

The background of the page is a large, semi-transparent seal of the State of Texas. The seal features a five-pointed star in the center, surrounded by a wreath of olive and live oak branches. The words "STATE OF TEXAS" are inscribed around the perimeter of the seal.

# **Beyond the Barriers:**

## **Issues and Ideas in Improving Access**

Prepared for  
The Special Commission on  
21st Century Colleges and Universities

The George Bush School of Government and  
Public Service, Texas A&M University  
Class of 2000

★ T H E G E O R G E B U S H S C H O O L ★

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*of Government and Public Service*

April 25, 2000

Mr. John Opperman  
Office of the Lieutenant Governor  
P.O. Box 12068  
Austin, Texas 78769

Dear Mr. Opperman:

We are pleased to present you with *Beyond the Barriers: Issues and Ideas in Improving Access*, a compilation of ideas created to foster discussions on access to Texas' 21<sup>st</sup> Century colleges and universities.

Our goal in this report is to offer The Lieutenant Governor's Special Commission on 21<sup>st</sup> Century Colleges and Universities innovative suggestions to improve access to higher education for our state's minority, low-income, and other underrepresented students. We conducted a survey of Texas high school counselors, telephone interviews with select institutions/departments of higher education, personal interviews with experts on secondary and higher education, and research into innovative programs dedicated to improving access. The ideas presented within the report are of varying levels of complexity, feasibility, and length. All recommendations are meant to facilitate discussion rather than offer comprehensive program designs.

Our research concluded that Texas could benefit from improvements in the following areas: defining and integrating access goals, promoting higher education, preparation for higher education, financial aid information, and partnerships with industries. Each idea is presented, followed by the argument for change, a brief discussion, and possible policy implications. Also included are several appendices. Of special interest is a compilation of "innovative" programs that increase access in terms of recruitment, enrollment, retention, and graduation. Another is an overview of access-related activities in the fifteen most populous states (other than Texas).

We would like to acknowledge the following (in no particular order):

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- Dr. Harvey Tucker for his guidance throughout the process
- Walter Wendler, Scott Poole, Donald Deere, Norman Luttbeg, and Marco Portales for their careful review of the document and thoughtful feedback.

We would be pleased to answer all of your questions regarding this document; we can be reached by email, [h-tucker@tamu.edu](mailto:h-tucker@tamu.edu), or telephone (409) 845-8589. We look forward to presenting the document and answering commission members' questions at the May 9<sup>th</sup> Commission meeting in Nacogdoches, Texas.

Warmest Regards,

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# Executive Summary

Texas' ability to educate its citizens is a major concern for preserving and promoting the future economic vitality of the state. The increasing diversity in Texas' economy and in its expanding population presents challenging barriers to providing equitable access to its higher education institutions. The institutions that attain success in the future will inevitably be different than those of the past.

Texas has already made strides toward improving higher education needs in the state with an inclusive definition of access. By acknowledging the importance of four critical stages in educating students—recruitment, enrollment, retention, and graduation—and applying them regardless of a person's race, ethnicity, economic status, gender, or disability, Texas is positioned to successfully address access and equity issues in its future education policy.

More than ever before, policy-makers must recognize the critical link between educating Texans and filling workforce needs. Because Texas' high-growth industries are so vastly different, workforce needs are becoming equally diverse. It is no longer the case that all students can, nor should, be trained for the workforce in traditional, four-year institutions of higher education. For this reason, Texas must address higher education policy to a broader variety of institutions including technical/vocational schools, junior colleges, and other certification or licensing programs.

After understanding current education policies in Texas, surveying high-school counselors from around the state, and benchmarking Texas' access programs against those of other states, this report provides a stimulus for policy discussions with ideas about how to further eliminate access barriers in Texas' institutions of higher education. Potential strategies to accomplish this task are as vast as the descriptions of and explanations for the barriers. However, themes common among them include: seeking student interest and parental support for higher education at earlier ages, communicating the benefits of higher education via messaging that is pertinent and meaningful to its audience, and committing to the challenge of reaching special groups such as first generation attendees and Spanish-speaking Texans. Additionally, soliciting participation from Texas' high-growth industries in the education process via internships, co-ops, financial aid, and loan forgiveness is the most direct approach to holistic education policy.

