholarship through graduation if they meet certain academic requirements and remain on track in earning the required credit hours for their degree.

Research indicates that high school preparation is a critical factor in determining whether a student graduates from a college or university. In fact, completion of certain high school courses, such as algebra and geometry, can predict success at a college or university.

By linking financial aid and academic performance, particularly completion of the college preparatory curriculum in high school, students are given an incentive to complete the more challenging curriculum and become better prepared for college work.

***Goals and Recommendations:***

- 1. Adopt a state comprehensive grant program, similar to the Georgia Hope Scholarship Program, that is linked to completing the Recommended or Distinguished Achievement curriculum in high school. The programs should include enhanced financial aid packages for qualifying students who also agree to become certified teachers in critical shortage areas, and who teach in these shortage areas for a specified number of years. All existing state grant and scholarship programs, excluding portions of the Texas Public Education Grant program and the Tuition Equalization Grant program, should be consolidated into the new comprehensive program.**
- 2. Direct the Higher Education Coordinating Board to review all programs providing exemptions from in-state tuition to determine**



**whether the exemptions are necessary if the state adopts a comprehensive scholarship program. In addition, the state should eliminate the waiver of nonresident tuition for students receiving nonacademic scholarships.**

## **CHARGE #2**

***Review the appropriateness of current allotments, weights, and set-asides under the Foundation School Program to fund school districts.***

### **Public Education Finance**

#### **The Present System**

Texas is one of several states which has struggled with the emotionally-charged issue of how to finance its public education system equitably. In 1995, the Supreme Court of Texas, after ten years and three adverse court decisions, declared the public school finance system "constitutional in all respects." The Legislature continues to monitor and review the effectiveness and appropriateness of the various component parts of the system. Toward that end, the Interim Committee on Funding Issues in Education solicited written comments from the various public education interest groups, as well as the staff of the Legislative Budget Board (LBB) and the Texas Education Agency (TEA), and also heard invited testimony.

The current school finance funding system consists of two levels, or "tiers," of funding and the new facilities allotment. All components of the system are "equalized," which means that the amount of state aid received, if any, depends on a school district's property wealth.

#### **Tier I: The Basic Program**

For Tier I, a school district is guaranteed that, at an 86-cent tax rate, it will receive, through state or local funds or a combination of both, a certain amount for each student in average daily attendance (approximately \$3,400). The Tier I elements consist of the following:

##### ***Basic Allotment (BA):***

For each regular program student in average daily attendance (ADA), a district is entitled to an allotment of \$2,387, or a greater amount as provided by appropriation. The basic allotment for the current biennium is \$2,396. The Edgewood IV court chose the public school accountability system as the method of determining whether the constitutional "general diffusion of

knowledge" standard was being met by school districts. The LBB staff report submitted prior to the 75th session concluded that, at current funding levels, and with a tax rate of \$1.50 per \$100 valuation, a school district will be able to generate a sufficient funding level to meet the accreditation standards for the year 2000.

The BA is then "adjusted" (multiplied by a certain factor) for (1) district-level characteristics and for (2) student level characteristics. The resulting figure is the Adjusted Basic Allotment (ABA).

***District Level Adjustments:***

Cost of Education Index (CEI). Each school district is assigned a CEI multiplier (1.04, for example). The basic allotment is adjusted by this factor, which is intended to reflect geographic variations in known resource costs and costs of education. Such factors as competitive beginning salary, county population, and percentage of low income students are used to establish the multiplier. It should be noted that the CEI uses factors which are roughly five to ten years out of date. For example, the factor based on competitive beginning average annual salary (the largest single factor in the formula) is based on data from the 1989-90 school year; the factor regarding average daily attendance (ADA) is based on the 1991-92 or 1992-93 school years; the factor concerning county population is based on the 1987 estimate of 1990 county populations by the Texas Department of Health; and the factor related to percentage of low income students is based on the 1988-89 and 1989-90 school years.

Small, Mid-sized, and Sparsity Adjustment. The basic allotments of school districts under 1,600 ADA (square mileage is also considered) and under 5,000 ADA receive, respectively, small and mid-sized adjustments. An additional sparsity adjustment is made for school districts under 130 ADA. The underlying purpose of these adjustments is to provide additional funding for districts based on dis-economies of scale existing in certain small and/or isolated school districts.

The ABA is then adjusted based on certain student population characteristics.

### *Student Level Adjustments:*

Special Education. For each student in attendance in a special education program in the district, a number of "weights" or multipliers are used to further adjust the ABA by multiplying it by the appropriate weight (e.g., 1.1). These weights are based on the type of instructional arrangement (special education program) provided and the number of contact hours credited for these services. The state has established maximum numbers allowed for contact hours for funding purposes.

Compensatory Education. Generally, for each student in average daily attendance who is educationally disadvantaged (eligible for the national free and reduced school lunch program), a district is entitled to an adjustment equal to the weight of 1.2 times the ABA. The funds are intended to be spent to provide accelerated instruction for students at risk of dropping out of school.

Bilingual Education. For each student in average daily attendance in a bilingual or in the English as a Second Language (ESL) program the district is entitled to an adjustment equal to the weight of 1.1 times the adjusted basic allotment.

Career and Technology. For each full time equivalent student in average daily attendance in an approved career and technology education program the district is entitled to an adjustment equal to the weight of 1.37 times the adjusted basic allotment. Total listed enrollments, total listed spending, and total state allocations for career and technology education has increased dramatically over the past 10 years. The recent LBB staff report, however, showed essentially no significant difference in earnings between high school graduates who had taken vocational courses and those who had not.

Gifted and Talented. For each identified student a school district serves in a certified gifted and talented program a district is entitled to an annual allotment equal to the district's adjusted basic allotment times the weight of 1.2. Not more than 5% of the district's students are eligible for funding. There is little relationship between the total number of students served and the funding provided. For example, during the 1995 school year, PEIMs data shows that actual school district statewide expenditures for this program amounted to three times the total of the state gifted and talented allotment.

