#### DOCUMENT RESUME

ED 306 916 JC 890 352

AUTHOR

Cloud, Robert C.

TITLE

Texas Two-Year College Funding: Issues for the

1990's.

PUB DATE

Aug 89

NOTE

21p.

PUB TYPE

Viewpoints (120)

EDRS PRICE

MF01/PC01 Plus Postage.

DESCRIPTORS

Community Colleges; \*Educational Finance; Educational Trends; \*Finance Reform; \*Financial Support; \*State

Aid; State School District Relationship; State Surveys; \*Tax Allocation; Tuition; Two Year

Colleges

IDENTIFIERS

Contact Hours; \*Texas

## **ABSTRACT**

An overview is provided of trends and issues in the financial support of Texas's community colleges. Part I provides introductory comments on the functions, enrollments, and costs of the state's public community college system. Part II reviews nationwide trends in the state and local support of two-year colleges, effects of declining revenues, models of financial support, and efforts to stabilize funding. Part III offers a historical overview of the funding process in Texas and explains the contact hour system used to support all instructional costs other than facilities construction, maintenance, and operation. Under the contact hour system of funding, appropriations are based on a median cost figure for each program applied to the contact hours produced for that program. The structure enables each community college to receive a line item appropriation each biennium based on contact hours produced by the college during the previous funding period. After highlighting the benefits of this funding structure, the paper details state appropriations for 1988-89 and discusses other sources of college revenue. Part IV identifies funding issues for the 1990's and beyond, including the need to diversify the state's economy; the the need for colleges to solicit corporate and private financial support; the effects of state legislation mandating skills assessment and remediation for entering college students; and the impact of population dynamics. After part V discusses the implications of the state's continuation as the primary funding source for the community college system, part VI draws conclusions and offers recommendations. (ALB)

Reproductions supplied by EDRS are the best that can be made

\*

from the original document.

\*



## TEXAS TWO-YEAR COLLEGE FUNDING:

ISSUES FOR THE 1990'S

Robert C. Cloud

August 1989

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R. C. Cloud

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this docu-ment do not necessarily represent official OERI position or policy



# TEXAS TWO-YEAR COLLEGE FUNDING:

# ISSUES FOR THE 1990'S

# TABLE OF CONTENTS

- I. Introduction
- II. Overview of the Funding Issue
- III. The Texas Funding Process
  - IV. Funding Issues for the 1990's and Beyond
    - V. Epilogue
  - VI. Conclusions and Recommendations



# TEXAS TWO-YEAR COLLEGE FUNDING: ISSUES FOR THE 1990'S

#### INTRODUCTION

The public community college movement in Texas began in the 1920's with a small number of institutions financed totally from local funds and student tuition and fees. State support began in the early 1940's and contributed to relatively slow, but steady growth through the 1950's. Creation of the Coordinating Board, Texas College and University System in 1965 brought great impetus to all of higher education, and particularly the community college sector. Through its Policy Paper 2 in 1968, the Coordinating Board endorsed a system of two-year colleges dispersed so that a college would be within commuting distance of 90% of the state's population. By 1986, that goal was met through a network of 49 districts and 66 campuses throughout the state.

Texas two-year colleges now provide two indispensable state functions based on a service orientotion: (1) educating and training workers for Texas business and industry and (2) providing the first two years of baccalaureate level course work. Consequently, they are popular with Texans. More than six hundred thousand Texans attend public community colleges. Headcount enrollment in credit courses increased from 327,425 in 1987 to 346,439 in the fall semester, 1988. Moreover, Texas colleges serve an additional 300,000 students each year in noncredit vocational and avocational courses.2 Because of their open-door admissions, low cost and easy accessibility, caring environment, and comprehensive offerings, these colleges enrolled 66% of the freshmen and sophomores and 47% of all the students in Texas public higher education in 1988.