Conclusions from the research are placed into 5 categories. They are summarized as follows:

- *Defining and Integrating Access Goals* – The state should continue to pursue unity of vision for its institutions through a shared definitions of access and equal application of that definition to goals and objectives set by individual institutions. To secure buy-in from institutions, performance-based financial incentives should be offered such that individual institutions develop and attain goals congruent with those of the state.
- *Higher Education Campaign* – Public relations campaigns should convey the personal benefits of higher education while promoting its popularity among the general public. Emphasis should be placed on making the institutions welcoming to potential students and their families and on publicizing the accessibility of higher education through the use of uniform application processes.

- *Higher Education Preparation* – Efforts should be made to better coordinate the use of preparatory measurement tools (TAAS, TASP) that are already in place so that resources are not wasted. In conjunction with academic preparation, the state should commit to seeking innovative approaches to disseminating information about higher education in Texas.
- *Financial Aid Information*–To better target funding provided to students, the state should consider innovative programs such as loan forgiveness, driving-related incentives, and tracking students throughout their educational careers. Funding should be approached with a “fair-share” mentality, and institutions should be charged with finding ways to contain costs. In addition, parental involvement should be sought through promotion of financial aid information sessions and programs like the Texas Tomorrow Fund.
- *Partnerships with Employers* – Businesses should be provided financial incentives to participate in the higher education of the students of Texas. Additionally, the state should promote programs, such as School-to-Careers, that connect students to mentor/advisor relationships.

The ideas in this report are based in large part on the responses that high school counselors gave to survey questions about access and equity issues in Texas higher education. Their thoughts confirm the complexity of access issues and their possible solutions. It can be stated definitively, however, that successfully educating Texas’ population requires cooperation from secondary schools, institutions of higher education, the private sector, and, most importantly, families. The mission to lower access barriers is daunting, but it is a necessary step on the path towards a bright future for Texas.

# Defining and Integrating Access Goals

Well-written goal statements that receive buy-in from all of the state's institutions of higher education can provide a continuity that leads to unity of vision. Common sense says that progress toward that vision is most likely when all involved parties are looking for similar indicators of success. To this end, there is a need for a well-crafted definition of access and integration of that definition into performance measurement and reward criteria for individual institutions.<sup>1</sup>

**The State of Texas should create and embrace an inclusive definition of access (including recruitment, enrollment, retention, and graduation) to be included in the mission statements of its institutions of higher education.**

Historically, Texas has defined access as everything from financial viability to desegregation to special programs intended to increase enrollment of minority groups. Inconsistencies and changes over time in the definition contribute to the difficulty the state has faced in attaining its access goals. Most recently, however, the state has included in its definition the four critical factors of recruitment, enrollment, retention, and graduation, regardless of a person's race, ethnicity, economic status, gender, or disability.<sup>2</sup>

## Argument for Change

Currently, higher education institutions are not required to mirror Texas' access goals in their own mission statements. Efforts to improve access for Texans are fragmented and driven by institutional initiatives instead of by state goals. While these institutions may be experiencing success in achieving their self-determined access goals, they are not inherently linked to the state's overall access objectives.

## Discussion

Incorporating the four critical elements of the state's definition of access (recruitment, enrollment, retention and graduation) in the mission statements of individual institutions is a necessary first step toward performance-based incentive structures. Aligning state and institutional access goals allows the state to establish and apply consistent performance measurement criteria. However, when incorporating the four factors of the access definition into performance measures, distinctions should be maintained between 4 year institutions, 2 year, and vocational/technical institutions.

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<sup>1</sup> See Appendix B: Access.

<sup>2</sup> See Appendix B: Access.

## Policy Implications

In order to accomplish a performance-based reward system, the state may have to collect information that is not currently measured. For example, a system that tracks students throughout their educational careers may be necessary. To this end, Texas should consider using policies instituted for other purposes, such as financial aid and placement. Expanded use of the Texas Common Application or assignment of a single student ID number for all institutions of higher education could also be employed.