The total of the basic allotment and all of the adjustments listed above is the Adjusted Allotment (AA).

The final Tier I allotment is the Transportation Allotment. The allotment for regular transportation is based on the number of students carried for each mile traveled (linear density) by a school district's school buses on state-approved bus routes. There are also separate allotments for special education transportation, private transportation and other allotments for other discreet programs. While costs have increased (by about one-third from 1990-91 to 1994-95 alone) the state maximum reimbursement amounts for school transportation have not been raised since the 1984-85 school year.

***Local Fund Assignment (LFA):***

A school district's share of the Tier I cost is computed by multiplying the district's property value, as certified by the Comptroller, by .86. This is, in effect, the amount that can be raised locally at an 86-cent tax rate. This amount, the LFA, is then subtracted from the total of the adjustments and the allotments under Tier I. The remainder is the district's Tier I entitlement from the state. Districts which can raise the entire Tier I amount from local funds (i.e., districts above \$280,000 in property value per weighted student in average daily attendance (WADA) receive no state aid.

**Tier II: Guaranteed Yield**

Essentially Guaranteed Yield funding is the equalization of funding. Under the current Tier II funding scheme, the state guarantees that a school district will receive a yield of \$21.00 per weighted student in average daily attendance (WADA) for each penny of tax effort above \$.86 (up to a maximum of \$1.50 - a total of 64 cents in equalized funding available to the district). The property wealth threshold for eligibility for Tier II funds is \$210,000 in property value per weighted student. The purpose of this program is to give the poorer school districts a boost in their available tax base, thus putting them on more equal footing with the wealthier school districts.

## **Instructional Facilities Allotment**

Under a program approved and funded by the 75th Legislature, school districts may apply to the Commissioner of Education for approval to receive funds for new construction for instructional facilities. Eligible districts are guaranteed a yield of \$28.00 per penny of tax effort for each un-weighted student in average daily attendance. The Legislature appropriated \$200 million for the current biennium to fund this program. To date, over 250 school districts have been approved to receive assistance under this program. The state's obligation for the coming biennium will be approximately \$250 million.

## **Discussion of Issues**

A number of areas in the public school finance program appear in need of adjustment. Obvious examples are the CEI, the distribution of Compensatory Allotment funds (and the funds “set-aside” from the Compensatory Allotment), and the Career and Technology Allotment. These areas will be addressed in turn.

The CEI factors are out of date. Because of this, it is extremely likely that a number of school districts in Texas are receiving a disproportionate adjustment to their basic allotment. Conversely, it is also likely that a number of districts are not receiving the funds they should be receiving. The education community, however, which includes teachers, parents, students, school boards, school administrators, advocates for teachers, advocates for parents and students, and many others, are not advocating revisions to the CEI and have made it quite clear that they would actively oppose any change to the CEI.

Concerning the Compensatory Allotment, there is no direct link between those students generating compensatory education funds and those for whom the funds are intended to benefit. Funds are distributed based on the number of students in a school district eligible for the Federal Free and Reduced Price Lunch program. For the 1997-98 school year, Texas Education Agency data shows 1,924,785 students participating in the Federal Free and Reduced Price Lunch program.

The Compensatory Allotment is to be spent for accelerated instruction for students who are, under statutory guidelines (See Texas Education Code Sec. 29.081), considered to be at risk of dropping out of school. During the 1997-98 school year, the Agency listed 1,439,691 students as meeting the statutory definition of “at-risk”

of dropping out of school. With a discrepancy, however, of just under 500,000 between those figures used to generate the funds and those to which it is intended, it could be argued that the Legislature should consider using TEA's calculation of "at-risk" students in order to more accurately direct the monies toward their intended target. If so, it might also be appropriate for the Legislature to review the statutory definition of student at risk of dropping out of school.

An issue related to the Compensatory Education Allotment is the issue of "set-asides." During the past ten years the Legislature has developed the practice of setting aside certain amounts from certain allotments within the Foundation School Program to pay for specific programs. For example, around \$55 million annually is currently set aside from the compensatory fund to pay for the optional extended year program. The total set-aside amount (currently eleven separate programs are funded through "set-asides") has grown from \$6 million in 1985 to around \$126 million for the 1997-98 school year.

An additional, seemingly unintended cost for school districts that receive Tier II funds occurs because, after the respective amounts are set aside from the compensatory and gifted and talented allotments, the TEA in turn reduces each eligible school district's WADA. Because of the reduction of funds, the eligible student count must be compressed, otherwise there would not be enough funds available for the eligible students. This compression of WADA reduces state aid to school districts eligible for Tier II funds because such funds are based on a per-WADA amount. The total cost in reduced state aid, for the applicable school districts, amounts to approximately \$80 million for the biennium.

As for the career and technology allotment, the evidence shows that much of the monies distributed under this allotment do not fund career and technology training. Funds are used for training in fields that, while praiseworthy and very likely worthwhile to a student's education, are not courses that will prepare a student for work in a career or in the area of technology. Again, however, there appears to be no desire on the part of the education community or the business community to move for revision of this allotment.

Ultimately the Legislature receives its direction from the people of Texas. Although some of the formulas and allotments may be less than perfect, it is quite clear that these formulas are serving a legitimate purpose and, perhaps more importantly, the

education and business communities of Texas are content to leave these conditions alone.