These percentages are likely to increase during the 1990's because of the continuing popularity of these colleges and increasing costs in the senior institutions. Community colleges appear to be a bargain for the state as well as the students. In 1987-88, the state spent \$3,800 per student in senior institutions, while the state expenditure for each two-year college student totaled only \$1,500.

# OVERVIEW OF THE FUNDING ISSUE

Financing of the nation's 1220 community colleges is an issue in virtually every state. Though funding plans differ and the issues vary, there are common elements in the issue from state to state.

State support for public community colleges averaged 53% of total revenues in 1985, down from the 58% level of 1982. Federal support also declined during this period, from 4.6% to 2.6%

Higher education researchers in recent years have predicted difficulty in maintaining adequate financing for the comprehensive mission of the community colleges. Consensus regarding the scope of various two-year college activities has not been reached, and this divergence has brought funding ceilings to many segments of these institutions. Limited economic resources and lack of consensus have reduced financial support considerably.<sup>5</sup>

In concert with national trends, state support for Texas institutions decreased by 22% between 1982 and 1987. Moreover, this depressing economic climate was made worse when final 1988-89 contact hour rates equaled only 74% of the amounts recommended by the Legislative Budget Board and the Coordinating Board. The primary effect of this eroding state support has been to force rising property taxes on residents in the college districts and to increase tuition and fees for students. Local college taxes have increased by an average of more than



100% since 1982. Tuition rates more than doubled between 1984 and 1989 and now average about \$12.00 per semester hour. Additional increases may be necessary in some districts to balance operating budgets. When coupled with significant current enrollment increases and increasing service expectations from the public, this economic profile presents administrators and governing boards with unprecedented problems, some of which defy solution.

Declining revenues have impacted the college administrations through deferred building maintenance, curtailment of professional travel, reduced funding for equipment and supplies, and the elimination of programs with marginal enrollment and/or a highly specialized curriculum. Austerity has also caused reductions in force, frozen salary levels, reduced fringe benefit packages, and increased workloads for faculty and staff.

In an effort to deal with the financing dilemma, community colleges across the nation are utilizing four different models of support: the negotiated budget, unit rate formulas like the one used in Texas, the minimum foundation, and cost-based program funding. Unfortunately, none of these systems is totally satisfactory for all institutions in a given state, much less the nation, because each campus faces a unique combination of challenges and opportunities. Wattenbarger has reported that the number of states negotiating budgets with each institution is increasing, and this of course, contributes to the complexity of the issue because of the possible political implications.

In concluding their 1981 study of two-year college financing, Breneman and Nelson made the following recommendations:

- 1. increased local tuition, coupled with increased student aid;
- increased local support for community college programs;
- 3. user fees that cover costs of most community service activities;



- 4. continued restriction of federal Pell grants to students enrolled for at least a half-time course of study;
- 5. state funding of remedial courses; and
- 6. formulas shich reflect the fact that unit costs differ with college size.8

In recent years, the State of Texas has addressed each of the aforementioned issues in an effort to stabilize two-year college funding. Without doubt, these and other issues will continue to perplex Texas community college leaders and threaten the effectiveness of these colleges through the turn of the century.

## THE TEXAS FUNDING PROCESS

Many of the early two-year colleges in Texas were created for local public school graduates who did not have the money to continue their education away from home. College classes were often held in public school facilities, and funding for college operations came from the public school budget, and whatever local sources were available. Since state and federal support were non-existent, funding in the 1920's and 1930's was marginal. Operating at the minimal cost was imperative for most colleges.

Later, institutional presidents began proposing a funding bill each legislative session and campaigning for its passage. There was no structure in place at the time to insure continuing state support from year-to-year, however. The major inadequacy in this approach, of course, was that administrators had no idea what to expect in terms of state funding from one biennium to the next. Consequently, planning for expansion of programs and services was difficult and tentative at best.