### **Allocating a fixed percentage of higher education funds according to performance on outcome measures would increase accountability at the institutional and sub-institutional levels.**

In 1991, the State of Texas adopted a new, performance-based approach to agency management and legislative and gubernatorial decision-making titled "Strategic Planning and Budgeting" (SPB).<sup>i</sup> The system encompasses an integrated set of decision-making and managing tools, including agency and state strategic planning; outcome-focused performance measurement; performance-based budgeting and legislative appropriations reform; and performance reporting, monitoring, evaluation, and auditing. Nearly all state activities use outcome measures, which are included in state appropriation bills. Targets are set and progress toward them tracked, with variances explained to the Legislative Budget Board and accuracy reviewed by the State Auditor's Office.<sup>ii</sup>

## Argument for Change

Although Texas is ahead of most states in applying a performance-based approach to budgeting, the SPB system lacks a fully connected institutional performance accountability structure in higher education. Funding decisions by the legislature are not directly linked to performance data despite the incorporation of performance measures and goals in the state's appropriation bills. Without this link, institutions are not provided a financial incentive to achieve performance goals such as those related to access. This lack of incentive to achieve goals is demonstrated in the results of a survey developed by staff members of the Senate Finance Committee and House Appropriations Committee to gather user perceptions of the performance-based budgeting system. Sixty-three percent of respondents said there are no internal penalties or rewards within their agency for meeting performance measures. In a corresponding survey of Senate Finance Committee and House Appropriations Committee members, three-quarters of the respondents thought a system of rewards and penalties tied directly to performance should be implemented.<sup>iii</sup>

## Discussion

The State of Missouri, recognized by Governing magazine as a leader in "managing for results,"<sup>iv</sup> has gone one step further than Texas in tying performance to financial awards in its budgeting process. As seen in the case study below, Missouri allocates a percentage of state funding to institutions based strictly on performance. The state rewards institutions for achieving

performance goals. In turn, the institutions may reward departments and programs for creating and achieving their own performance goals. Unlike Texas, this two-tiered system addresses the need for accountability at the institutional and sub-institutional levels.

## Case Study<sup>v</sup>

### Funding for Results: A Collaborative Initiative for Educational Excellence

Missouri's performance funding program, known as Funding for Results (FFR), defines statewide priorities, promotes systematic assessment of performance, and uses budget policies to reinforce accountability. Using a data-based indicator system, a portion of each institution's annual budget increase is linked to performance; this contrasts to more traditional policies that link budget increases to enrollment or treat them as entitlements.

With support from the Fund for the Improvement of Postsecondary Education (FIPSE), Missouri's performance funding program is being refined and expanded. FFR operates on two tiers. At the state level, institutions are rewarded for helping to achieve statewide goals established by Missouri's planning initiatives, e.g. increased minority graduation and improved students performance in general education and in their major. The second tier, which is voluntary and operates on the campus level, permits diversification by rewarding institutions for designing and implementing locally-controlled performance funding programs emphasizing innovations in teaching and learning. All of Missouri's 29 public campuses have chosen to participate in this program.

Missouri is experiencing success with FFR. Under Governor Mel Carnahan's recommendation, institutions could receive a total of 17.5 million new dollars linked to FFR in the FY 2001 budget appropriation. This represents less than 3 percent of the general core operating budget but over 45 percent of new money.<sup>vi</sup> As part of this appropriation, \$2.8 million supports experimentation with teaching/learning innovations. Funding for Results is serving as a catalyst for change by encouraging the involvement of stakeholders across the system. During the past year, a statewide faculty committee published a booklet, "Excellence in Teaching and Learning," which is being used on campuses to stimulate discussion. Throughout Missouri, faculty dialogue and experimentation with teaching/learning issues are increasing. Institutions are documenting attempts at addressing a wide array of challenges including improving the study skills of community college students and enhancing the residence experience of doctoral students. While some projects directly address ways to improve the performance of students on assessments, others focus on enhancing student advising or easing the transition from the community college environment to the four-year institution.

Through FFR, Missouri's colleges and universities are demonstrating accountability. At the same time, FFR provides a forum for key policy makers to send a strong signal about educational priorities without the heavy hand of a legislative mandate.