*Goals and Recommendations:*

**The committee recommends, with the exceptions listed below, and subject to review in light of new information such as the current interim LBB report on the funding elements, that the 76th Legislature should retain the current system of allotments, weights and set-asides under the Foundation School Program to fund school districts.**

- 1. Direct the Texas Education Agency to subtract the set-aside funds from the Compensatory Allotment after calculating each school district's weighted student allocation.**
- 2. Re-structure the Gifted and Talented Allotment by directing the Texas Education Agency to use the funds formerly distributed under this allotment to establish awards for schools that increase the number of students completing a college prep curriculum or Advanced Placement courses.**
- 3. Increase the Transportation Allotment funding levels to more clearly reflect the state's role as a partner in school transportation funding.**
- 4. Appropriate additional funding for the Instructional Facilities Allotment program for new construction projects, in addition to continuing to fund the current state obligation.**



## **CHARGE #3**

*Study the management, investment, and distribution of funds dedicated to public and higher education, including the Permanent School Fund, Available School Fund, Permanent University Fund, Available University Fund and Higher Education Fund. The Committee should review the purpose of these funds and the ability of these funds to continue to meet the needs of the state.*

### **Dedicated Education Funds**

#### **The Present System**

While this charge encompasses the management, investment and distribution of the public and higher education dedicated funds, the committee focused on the ability of the Permanent University Fund, Available University Fund, and Higher Education Fund to provide adequate and equitable capital and academic excellence resources to all the state's public universities. Also, included in these discussions were capital funds available to institutions from issuing bonds backed by tuition revenue.

All universities, health-related institutions, Texas A&M University Service Agencies (excluding the Texas Wildlife Damage Management Service and the Texas Veterinary Medical Diagnostic Laboratory), and the Texas State Technical College System, have access to capital funding from either the Permanent University Fund or Higher Education Fund.

Amendments to the Texas Constitution in 1984 and 1993 determined which institutions participate in the Permanent University Fund and the Higher Education Fund.

#### **Permanent University Fund**

The Boards of Regents of The University of Texas System and the Texas A&M University System are authorized to issue bonds not to exceed 20 percent and 10 percent, respectively, of the value of the Permanent University Fund. These bond proceeds can be used to acquire land, construct, equip, repair and rehabilitate buildings, and acquire capital equipment and library books and materials.

Institutions eligible to use Permanent University Fund bond proceeds are:

- The University of Texas System
- The University of Texas at Arlington
- The University of Texas at Austin
- The University of Texas at Dallas
- The University of Texas at El Paso
- The University of Texas of the Permian Basin
- The University of Texas at San Antonio
- The University of Texas at Tyler
- The University of Texas Southwestern Medical Center at Dallas
- The University of Texas Medical Branch at Galveston
- The University of Texas Health Science Center at Houston
- The University of Texas Health Science Center at San Antonio
- The University of Texas M.D. Anderson Cancer Center
- The University of Texas Health Center at Tyler
- The University of Texas Institute of Texan Cultures at San Antonio
- Texas A&M University System
- Texas A&M University
- Texas A&M University Health Science Center
- Prairie View A&M University
- Tarleton State University
- Texas A&M University at Galveston
- Texas Forest Service
- Texas Agricultural Experiment Station
- Texas Agricultural Extension Service
- Texas Engineering Experiment Station
- Texas Transportation Institute
- Texas Engineering Extension Service

In addition to providing capital funding, the Constitution authorizes the Boards of Regents of The University of Texas System and the Texas A&M University System to allocate Permanent University Fund income to The University of Texas, Texas A&M University, and Prairie View A&M University to promote academic excellence. For 1998, excellence funding for The University of Texas at Austin was \$76.4 million. For the same year, excellence allocations to Texas A&M University and Prairie View A&M University were \$48.7 million and \$5.5 million, respectively.

Debt service payments on all Permanent University Fund bonds, excellence funding for the University of Texas at Austin, Texas A&M University and Prairie View A&M University, and administration of The University of Texas and Texas A&M University Systems totals \$247.6 million for 1999.

### **Higher Education Fund**

The Constitution dedicates revenue to the Higher Education Fund to be used for the same purposes as Permanent University Fund bond proceeds. The Legislature currently appropriates \$175 million each year to be allocated to the Higher Education Fund institutions according to amounts identified in law. [See Texas Education Code, 62.021(a)] The formula to allocate these funds is reviewed every five years. In addition, the Legislature has appropriated \$50 million each of the last four years to begin creating a \$2 billion permanent Higher Education Fund. Once the fund reaches \$2 billion, the investment income of the fund will provide capital resources to the Higher Education Fund institutions.

Institutions eligible for Higher Education Fund resources are:

- The University of Texas - Pan American
- The University of Texas at Brownsville
- Texas A&M University - Commerce
- Texas A&M University - Texarkana
- Texas A&M University - Corpus Christi
- Texas A&M University - Kingsville
- Texas A&M International University
- West Texas A&M University
- University of Houston System
- University of Houston
- University of Houston - Clear Lake
- University of Houston - Downtown
- University of Houston - Victoria
- Midwestern State University
- University of North Texas
- University of North Texas Health Science Center at Fort Worth
- Stephen F. Austin University
- Texas Southern University
- Texas Tech University

- Texas Tech University Health Sciences Center
- Texas Woman's University
- Angelo State University
- Lamar University, including Lamar Orange, Port Arthur and the Institute of Technology
- Sam Houston State University
- Southwest Texas State University
- Sul Ross University, including the Rio Grande Campus
- Texas State Technical College System

### **Tuition Revenue Bonds**

Institutions are required to obtain legislative authorization to issue tuition revenue bonds, and are reimbursed through appropriations for annual debt service payments on these bonds. For the 1997 legislative session alone, over \$638 million in tuition revenue bonds were authorized at 41 of the state's universities and health related institutions. These funds are used to acquire, purchase, construct, improve, renovate, enlarge, or equip property, buildings, structures, facilities, roads, or related infrastructure.

### **Discussion of Issues**

The table in Appendix A shows total capital and academic excellence funding available to the institutions for 1999. Given the vast differences in student enrollment at each university, total capital and academic excellence funding is viewed based on the number of weighted credit hours taught at each university. Capital and academic excellence funding per semester credit hour ranges from lows of \$6.65 at Sul Ross State University Rio Grande College and \$7.20 at The University of Texas at Arlington, to highs of \$104.43 at Texas A&M International University, \$51.43 at The University of Texas at Brownsville, and \$42.89 at The University of Texas of the Permian Basin.

These data illustrate the disparity of capital and academic excellence funding available to our public universities. While some of the disparities can be explained by enrollment changes and the conversion of institutions from upper-level to four-year universities, some schools are disadvantaged in their efforts to finance capital and academic excellence needs.