State support for Texas two-year colleges began in 1941, when the legislature appropriated \$325,000 for the 6500 full-time student equivalents enrolled during the previous funding period. This amounted to \$50 per full-time



student equivalent per year for each institution. Funding was limited to full-time equivalencies (15 semester hours) enrolled in the fall semester. No state funds were appropriated for spring and summer enrollment. In addition, community college courses had to be taught by at least one senior institution in Texas before state funding for that course was permitted. Courses not taught by at least one senior institution had to be funded totally by the local two-year college. This restrictive approach to funding, of course, discouraged the implementation of needed technical, vocational, and occupational course offerings since senior institutions offered very few such programs. Texas was not yet ready for the comprehensive community college concept.

In fact, no state funds were appropriated for technical or vocational courses until 1963 when certain federal funds were made available through the state to pay up to 75% of faculty salaries and departmental operating expenses. Individual colleges contracted with the Texas Education Agency on an individual course and program basis for these funds, and occupational offerings were increased through this new and expanded base of support. Still, there was no line item state appropriation for occupational programs guaranteed from one biennium to the next, and this uncertainty caused many colleges to be cautious in program expansion and enhancement.

By the late 1960's several factors motivated the Coordinating Board, Texas College and University System and the colleges to seek a new and more reliable system of state funding. First and foremost, the legislature and Coordinating Board embraced the concept of a state-wide system of comprehensive community colleges in 1968. There was a need for on-going funding of high cost technical and vocational programs through some type of formula. There was a need to fund instructional programs on a year-round basis and to standardize financial and enrollment reporting. With increased state involvement, it was necessary to furnish the legislature with actual, verifiable cost data.



In an effort to address these issues, the Coordinating Board appointed a Formula Advisory Committee in 1968. Working with the Texas Education Agency, Coordinating Board, and the Legislative Budget Board, the Committee developed a standard system of financial reporting which made possible implementation of the contact hour concept. The contact hour was defined as "one student with one teacher for one hour." The contact hour was adopted as the funding unit over the semester hour, because the contact hour is more definitive in assessing the costs of a broad range of instructional programs characteristic of the community college.

Under the contact hour system of funding, appropriations are based on a median cost figure for each course and program applied to the base period (i.e. summer and fall, 1988 and spring, 1989) contact hours produced for that program. Contact hours generated in a given course multiplied by the median statewide cost to operate the course equals the appropriation in the next biennium. Known as the "Package Appropriations Bill Approach," this system was established to fund all elements of cost other than facilities construction, maintenance and operation, and it has proven to be equitable, because it places the funds where the students are being taught.

The contact hour formula system for funding Texas community colleges appears to be a model for others to emulate. Contact hour rates are based on the actual cost of each course, and the process is easily understood by taxpayers who pay the bill. The system encourages administrators from all 49 districts to work cooperatively in the legislative process, because what benefits the group generally benefits each member. It seems to be an effective method of allocating resources, and it will remain in place until someone or some agency develops a better procedure. The current funding structure enables each community college to receive a line item appropriation each biennium based on contact hours

produced by the college during the previous funding period. With this security, Texas colleges are able to plan budgets, implement programs, and construct capital improvements.

The state appropriation for 49 community college districts in t'e 1988-89 biennium exceeded \$827 million, a figure which constituted approximately 15% of the state support for all of higher education. 12 By comparison, 1986-87 state support equaled \$890 million. Much of this reduced state support resulted from an unexpected and unprecedented veto. In accordance with previous practice, the 1988-89 budget approved by the Legislature included funds to underwrite health insurance coverage for employees in all college districts (\$45.3 million for the biennium). Although state law requires the colleges to provide broad-based insurance benefits, Governor Bill Clements vetoed the funding in late summer, 1987, forcing many districts to raise local taxes or exhaust budget reserves. Community college leaders expected to be reimbursed for all or some of the lost funds by the 71st Legislature. The House tentatively approved \$24.3 million in emergency funding for this purpose on February 22, 1989. Once approved by the Senate and signed by the Governor, these funds were to be distributed immediately and proportionally to all colleges. In addition, state budgeting procedures may be amended to preclude future vetoes of funds so critical to the health and welfare of Texas educators. 13