## Policy Implications

In order for Texas to implement a similar program, it would be essential to identify and measure the appropriate indicators of performance in regard to the state's access goals. By giving financial incentives to institutions achieving these goals, the state can hold institutions accountable. For example, institutions could be awarded for the number of low-income students they admit and graduate.

# Higher Education Campaign

The State of Texas should develop a comprehensive program, including popular media exposure, government and industry partnerships, school district programs, and other collaborative agreements to promote higher education to the entire population of the state. While this program seems ambitious, it is made up of four basic, equally important parts. Each sub-program emphasizes the role of higher education in the lives of all Texans. As with any communication campaign, it is important to be sensitive to audience; for Texas, this means providing many of these services in Spanish.

## **Texas must implement a broad-based media campaign to popularize Texas higher education.**

The State of Texas has used the popular media to promote several programs. The success of the “Don’t Mess With Texas” campaign and the advertising for the Texas Lottery has proven that a well prepared, targeted marketing program can influence a wide range of people. A survey of Texas high school counselors revealed that family and peer support was considered a very significant factor in the choice to participate in higher education.<sup>3</sup>

### Argument for Change

Without complete information, students may assume that higher education is expensive, unattainable, or inconsequential. Negative peer pressure and lack of family support could perpetuate these attitudes. The survey of counselors identified parental outreach as an important tool in promoting higher education, and many counselors have worked to develop outreach programs informing parents of the virtues of higher education. Many of these programs include financial aid workshops that present the availability of funding for higher education to parents who may be unfamiliar with funding processes. The development of a clear, overarching communication strategy is important to the dissemination of the information needed to make informed decisions about higher education.

### Discussion

A program similar to the “Don’t Mess With Texas” campaign should be developed to promote higher education options. This program would present popular media messages in the form of print, radio, and television advertisements. The program should be comprehensive, working to promote all types of higher education in Texas. Celebrities, prominent Texas businesspersons, and government officials should be utilized in spreading the message that higher education is available and important to the future of Texas. The program would tout the availability of financial aid, scholarships, and various programs at all institutions of higher education in the state. In conjunction with this program, a toll-free telephone number and web address would accompany all advertising and would provide a single-source clearinghouse for higher education information for all institutions in the state.

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<sup>3</sup> See Appendix E: Survey.

## Policy Implications

The campaign would promote higher education, continuing to be effective over many years. Generations of Texans would benefit from attempts to educate the public about the advantages of higher education. One possible drawback of the program would be the risk of trivializing higher education by associating it with light-hearted advertising campaigns. While the risk of this is low, it is still possible to send inconsistent messages by advertising one thing while advocating another. The remainder of programs will help to develop a consistent message.

**A campaign to personalize educational experiences that includes profiles of individuals with diverse ethnic, racial, educational, and occupational backgrounds will increase awareness of and interest in high-demand careers.**

The popular media has inadvertently helped to perpetuate stereotypes about various professions. While some of these stereotypes are positive and help to provide insight into the day-to-day lives of professionals, other stereotypes falsely portray or fail to portray other career options. As a result, people who do not seek education and career information through personal research are often ignorant of the multitude of options available to them.

## Argument for Change

Public knowledge of available careers and the training necessary to obtain them is often incomplete. This inability to identify career alternatives has discouraged Texas students from preparing for and pursuing certain fields. Educating Texans on career options is important to meeting the workforce demands of the state.

## Discussion

The second part of the higher education marketing campaign will develop individual profiles to be portrayed through the popular media. Radio, television and print advertisements would be dedicated to various professionals, students, and other beneficiaries of higher education. The campaign would strive to develop realistic images of life before, during, and after higher education. By putting a real face on various professions, the state could help to dispel the myths and omissions developed through the popular media. A part of this campaign would depend on the formation of partnerships with various national, state, and local professional organizations. These organizations could help to develop realistic profiles and choose representatives from their memberships. Professional organizations already work to develop public relations campaigns, promoting their professions, attracting membership, and developing relationships. A cooperative agreement with the state to develop a realistic marketing campaign is a natural continuation of existing programs. Individual profiles of working Texans could be used to send the message that these advertisements are meant for everyone. Profiles depicting the experiences of minority individuals throughout their higher education and work experiences would relay a positive message.