*Goal and Recommendation:*

**The committee recommends that additional funding be provided to universities to compensate for the disparities in capital and academic excellence resources available to all institutions.**

## CHARGE #4

*Study the factors affecting undergraduate enrollment and graduation rates at public colleges and universities in Texas, and make recommendations for any necessary legislative action. The Committee should consider the costs of higher education and the availability of financial assistance to students; collaborative efforts between higher education and public education systems; and student recruitment and retention efforts. The Committee should also consider methods to effectively measure institutions' performance in meeting enrollment and graduation goals set by the Legislature.*

### **College and University Enrollment and Graduation**

#### **Improving Preparation of Public School Students for Post-secondary Education**

Although Texas' high school graduates enroll in colleges and universities at about the same rate as their national counterparts, the graduation rate from Texas' colleges and universities is substantially lower than the national average. In addition, over half of Texas' incoming freshman fail one or more portions of the Texas Academic Skills Program (TASP) and take one or more remedial courses. Unfortunately, only one in five students who take a remedial course ultimately receives a college degree.

Almost all national and state measures indicate that the two best predictors of graduation from a college or university are a student's socioeconomic status and the strength of the high school curriculum taken by a student. These two factors outweigh other common measures, such as race, ethnicity, achievement test scores and grade point average. While state educational policy cannot directly affect a student's socioeconomic status, it can directly affect the curriculum offered to the student and the motivation for the student to take advanced curricula.

The goal of improving the preparation of college-bound students includes a need to focus on improving and expanding the mathematics and science courses offered and completed in middle and high schools. There are two compelling reasons for this focus. First, success in these academic areas in grades 8-12 is linked to ultimate success in colleges and universities. Second, many jobs expected to be created in Texas over the next two decades require increased instruction and learning in math and science.

Research has revealed that successfully completing college ultimately depends on foundations laid and the academic skills mastered in a child's early years. In this sense, college preparation begins with a child's readiness to learn before entering kindergarten and is greatly affected by a child's mastery of reading. Moreover, studies indicate that if a child falls behind in education at this early stage, it is unlikely that he or she will be able to catch up.

In addition to the primary policy goal of improving student preparation for college, there are a number of other initiatives directly related to it. Paramount among these are ensuring both that appropriate college-bound curricula are offered by Texas schools and that such curricula are taught by teachers certified in the particular subject matter areas. In order to improve student preparation, and provide that higher quality pipeline, high schools must offer better curricula and there must be qualified teachers to teach it.

One perennial issue concerning teacher quality has been the lack of certified teachers in certain subject matters, particularly math, science and bilingual education. Data from the State Board for Educator Certification indicates that in Texas more than 30 percent of the teachers in these fields are not certified to teach in that particular area. Given the importance of each of these disciplines in raising current student academic performance, in meeting the future workforce needs of Texas' expanding high technology industries and in successfully assisting students whose native language is not English transition to the traditional classroom, it is critical that the State adopt a comprehensive program to address these teacher shortages.

***Goals and Recommendations:***

- 1. Maximize individual educational opportunity and increase chances for student success.**
  - a. Fund pilot programs in reading preparation for pre-kindergarten students in the lower socioeconomic status (SES) levels.**
  - b. Improve reading instruction and mastery in the early grades.**
  - c. Ensure that promotion standards are linked to academic achievement, and that early identification and extended**

**instruction are provided to students having difficulty meeting those standards.**

- 2. Increase the number of students completing advanced high school curricula.**
  - a. Adopt a college financial aid program that provides substantial grant funds for the college education of high school students who complete at least the Recommended High School Program.**
  - b. Directly link college admissions to high school curriculum successfully completed, including amending the statute requiring any state university to automatically admit any student finishing in the top ten percent of his/her high school class to require additionally that the student have completed at least the Recommended High School Program.**
  - c. Fund pilot projects in low SES areas for mentoring and tutoring programs that link colleges, public schools and prospective employers with the goal of identifying, encouraging and preparing qualified middle school and high school students to pursue postsecondary education.**
  - d. Provide funds for students in the lower SES levels to take Advanced Placement and TASP tests.**
  - e. Standardize the policies by which colleges and universities give course credit for Advanced Placement test scores.**
  - f. Expand the offering of college/university core curriculum courses as dual enrollment courses.**
- 3. Improve the curricula offered by high schools.**
  - a. Require the collection of certain data concerning Texas high school graduates who enroll in a Texas college or university,**



- including any achievement test scores, continuation of the student into the sophomore year and sixth-year education status, report it to the high school from which the student graduated, and include it in the annual Academic Excellence Indicator System (AEIS) of the high school for accountability purposes.
- b. **Provide funding for teacher training in Advanced Placement and “gateway” courses (“gateway” courses are courses, such as Algebra I and Geometry, which are effective predictors of enrollment in, and graduation from, a college or university).**
  - c. **Adopt changes in the public school formula to reward schools that increase the number of students completing the Recommended or Distinguished Achievement programs or Advanced Placement courses.**
4. **Increase the number and quality of certified teachers, especially in critical shortage areas.**
- a. **Adopt student financial aid programs (e.g. loan, grant, or work study programs) designed to provide teachers for critical subject matter shortage areas.**
  - b. **Institute student loan repayment programs for new teachers in critical shortage areas, with at least five years of service required.**
  - c. **Provide state or local stipends for teachers in critical subject matter shortage areas (math, science, and *bilingual education*).**
  - d. **Provide pay or per diem supplements for teachers who: (1) become certified in critical subject matter shortage areas; (2) receive additional training in such areas; or, (3) receive training in such areas as Advanced Placement (AP) courses, reading or other areas deemed important by state policy.**