Texas community colleges receive revenue from several sources. State appropriations provide approximately 56% of operating income. State funds may be used only for specific elements of costs which are specified in each appropriations document. State funds may not be used by community colleges to construct buildings or to maintain and operate the physical plant. Forty-three percent of the revenue now comes from local sources (property taxes, student tuition and fees, and other). 15



Local taxpayers have invested more than \$1 billion in the 66 campuses across the state. 16 Campus maintenance and operation costs are covered by local tax revenues. Although student tuition and fees have increased dramatically, statemandated tuition exemptions for more than 20 different groups reduce income from this source. The federal government currently contributes 1-2% of community college revenues, primarily for student financial aid programs.

## FUNDING ISSUES FOR THE 1990'S AND BEYOND

All of higher education faces uncertainty in the final years of this century. Higher education was a growth industry for more than 30 years after World War II, and nowhere was this expansion more evident than in the community colleges. During the 1960's a new two-year institution was opened almost every week somewhere in the United States. The next decade, on the other hand, may see financial support continue to dwindle for existing colleges. Competition for enrollment will clearly intensify. The fate of community colleges in this setting will depend on the economic environment in their area, policy and funding decisions by the state legislature, and indeed on the ingenuity and resourcefulness of local boards and administrators.

It is clear that the economy will evert a strong influence on funding prospects for the 1990's. This economic impact will be magnified in Texas, because the state's economy has been based on petroleum and agriculture, industries which have been hard hit by current marketplace conditions.

Diversification of the Texas economy is critically important to the survival of all tax-supported agencies, but mere survival is not the question; quality of services is the real issue. Public two-year colleges annually train more than 100,000 workers for the state's business and industry. <sup>18</sup> Consequently, they seem



to be the most important single asset in the various plans to broaden the economic and tex bases of the state. New and stronger linkages must be developed between the corporate sector and two-year colleges for employee training and retraining, research, and program development. Forecasters predict a greater role for business in training and education by the turn of the century. Corporate investment in employee education and retraining — now soout \$80 billion a year nationally — will double by 2001. At that point, one-half of all funding for job training will come from 200-300 large companies. 19 Texas community colleges will, of course, continue to contract with many of these corporations to provide training and facilities, and thus benefit from this significant external funding source. Federal programs like the Job Training Partnership Act will continue to supplement such cooperative training programs and encourage the sharing of costs and resources whenever possible.

On a related matter, community colleges must accelerate efforts to increase corporate and private foundation contributions to mitigate the declining support from traditional revenue sources. Although two-year colleges represent one-third of all higher education institutions and enroll more than half of all freshmen, these colleges received only 1 percent of private contributions to higher education in 1985-86. Many corporate and foundation policies actually preclude grants to two-year colleges. Indeed, more than 20% of the 1000 corporations that match employee gifts to colleges and universities do not match contributions to community colleges. When one considers the success of two-year colleges in retraining the work force, reducing high school attrition rates, and improving adult literacy (issues of concern to many foundations and corporations), this lack of support is puzzling. Progressive two-year colleges are now soliciting grants from private foundations and corporations, and the outstanding colleges in



the 1990's and beyond will attract financial support for program enrichment and capital expansion from these partners in the education enterprise.