## Policy Implications

Public perception is an important factor in improving access to higher education. The campaign would work to develop a realistic view of the benefits of higher education. By exposing the public to realistic profiles of persons with which they can identify, they will be encouraged to pursue the benefits of higher education. One drawback of this campaign is the difficulty of determining which demographic groups most need this encouragement. Development of specific personal profiles that each demographic group finds inspiring could require extensive research.

### **Expanded recruitment visits, summer youth programs, cooperatives, and internships will aid higher education institutions in recruiting Texas' students.**

Recruitment practices have usually involved an on-campus visit from a recruiter during a designated time period. Unfortunately, this limits the amount of time a student can spend with a recruiter to only a few minutes. Furthermore, normally only high school juniors and seniors are exposed to recruiters. Students should be approached about higher education much sooner in their educational careers.

Summer programs have been successful in exposing younger students to the benefits of higher education.<sup>4</sup> Various institutions have programs that allow youngsters to experience classes, work on projects and competitions, and ask questions. In many cases, these programs are the first experience many younger students will have with higher education.

Existing cooperative programs have worked to expose students to real-world work experience. Through this type of experience, graduating students are more marketable to prospective employers as trained, experienced employees. The co-op experience also works to afford students an opportunity to learn about a profession before they commit to a full-time position. Further, co-op sponsors gain from the program by having the opportunity to hire students with experience in the workplace that can more easily transition into a full-time role.<sup>5</sup>

## Argument for Change

By expanding the use of preparatory programs, Texas' institutions of higher education can increase the number of students recruited by educational providers and industries/employers. They can also increase the quality of that recruitment through the increased time and exposure afforded by these programs. While many Texas institutions of higher education have developed successful summer programs, it is important for those that have not to do so. In some institutions, only specific colleges or departments have created such recruitment programs; this means that students who are interested in other areas of study are missing important exposure. These programs would allow younger students to experience higher education and, most importantly, give them the background they need to make informed choices about their future.

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<sup>4</sup> See Appendix C: Wisconsin College Access Program.

<sup>5</sup> See Appendix D: Pennsylvania.

## Discussion

The third part of the public relations campaign would consist of cooperative agreements between the state, institutions of higher learning, and private industries. These partnerships would do two things. First, professionals and students of higher education would come together to provide outreach programs to secondary schools throughout the state. These programs would consist of campus visitation—secondary students to higher education campuses and higher education students to secondary school campuses-- to explain and promote higher education and careers. Professionals would visit school campuses in regular intervals to discuss their professions with students at all grade levels. Various professional organizations could act as liaisons between school districts and private industry.

Second, cooperative education/occupation programs and internships for students of higher education would be further developed. This means expanding traditional work-study and student employment programs. Non-traditional co-ops and internships are also necessary to better prepare students for the workplace and to attract people to higher education.

Schools should adopt a system that makes it easy for a student of any age to use school time to research and visit institutions of higher education. School districts should work to encourage curiosity into higher education, and resources should be made available for all students. This would include libraries of education including curriculum, cost and location of each facility, Internet access for reviewing each school's web-based resources, and access to telephone services that would allow them to talk to higher education officials, asking questions and receiving timely, personal answers.

## Policy Implications

Exposure to the benefits of higher education is the key theme in this open-door approach. It would allow students of all ages to participate in and learn about careers available to them as a result of higher education. This would allow prospective students to make early, informed decisions about higher education and career fields. Expansion of co-op programs to include all colleges and departments would make these programs more attractive to prospective students. This approach, however, will be subject to various complications in logistics, coordination, and communication. The coordination effort between state and local authorities and private industry might be challenging and expensive.

**The State of Texas and its higher education institutions must facilitate understanding and accessibility of application/financial aid processes through the use and innovative administration of common forms.**

Current financial aid and admissions systems are complicated and confusing. Instructions and forms are often different from institution to institution. The widely varying nature of these documents may discourage students from applying for financial aid and admission to the institutions that they would like to attend. Development of common admission forms and access

to those forms on the Internet would make it easier for Texas students to apply to higher education institutions.