- e. *Provide stipends to inservice reading teachers who receive training in recognizing the characteristics of various learning disabilities including dyslexia (estimated cost of up to \$250 per teacher).*
- f. **Direct the Legislative Budget Board to study university funding of teacher preparation programs and the amount of money generated by such programs and file a report with any recommended policy changes with the 77th Legislature.**
- g. **Direct the Higher Education Coordinating Board and universities to develop degree tracks in math education and science education, providing that such degrees maintain the current balance of pedagogy and subject matter.**
- h. **Give incentives to universities to direct students into the teaching field in shortage areas. On a related matter, ensure that university and college professors are informed that there is a shortage and in what areas.**
- i. *Provide training to all inservice and preservice teachers, especially those in middle and high schools, on effective methods of serving limited English proficiency (LEP) students, to facilitate the mainstreaming process.*
- j. *Require all preservice teachers in elementary or reading education to receive basic instruction in learning disabilities as a requirement for certification.*
- k. *Require institutions of higher education to include the integration of technology into instruction as a required element of teacher preparation programs.*

*Italicized text indicates items which are also recommendations of the Senate Interim Committee on Education.*

## **Improving the Graduation Rate of Texas Public Colleges and Universities**

In the United States, the receipt of a baccalaureate degree is believed to be good for both the individual and the society. This conclusion is buttressed by all measures that quantify the financial impact of undergraduate and graduate degrees. Thus, college graduates earn more money annually and over a lifetime and spend more money in consumption and taxes than do persons who do not receive an academic degree.

Depending upon the measurements used, Texas college and university graduation rates lag between 15 percent to 25 percent below colleges and universities in other states. Similar disparities exist between Texas' two flagship universities and their peer institutions in other states. These disparities are projected to widen over the next few decades as Texas' poorest and least educated population is expected to grow substantially. The end result is that, if current trends continue, the overall educational achievement and standard of living in the state will decline.

This sobering projection darkens considerably when applied to what has been an intransigent fact about Texas graduation rates: Texas colleges and universities have had no proven success in increasing their graduation rates over the past three decades. These rates have persisted over time despite efforts by individual colleges and universities. Nonetheless, Texas can impact two of the more significant issues affecting persistence in and graduation from college: pre-college preparation and availability of financial aid. In addition, it can design and monitor pilot projects aimed at impacting this seemingly intractable problem.

### ***Goals and Recommendations:***

- 1. Increase financial aid monies available to Texas college and university students.**
  - a. Adopt a college financial aid program that provides substantial grant funds for the college and university education of high school students who complete at least the Recommended High School Program (See also pp. 3 and 18).**

- b. Adopt work study programs that focus on recipients working as mentors or tutors.**
- 2. Increase the graduation rates at Texas colleges and universities.**
  - a. Adopt performance funding measures that reward colleges and universities which improve their retention and graduation rates.**
  - b. Adopt performance funding measures for remedial courses that reward colleges and universities which improve the retention and graduation rates of students taking remedial courses.**
- 3. Improve the collection and analysis of information relating to Texas college and university students.**
  - a. Require community colleges to report more precisely on students who are seeking degrees, students who are in adult basic education courses, and students who are merely taking the occasional course.**
  - b. Require the collection of certain data concerning Texas high school graduates who enroll in a Texas college or university, including any achievement test scores, continuation of the student into the sophomore year and sixth-year education status, report it to the high school from which the student graduated, and include it in the annual AEIS of the high school for accountability purposes (see also pp. 18-19).**

### **Linking the Public and Higher Education Systems to Improve Student Achievement**

If it is the goal of both public and higher education to raise the level of academic achievement of students in Texas then it is unfortunate that a lack of communication currently exists between these two systems. Students who cannot meet the academic rigors of college fail, in part, because of a lack of consistency and coordination

between public and higher education systems. To some extent, earlier recommendations address this weakness, for example, by seeking to encourage students to take curricula which will better prepare them to meet the demands of higher education and by requiring Texas colleges and universities to collect academic data and report it to the high school from which a freshman student graduates. Other strategies, however, are needed.

A number of states have adopted policies designed to better align the activities and functions of their public and higher education systems. Several reasons justify this effort including: improving the coordination of curricula and standards, easing the transition of students between systems, increasing the knowledge of the functions and needs of the various parts of the systems, encouraging cooperative reporting, record-keeping and analytical functions, and the development of better performance-based assessments at all levels of the system.

***Goals and Recommendations:***

- 1. Direct the Commissioner of Education and the Commissioner of Higher Education to:**
  - a. align curriculum and assessment tools directly affecting college enrollment and graduation (i.e., the college-bound curricula, Texas Assessment of Academic Skills (TAAS) and TASP);**
  - b. adopt compatible information systems for the agencies that facilitate the sharing of information and analysis; and,**
  - c. recommend appropriate teacher preparation and training programs, including continuing education programs.**
- 2. Move the exit-level TAAS to the 11th grade, align it with college-bound curricula, and use it not only as an assessment test but one that can substitute for TASP.**
- 3. Place the responsibility for completion of most remedial programs on the public high school and provide the funds to support it.**

- 4. Phase out the TASP for students entering college directly from high school and increase reporting required from colleges and universities on student retention and graduation.**

## CHARGE #5

*Evaluate and, if needed, make recommendations to determine need and allocation of funds for higher education budget special items, medical schools and Texas A&M Service agencies.*

### Funding in Higher Education

#### Higher Education Budget Special Items

A large portion of state funding for Texas public universities is calculated based on two formulas for (1) instruction and operations, and (2) infrastructure support. In addition, supplemental funding is provided for institutions experiencing growth in student enrollment. The Legislature also provides incentive funding through a teaching experience supplement for undergraduate classes taught by tenured and tenure-track faculty. For the 1998-1999 biennium, funding through the formulas, including supplemental and incentive funding, represents 80.4 percent of the total appropriations for universities.

Institutions also receive a direct appropriation as reimbursement for staff group insurance, workers' compensation insurance, unemployment insurance, public education grants, 50 percent of indirect research costs recovered on grants, organized activities (self-supporting), Skiles Act and tuition revenue bond payments and facility lease charges.