Other issues with funding overtones confront Texas community colleges. In 1987, the Texas Legislature enacted House Bill 2182 requiring skills assessment for all students entering public colleges and universities after September 1, 1989. This legislation established the legal framework for the Texas Academic Skills Program (TASP) which includes components in reading, writing, and mathematics. TASP is being implemented jointly by the Texas Higher Education Coordinating Board and the Texas Education Agency. Under Coordinating Board policy, students must pass all three components of the TASP with at least 70% accuracy on each component in order to obtain an associate degree or advance to junior-level courses. Those who fail any one or all components will be required to take remediation in the appropriate area(s). The Coordinating Board has predicted that about 46% of incoming freshmen will fail one or more components of the examination, at least in the initial year of its administration. 21

Texas community colleges could face serious staffing and financial problems as they implement remedial instruction and services for the predicted number of students. Finding enough qualified teachers for remedial programs serving approximately half of the freshmen will be a challenge. The Coordinating Board requested that the Legislature provide \$36 million to underwrite remedial instruction and faculty retraining to teach remediation for the 1990-91 biennium. Community college leaders and some Coordinating Board members recommended that the testing program be postponed or cancelled, if adequate funds for remediation were not approved, since local colleges do not have the resources to implement a new program of such magnitude and cost. This fact notwithstanding, the assessment and remediation of student academic skills will be a continuing — and expensive — challenge for Texas community colleges for the foreseeable future.

Because of the additional burdens of TASP implementation, various legislators and educators have proposed incentive funding in addition to base funding for institutions where students significantly improve their test scores. Incentive funding is not a new topic. This concept was proposed by the Select Committee on Texas Higher Education in 1987 to encourage institutions to improve building space utilization on existing campuses. Incentive funding was also proposed as a motivation to increase minority enrollment, initiate faculty-staff development programs, and attract outside financial support. The concept appears to merit consideration in long-term planning for higher education, but its inclusion in state funding policies is not anticipated soon.

One other potential funding source for two-year colleges deserves mention. According to a recent Texas Poll conducted by Texas A & M University, Texans overwhelmingly want the opportunity to participate in a state-run lottery. The telephone poll of 1006 randomly-selected respondents revealed that 68 percent favored a state-run lottery. Sponsors of a lottery bill in the Legislature have estimated that the lottery would net at least \$400 million annually for supplementing public education financing. Despite the apparent strong public support and the windfall for public education, legislative supporters predict that a state lottery will not be implemented in Texas for many years because of a lack of consensus in the House of Representatives. 23

Population dynamics is another phenomenon likely to influence community college funding in Texas through the turn of the century. The 1987 population of Texas was estimated at 17,000,000 with a minority percentage of 33.5. The United States Bureau of the Census projects that California, Florida, and Texas will account for more than one-half of the total U.S. population increase to 2000. By 1995, Texas will be the second most populous state with a population of



19,000,000, and the number could exceed 20,000,000 by 2000. <sup>24</sup> Furthermore, the percentage of minorities in Texas will approach 50% by the year 2000. The potential impact of these demographics on two-year college planning, funding, and services is obvious. Adequately funded community colleges will be essential to the literacy, productivity, and civility of such a large and diverse population.

## **EPILOGUE**

One final point should be emphasized. The State of Texas will continue to be the primary funding source for the community college system. Local property taxes and tuition and fees are approaching acceptable limits in many districts. Federal aid is not likely to increase significantly in the 1990's. Although alternative funding from business, industry, and federal programs like the Job Training Partnership Act will help immensely, these sources are not intended to provide the financial base needed to operate a state-wide system; only the state can do that.

Consequently, the most critical decisions affecting community college finance will be made at the state level as the legislature, Governor, and Coordinating Board consider available resources, institutional role, and projected population increases. The financing of two-year colleges, like all issues of such magnitude, will continue to be a political matter as well as an administrative procedure. Texas board members and administrators may ignore this fact only at their institution's peril. As Edmund Gleazer, former President of the American Association of Community and Junior Colleges, has said:

Like it or not, circumstances have led community colleges [and their leaders] to the state capitals [for adequate funding]. Legislative perception cannot be ignored.



Prior to its adjournment, the 71st Texas Legislature passed a recordsetting \$47 billion state budget which included good news for public higher
education. The 1990-91 budget included a \$716 million (15.5 percent)
increase for the total higher education system. This, of course, was the
first significant funding increase in three legislative sessions.