## Argument for Change

The survey of high school counselors indicated that financial aid documentation workshops are effective methods for promoting higher education; however, the number and complexity of college admission and financial aid forms could discourage students and parents. A greater uniformity of documents and wider dissemination of information on the process would alleviate this apprehension and simplify the task of high school counselors.

## Discussion

A coordinated collection of application forms and instructions that clearly explain the application process for both financial aid and admissions should be developed. Uniform information packets should be created for all institutions in the state. In addition to these common forms, Internet-based forms would allow faster and easier access to applications and other documentation. Students could apply to several institutions at once without the added labor of manually completing forms. Higher education institutions would benefit from reduced paperwork and almost immediate access to all information, using databases and other software. This program would be easy to implement because the Internet infrastructure and the software needed to manage the program already exist. If desired, the entire program could be privatized through an existing or new company, allowing institutions of higher education to focus on other priorities.<sup>6</sup>

## Policy Implications

This recommendation would create identical forms for as many higher education programs as possible. It would allow for easier maintenance of documents and future expansion. The reduced paperwork would save money and hours of repetitive labor. It may be problematic that this program does not allow for specific institutions' requirements to be addressed. While some institutions will receive more information than they normally ask for on an application, others will receive less. Successful implementation will require that all institutions of higher education agree to a uniform application process.

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<sup>6</sup> See Appendix C: LSDAS.

# Higher Education Preparation

Each year, institutions of higher education are confronted with an increasing number of incoming students who lack the preparation necessary to be successful at a college or university. Employing remediation strategies once an individual enters higher education is a drain on resources. Texas must develop policies and programs that will allow early identification and correction of skill deficiencies. It is the responsibility of the whole educational system to improve the preparation of potential higher education students.

**By linking or combining the TAAS and the TASP and creating a preparatory academy to provide remedial services, Texas can increase efficiency for its students, secondary schools, and higher education institutions.**

Under the current testing structure, the Texas Education Agency (TEA) administers the Texas Assessment of Academic Skills (TAAS) to determine whether students meet the minimum Texas Essential Knowledge and Skills (TEKS) requirements to graduate from high school. Additionally, the Texas Higher Education Coordinating Board (THECB) administers the Texas Academic Skills Program (TASP) to assess college preparedness for all students entering a Texas public college or university. A college or community college must administer all TASP exams. In some cases, colleges and universities enter into agreements with high schools to administer the exam at the high school campuses on Saturdays. Most students take the TASP test prior to graduating from high school, after passing the TAAS exit exam. The TASP test identifies skill areas in which students need remediation in order to be successful in a college environment.

These two tests are distinct from one another and are not coordinated by the two administering bodies. For example, the math section of TAAS exit-level is scaled to an eighth-grade level, but the TASP includes basic algebra and geometry. Although Texas high schools receive group data on their TAAS scores, they can only receive a student's TASP information with student authorization. Therefore, high schools are unable to provide the necessary remedial services, forcing colleges and universities to identify deficiencies, which delay services to students and increase the time a student spends in higher education.

## Argument for Change

Institutions of higher education spend valuable resources on remediation or developmental programs that do not advance the mission and/or goals of higher education. The remedial courses required by the institutions are taken at the expense of the student and the credits cannot be applied towards any degree program. This can lead to retention problems as well as increased financial burdens on both the student and the higher education institution because students can spend as many as two years at the institution before taking a course that counts toward graduation.

The TASP exam can identify deficient skills early; however, the inability of high schools to analyze student scores inhibits them from taking corrective action. Early identification will give high schools and students more time to build the skills necessary to succeed in higher education. In addition, it will bridge the gap between the high school curriculum and college admission standards. If deficient skill areas can be identified early, this information can be used to help students be college-ready at the time of high school graduation. Furthermore, students who are college-ready are more likely to participate in higher education; research shows that “students who take algebra and geometry early (by the end of eighth or ninth grade) are much more likely to go on to college than students who do not.”<sup>vii</sup> In the same study, 71% of low-income students who took geometry went to college compared to only 26% of those who did not take it. An admissions counselor from the Massachusetts Institute of Technology stated that students enrolled in science and engineering programs decided to study one of those fields while they were in middle school.<sup>viii</sup>

High schools have no opportunity to help those students who return to college years after high school graduation. As colleges and universities attempt to assist these students, scarce resources are strained. For these students, a separate entity may allow them to pursue skills undeveloped in high school but required for success at a university with a minimal of time and financial commitment.