Additionally, non-formula funds are appropriated for special instructional needs, research endeavors, public service projects, and other institutional requirements for each university. These special items and the amount of funding have increased over several biennia. For 1998 and 1999, special item funding for the universities, including the Lamar centers, reached \$311.8 million, or about 8 percent of total funding for general academic institutions.

In response to concern about the growing emphasis on special items and the level of funding that flows to the universities outside of the formula process to fund special items, staff from the Senate Finance Committee and LBB, on behalf of the Interim Committee on Funding Issues in Education, visited each university to assess the purposes for which special item appropriations are being used. These site visits were conducted from September 1997 through May 1998. In addition, the universities

provided detailed budget and programmatic information on each special item in response to a staff-developed questionnaire.

After the fall site visits were concluded, criteria were developed to guide staff in objectively identifying types of special items that could be considered for a possible reduction or elimination of funding. Follow-up meetings were held in Austin with officials from each university to conduct further discussions about special items meeting one or more the following criteria.

The special item appropriation:

- Provides start-up funding to establish a new degree program or programs.
- Provides general research funding that is either granted to faculty using a competitive, peer-review process or is not for a specific project or program.
- Pays for activities intended to be covered by formula funding, such as remedial education, student services, administration of research programs, etc.
- Pays for items eligible for funding with Higher Education Funds (HEF) or Permanent University Fund (PUF) bond proceeds, such as capital equipment, library materials, repair and rehabilitation, and new construction.
- Pays for activities that can generate adequate external funding, such as grants, contracts, or fees for services, to cover the cost of the program.
- Provides funding for research for which there is no longer a compelling state need (e.g., energy research funded in 1970s in response to the OPEC oil crisis).
- Provides funding for research or services which duplicates that conducted by another university, entity, or state agency.



- Pays for activities that are auxiliary to the central mission of the university and are not generally paid for with state educational and general funds.
- Provides funding for a program that is similar to programs at other universities and, if consolidated under a single entity, would be administered more efficiently.

In addition, alternative mechanisms were explored for providing funding, on a formula basis, to all institutions to replace similar types of special items that represent a need at all universities. As an example, there are 13 special items funding student recruitment and retention programs. However, all universities have in place a number of student recruitment and retention efforts that are funded from a variety of sources, such as formula dollars, fee revenue, grants or special item funds. Regardless of the source of funding, this appears to be a program need at all the universities.

*Goals and Recommendations:*

- 1. Eliminate the majority of special items funded at the universities and Lamar centers, either beginning in 2000 or over time, and distribute a greater percentage of total funding by formulas.**
- 2. Adopt other funding mechanisms to address the range of needs of all institutions.**
  - a. Phase-out special items that provide start-up funds for new degree programs as formula funding is generated to support the program.**
  - b. Provide funding to all universities to support student recruitment and retention programs. The formula should be similar to the retention supplement for economically disadvantaged students recommended by the Higher Education Coordinating Board that is based on costs associated with providing improved student advising and counseling, and additional instructional assistance for all freshman core academic courses.**

- c. Allocate discretionary research funds to universities to use as seed or matching funds to attract external research dollars and to cover research equipment and other research infrastructure costs. Eliminate most research special items except those that are generally separately located entities conducting research of statewide significance.**
- d. Eliminate special item funding for scholarships as a result of increasing financial aid dollars available to Texas college and university students (see p. 3).**
- e. Redirect state funding for Small Business Development Centers (SBDCs) and other economic development special items to the Texas Department of Economic Development for allocation to the same institutions currently receiving SBDC and economic development special item funding. Direct the Texas Department of Economic Development to report to the 77th Legislature on the effectiveness of these economic development activities and the appropriateness of the current allocation of state dollars for these purposes.**

### **Health-Related Institutions**

State funding for the 10 health-related institutions totals almost \$3 billion for 1998 and 1999. These institutions include:

- The University of Texas Southwestern Medical Center at Dallas
- The University of Texas Medical Branch at Galveston
- The University of Texas Health Science Center at Houston
- The University of Texas Health Science Center at San Antonio
- The University of Texas M.D. Anderson Cancer Center
- The University of Texas Health Center at Tyler
- Texas A&M Health Science Center
- Texas A&M System Baylor College of Dentistry
- University of North Texas Health Science Center at Fort Worth
- Texas Tech University Health Sciences Center

The health-related institutions provide medical, dental, biomedical science, public health, allied health, and nursing education. They also support residency and post-doctoral training, conduct significant research, and provide over \$500 million in unreimbursed health care services to indigent patients statewide.

Unlike other areas of higher education, the health-related institutions' funding is not calculated using formulas and appears to be founded on historical appropriations. For 1998 and 1999, \$30 million in additional funding was provided to seven health-related institutions. Funds were appropriated by rider based on each institution's share of instruction funding but could be used in support of its academic, research or patient care activities.

Like the universities, the health-related institutions receive funding for a variety of special items, primarily focused on research. Special item funding for these institutions totals \$83.6 million for 1998 and 1999.

***Goal and Recommendation:***

**The committee recommends that formulas be constructed, similar to the formulas for the universities, to rationalize funding for the health-related institutions.**

**Texas A&M University System Agencies**

As a land-grant university, Texas A&M University was chartered not only to provide the usual and customary degree programs of a comprehensive university, but to conduct research and deliver services needed by the agricultural and industrial sectors of the Texas economy. To fulfill this obligation, the Texas A&M University System includes eight state agencies collectively referred to as the Texas A&M University System Service Agencies. These agencies have a long history of providing Texas citizens access to education, training, technology and research. The agencies serve as a daily link between the universities of the Texas A&M University System and the citizens of the State for information, technical assistance, vital services and training programs that educate the workforce, strengthen families and provide economic development for both rural and urban communities. The agencies each have statewide missions and responsibilities both in terms of service to the people of Texas and in terms of promoting and conducting research. The A&M University System agencies

are listed below, and a brief description of each agency is included in Appendix B at the end of this report.