Because of recent enrollment growth and their key role in the state's economic development, the 49 community college districts fared well, receiving \$195 million in additional state revenue for the biennium, a 23.6 percent jump over 1988-89 funding. By comparison, funding for the state's 34 public universities rose by \$254 million, a 12.6 percent increase. <sup>26</sup> It remains to be seen whether future legislatures will have the resources, the perception, and the inclination to continue this level of financial support.

The Legislature appropriated \$22.5 million (about 62 percent of the amount requested by the Texas Higher Education Coordinating Board) for the remedial instruction required by the Texas Academic Skills Program. Approximately \$3 million was allocated directly to the public community colleges and universities in direct appropriations ranging from \$25,000 to \$50,000. An additional \$19.5 million was designated for the Coordinat ng Board to distribute to these institutions during the biennium according to demonstrated need. 27



#### CONCLUSIONS AND RECOMMENDATIONS

This review of Texas community college funding warrants certain conclusions, and from those conclusions recommendations can be made.

## Conclusions

It appears that the contact hour funding formula for Texas two-year colleges has worked effectively. Contact hour rates are based on actual costs; the process is easily understood by the taxpayers; and funds go where the students are being taught.

State funds will continue to provide most of the revenue for operating the two-year colleges, and the state legislature will continue to be the decisive voice in the funding process.

Funding will continue to be a partnership.

Discussion about the role and scope of community colleges will persist, and this dialogue will impact on what programs are funded by the state and to what degree.

Student tuition and fees will be reviewed more often than in the past and increased accordingly to keep pace with operating costs.

Population increases will place additional service expectations on Texas community colleges.

Federal aid to the community colleges will not increase in the foreseeable future.

The Texas Academic Skills Program will require remediation by almost one-half of the first-year students.

Continuing education and other non-credit courses will continue on a pay-asyou-go basis at the local level.



Texas community colleges will continue to enroll approximately 66% of the freshmen and sophomores, and more than 47% of all students, in the state's higher education system. This fact notwithstanding, the community college share of state support to higher education will remain at about 15%.

Corporate and foundation contributions to community colleges will increase.

Future proposals to create new community college districts will be reviewed very carefully by the Coordinating Board, for obvious reasons.

Business and industry will invest more money in future training and development programs.

With economic projections showing a shortage of state funds for the future, the legislature will seek additional revenue sources such as a broadened sales tax and a state lottery.

Cooperative training agreements between colleges and business will increase.

## Recommendations

Full contact hour formula funding should continue to be a primary goal of .

Texas community college leaders.

Minimum line item appropriations to all community colleges should be continued. This will guarantee smaller institutions enough state support to pay for basic operation and administrative costs.

The legislature and Coordinating Board should ensure adequate funding for existing community colleges before approving new college districts.

State-mandated tuition exemptions should be eliminated, or the legislature should budget state funds to reimburse local college districts.

Community colleges should strengthen linkages with business, industry, and local governmental units in their service areas. Where possible, colleges should cooperate with other agencies in the deve sent and use of facilities and



equipment. In addition, college leaders should solicit financial support from business and industry, particularly those for which the college may be training current or future employees. Corporate support for teaching, research, and capital expansion in the four-year institutions is a tradition, and the two-year colleges should expect comparable consideration.

Finally, Community colleges should actively solicit financial support from alumni and private foundations to mitigate the impact of reduced state, local, and federal funding. Colleges which do not have a development office should organize one or assign the duties to a current staff member.