**Research Agencies:**

- Texas Agricultural Experiment Station
- Texas Engineering Experiment Station
- Texas Transportation Institute

**Service Agencies:**

- Texas Agricultural Extension Service
- Texas Veterinary Medical Diagnostic Laboratory
- Texas Forest Service
- Texas Wildlife Damage Management Service
- Texas Engineering Extension Service

**Current and Past Funding of the TAMUS Agencies**

Unlike the general academic institutions, the Texas A&M University System agencies are not funded on a formula basis in which the formula establishes “units” (e.g. SCHs) of desired production and appropriates funding on an equitable basis among several institutions according to how many such units are produced by each institution. Instead, funding is provided on a demonstrated need basis.

**Discussion of Issues**

At the conclusion of the 75<sup>th</sup> Regular Session four issues remained unresolved with respect to funding the Texas A&M University System research and service agencies:

- Infrastructure** - (1) Verify the Brazos County infrastructure inventory of the agencies;  
(2) Develop a space model to predict the agencies’ needs in a manner equivalent to the universities;  
(3) Develop a method of funding the agencies’ infrastructure
- Indirect cost** - (4) Recover for the State of Texas 50 percent of indirect costs earned by the research agencies.

**Higher Education Coordinating Board Infrastructure Study**

During the 75th legislative session, a charge was given to the Texas Higher Education Coordinating Board (HECB) to develop an equitable mechanism to fund the agencies' infrastructure costs for facilities located in Brazos County.

The HECB began the infrastructure study with a review of the space inventory for Texas A&M University and the Texas A&M University System Service Agencies. This review included an audit by HECB staff to determine the accuracy of information provided to the HECB by the university and the service agencies in the space inventory. Upon conclusion of the audit, the HECB reported there were no discrepancies in the total amount of space allocated either to the university or the service agencies, thereby assuring there was no "double counting" of space allocated to the university or service agencies.

The HECB also determined through comparison and analysis that the space projection model for community and technical colleges, used by HECB to predict space needs for this particular class of educational institutions, could be adapted with minor exceptions to accurately predict the space needs of the service agencies.

### **Comparison of Indirect Costs at General Academic Institutions and Texas A&M University System Services**

General academic institutions that are awarded research grants are required to remit 50 percent of the allowable indirect costs associated with each grant to the State to pay for overhead costs attributed to the institution's grant activity. Overhead costs are generally classified as payroll, utilities, research space, etc. Since the State has provided funding for 100 percent of an institution's overhead cost, the ability of an institution to keep 50 percent of the indirect cost recovery funds was meant to provide an incentive to institutions to increase the amount of their research grant activity.

The funding policy for the Texas A&M University System Service Agencies, because they are not formula funded, has allowed them to retain 100 percent of research-related indirect cost recoveries. This policy has applied to all agency research grant activity, including grants that are awarded through the Texas A&M University Research Foundation.

### **Program Funding for the Texas A&M University System Services**

Texas A&M University System Services perform vital functions of information and technology transfer to the citizens of Texas that lead to a healthier and safer environment, a skilled and globally competitive workforce, stronger and safer communities, and responsible, productive, self-motivated youth and adult leaders. With the Texas A&M University System Services' primary mission being service to the people of Texas, it can be noted that the programs and activities of both the research and service oriented agencies do not easily lend themselves to a formula-based funding mechanism. These programs are closely related to the programs one might find at state agencies that are independent of the higher education community. For this reason, the legislature has in the past appropriated programmatic funding to both the research and service oriented agencies by evaluating needs and assessing priority to those needs.

### **Comparison of Funding Structure**

The general academics' funding structure relies on the appropriation of educational and general funds, which consist mainly of tuition and fees, as an institution's source of educational revenue outside of general revenue. The Texas A&M University System Services rely on similar revenue components known as research and general funds. The research and general funds available to the Texas A&M University System Services are composed primarily of general revenue funds and indirect cost recoveries. The Agricultural Experiment Station also maintains certain other funds for its regulatory and research functions, including federal formula funds through the Hatch Act, sales funds, feed control funds, and fertilizer control funds. These funds are accounted for as "research and general funds" in the same manner that the universities account for "educational and general" funds. The rest of the research agencies' funding consists primarily of funds restricted to perform the actual research and development work which is managed by contracts and stated deliverables.

### ***Goals and Recommendations:***

- 1. To determine space needs of the Texas A&M University System Services, the legislature should implement the recently adopted HECB study "Infrastructure Support For Texas A&M University System Services Facilities Located in Brazos County, Texas."**
- 2. A proposal has been discussed in the higher education community regarding an increase of up to 100% of indirect cost recoveries being**

returned to general academic institutions. Whatever policy is adopted concerning the retention of indirect costs for general academic institutions should also be applied to the Texas A&M University System Services, regardless of whether the research grants were awarded through the research foundation.

3. **The appropriation of programmatic funds for both the research and service oriented agencies should be based on demonstrated need provided by the Texas A&M University System Services. These programmatic funds will be evaluated by the Legislature in a manner similar to other state agencies.**
4. **The Legislature should appropriate the Texas A&M University System Services' research and general funds in the same manner as the general academic institutions' educational and general funds are appropriated.**

## SUPPLEMENTAL CHARGE

*Study the costs of textbooks for public schools and, if necessary, make recommendations to improve the purchasing process to ensure that Texas schools are receiving the best price possible. In its work, the Committee should examine the use of computers and other technological resources as alternative teaching aids to textbooks and consider whether these alternative resources are more economical and efficient in enhancing the learning capacities of children.*

### Textbooks and Laptops

#### The Present System

The current process for purchasing textbooks had its genesis in legislation first proposed by Governor Sul Ross in 1891. Governor Ross had championed the issue of state uniformity for textbooks. Legislation was indeed passed, but the enacting clause mysteriously disappeared, causing the law to be void. In the ensuing 107 years, the textbook adoption process has grown into a complex system involving hundreds of millions of dollars.

Today, the State Board of Education (SBOE) establishes the review and adoption cycle for textbooks in Texas. Funding for textbooks is set out in the state constitution, and the SBOE is obligated to set aside from the Available School Fund an amount sufficient to fund the purchase and distribution of textbooks for the use of students. Other duties of the SBOE include: setting a limit on what may be paid for a textbook; establishing the physical specifications for textbooks; and, adopting conforming (meets all physical specifications and contains each element of the essential knowledge and skills for the particular subject and grade level) and non-conforming (meets all physical specifications and contains at least half of the elements of the essential knowledge and skills for the particular subject and grade level) lists of textbooks.

There are no limits on the number of textbooks that may be adopted in any subject area. Further, school districts may purchase books not on either list and still receive partial reimbursement from the state.



The actual process, from the initial development of bid specifications to the delivery of books to the classrooms, takes several years. A simplified description of this process is:

- Spring/Summer 1995 - Proclamation (bid specifications for publishers) development. Proclamations are developed by subject area committees and are later adopted by the SBOE.
- November 1995 - Proclamation adopted by SBOE.
- November 1995 - Spring 1997 - Publishers develop materials.
- Spring 1997 - Publishers submit samples to the Texas Education Agency (TEA); TEA appoints review committees.
- Spring/Summer 1997 - Review committees receive books and meet.
- Summer 1997 - Review committees make recommendations to the Commissioner of Education.
- September 1997 - SBOE public hearing.
- November 1997 - SBOE adoption.
- Winter 1997 and Spring 1998 - Notices to school districts about adopted materials.
- Summer 1998 - Materials delivered to school districts.
- 1998-1999 school year - Materials used in the classroom.

### **Discussion of Issues**

In addition to criticism regarding the length of time involved in the adoption cycle, there are also those who question current practice of, for each Proclamation, choosing textbooks in a wide variety of subject areas. For example, Proclamation 1997, which is for textbooks to be used beginning in 2000, includes History, Science, English,

Health, and Reading/Language Arts. Such variety would not appear to lend itself to a smooth, efficient process.

Another criticism of the process involves the adoption cycle. The SBOE currently uses a 6-year adoption cycle. Although this is not a problem for certain subjects, it has been noted that Texas students still have history and social studies textbooks that do not address the dissolution of the Soviet Union or the fall of the Berlin Wall.

Finally, there is the issue of whether textbooks should be replaced or supplemented through the use of laptop computers, which leads into the second part of the committee's charge. There is a great deal of interest in moving modern technology into the classroom. This is driven by a number of factors, not the least of which is that computer and key board skills are becoming essential in the job market. Further interest in this area stems from the hope that computers will provide easier access to educational materials for teachers and students, greatly broaden the available curriculum, allow for better communication both within schools and between schools, allow students and teachers to access materials and resources from their homes (or even while riding the school bus), and, in sum, improve and enhance the education of the school children of Texas.

Obviously, however, there are concerns, obstacles, and legitimate issues to be addressed in this area. Among the issues raised during discussions with interest groups, representatives of the computer hardware and software industries, and others are the following:

- Substituting laptops for textbooks is an expensive endeavor.
- Teachers must be trained, support staff must be trained and readily available, schools must be networked, and curriculum must be available. Realization of these goals is still in the embryonic stages.
- Some schools and parents are already providing computers for students. The overwhelming majority of these situations are in well-to-do areas. As this trend continues, the state may face some equity concerns regarding poor school districts' lack of access to technology hardware.
- Some computer companies are providing computers (along with training and maintenance assistance) to local schools as part of "good neighbor" initiatives.

The companies cannot afford to do this for the entire state, but these may be interesting models to watch.

- Whether the state should lease equipment, instead of purchasing it, because of rapidly changing technology.

Perhaps the paramount consideration regarding laptop computers is the cost involved. Due to the fact that various adoption cycles involve different numbers of textbooks, annual state expenditures for textbooks vary greatly from year to year. The state spent approximately \$45 million for the 1996-1997 school year, however, approximately \$365 million is projected to be spent for the 1998-1999 school year. On a per-student basis this amounts to a range of around \$12.00 per student to around \$70.00 per student for textbooks. The cost of an individual portable computer is not yet in this range.

Competition, and a large job market may, however, drive these costs down to a level that the state could consider reasonable. In addition, if the machines are durable and versatile enough, they could replace some of the costs inherent in the textbook process. For instance, rather than purchasing a new third grade math textbook every six years, schools may be able to down-load the material onto the students' computers. These issues clearly lend themselves to the study of this issue. Thus, a pilot project is the next logical step.

In addition to this committee's deliberations on this issue, two additional efforts to further the use of technology are underway. First, SB 294, passed in the 1997 legislative session, charged the TEA with developing "a study project to determine the costs and benefits of using computer networks" in the public schools. It also created an advisory committee to assist TEA. The committee is made up of agency personnel, textbook publishers, educators, students, and technology experts, all appointed by the Commissioner, as well as two members each of the House and Senate. Representative Scott Hochberg, Representative Ric Williamson, Senator David Sibley, and Senator Eliot Shapleigh are the legislative members of this committee.

There are a number of school districts that presently are piloting the use of laptops and the Internet. TEA plans to select certain of these districts and use them for pilot studies. These projects would be part of the program recommended below.

*Goals and Recommendations:*

- 1. Encourage the TEA and the SBOE to align the textbook adoption process with the curriculum revision process. Adoption should, to the extent practicable, encompass single subject areas or like subject areas.**
- 2. Encourage the TEA and the SBOE to revise the adoption process so that not all subject areas are on a six-year adoption cycle. Certain subjects, such as social studies, might be considered for shorter cycles. Other subjects, wherein the subject matter does not change greatly over certain time periods, could remain at a six-year or longer cycle.**
- 3. TEA should issue a request for proposals (RFP) from vendors with the goal of selecting three to five of the best proposals for the use of laptop computers and other technologies in the class room. These systems should then be piloted in a variety of sizes and types of school districts in Texas. In addition to cost, the principal criteria used to evaluate the proposals should be based upon which proposals show the most promise of increasing the classroom achievement of students.**