Robert C. Cloud

August 14, 1989

t C Cloud



## REFERENCES

- <sup>1</sup>Coordinating Board, Texas College and University System, <u>Policy Paper 2</u> (Austin, Texas: Coordinating Board, 1968).
- <sup>2</sup>Texas Public Community/Junior College Association, <u>Presentation to the 71st Texas Legislature</u> (Austin, Texas: TPC/JCA, 1989).
  - <sup>3</sup>Texas Public Community/Junior College Association, ibid.
- <sup>4</sup>Texas Public Community/Junior College Association, <u>Position Paper, Issue 1</u> (Austin, Texas: TPC/JCA, 1985), p. 1.
- David W. Breneman and Susan C. Nelson, Financing Community Colleges: An Economic Perspective (Washington, D.C.: The Brookings Institution, 1981), pp. 161-162.
- Texas Public Community/Junior College Association, Facts on What Happens to Community/Junior Colleges if State Funding is Cut (Austin, Texas: TPC/JCA, 1987), p. 1.
- <sup>7</sup>James L. Wattenbarger and Sherry L. Mercer, <u>Financing Community Colleges</u> (Gainesville, Florida: Institute of Higher Education, University of Florida, 1985).
  - $^{8}$ David Breneman and Susan Nelson, pp. 206-208.
- Robert L. Clinton, <u>Texas Public Community/Junior College Association Directory</u> (Austin, Texas: TPC/JCA, 1983), pp. 31-33.
- Texas Public Community/Junior College Association, TPC/JCA Position Paper, Issue 1, p. 3.
  - 11 Telas Public Community/Junior College Association, ibid, pp. 4-5.
- 12 State of Texas, State Appropriations Bill, 1988-89 (Austin, Texas: Office of the Governor, June 1987).
- 13 Debbie Graves. "Texas House OKs Funds for Colleges, " Waco Tribune-Herald, (February 23, 1989).
- 14 State of Texas, State Appropriations Bill, 1978-79 (Austin, Texas: Office of the Governor, June 1977), pp. IV, 25-26.
- <sup>15</sup>Texas Junior College Teachers Association, <u>Messenger</u> (Austin, Texas: TJCTA, Spring 1988), p. 8.
- 16 Texas Public Community/Junior College Association, <u>Presentation to the 70th Texas Legislature</u> (Austin, Texas: TPC/JCA briefing papers, 1987), p. 13.
- 17 Edmund Gleazer, "Junior College Explosion," American Education, V. No. 1 (December 1968-January 1969): pp. 12-13.



- 18 Texas Public Community/Junior College Association, Facts About the Effectiveness and Productivity of Community/Junior Colleges in Texas (Austin, Texas: TPC/JCA 1987).
- <sup>19</sup>Marvin J. Cetron, Wanda Rocha, and Rebecca Luckins, "Into the 21st Century: Long Term Trends Affecting the United States," The Futurist, (July-August 1988): p. 33.
- Anne Lowrey Bailey, "Community Colleges Mobilizing to Attract More Support from Companies, Foundations," The Chronicle of Higher Education, (August 12, 1987): p. 27.
- <sup>21</sup>Jorjanna Price, "Remedial Time for Freshmen," The Ho on Post, (January 22, 1989): p. 1.
- 22 Mary Alice Robbins, "Colleges Should Get Incentive Funding, Texas House Told," <u>Lubbock Avalanche-Journal</u>, (February 3, 1987): p. Bl.
- <sup>23</sup>Siva Vaidhyanathan, "Lottery Comes Out Big Winner in Texas Poll," <u>The Dallas Morning News</u>, (February 12, 1989): pp. 47A and 52A.
- 24 United States Department of Commerce, Bureau of the Census, State Population Projections: 1987-2010 (Washington, D.C.: Bureau of the Census, CB 88-48, April 1, 1988).
- <sup>25</sup>Edmund Gleazer, <u>The Community College: Values, Vision, and Vitality</u> (Washington, D.C.: American Association of Community and Junier Colleges, 1980): p. 44.
- <sup>26</sup>Mike Hailey, "\$47 Billion State Budget Passes Easily," <u>Waco Tribune-Herald</u>, (May 29, 1989), pp. 1A and 12A.
- Monte Jones, "Colleges Weigh Needs for Remedial Funding", Waco Tribune Herald, (June 25, 1989), pp.15-16 A.



ERIC Clearinghouse for Junior Colleges SEP 01 1989