## Discussion

To supply the remediation needed to enable students to meet the minimum standards of colleges, a distinct entity that incorporates the expertise of TEA and THECB should be created. The entity would be a collaborative effort between TEA and THECB in which financial and human resources, materials, and expertise would be shared. For example, the staff would include master’s and doctoral candidates instead of certified teachers or professors. It would operate similar to other enrichment programs offered in addition to the K-12 curriculum. This entity would bridge the gap in skill levels required for high school graduation and college admission. Both the high schools and colleges have excellent resource materials and experiences that will ensure the success of such an academy.

One implementation option is to permit high schools to administer the TASP test. Under this system, high schools can ensure that all students take the test prior to entering higher education and that results are easily accessible to identify remedial needs. Students identified as needing remediation could take advantage of courses that high schools might not have the resources to offer. Administration at the district level would reduce the financial burden on students, and the resources spent by colleges and universities preparing students to take college level courses.

A second option is to combine the TASP test and TAAS exit-level exam. This option will simultaneously identify skill deficiencies and meet high school graduation requirements. TEA is developing an exam that will give students the option of taking additional test sections to meet the TASP standard. This is a first step toward coordinating efforts between TEA and THECB. Currently, the TEA is responsible for creating the new test with some assistance from THECB. If all students take a TASP equivalent exam during high school, the possibility of most students

being prepared for college upon graduation, whether the students choose to enter immediately following high school or later, will be increased.

## Policy Implications

This recommendation affects two statutes: HB 2031, which requires student authorization to release TASP scores, and Texas Education Code Section 51.306, which states that school districts are not required to provide additional programs to address skill deficiencies in this area. If this recommendation is implemented, these statutes would no longer apply.

The decision to move responsibility for administering the TASP test to high schools spreads the financial burden of providing remedial classes and programs to both colleges and universities and the school districts. Therefore, a change in the allocation of funding must follow to compensate school districts for these additional responsibilities.

Combining the TAAS/TASP test will allow students to meet graduation and college admission requirements with one testing. Students who fail one or more section specifically meeting college admission requirements will participate in the preparatory academy before enrolling at a college or university. One anticipated concern is how the TASP/TAAS combined test will affect graduation. A second concern is how to evaluate when a student must retake the test.

## **Information on Texas higher education must be disseminated to students and their families early, often, and with innovation.**

The Texas Higher Education Coordinating Board has identified major factors contributing to insufficient preparation for higher education.<sup>ix</sup> Among these are that many low-income parents have not attended higher education institutions and as such they are unaware of the degree of planning necessary to prepare a student for higher education. As a result, students in low-income areas are less likely to be prepared for college than their counterparts who attend schools in high-income areas. Selecting the right classes and engaging in social capital enriching activities for students during the middle and high school years is an important factor in determining the preparation and success of students.

Geographic barriers exist when institutions of higher education try to distribute information to all portions of the state, and Texas is beginning to overcome those barriers with the availability of online information. Institutions of higher education are quickly moving all of their services to the Internet. In fact, companies such as Kaplan are actually creating institutions of higher learning that are completely housed on the Internet.<sup>x</sup> These new developments in the world of higher education apply an entirely new dimension to the concept of access. According to the Commerce Department's report, a family's likelihood of being online is in direct correlation to its income level.<sup>xi</sup> Some would argue that this "digital divide" is becoming less evident. In fact, a recent article in *U.S. News and World Report* argues that the minorities are moving onto the Internet nearly fourteen times faster than whites.<sup>xii</sup> However, economically disadvantaged groups of all ethnicities are failing to go online, and this failure will further polarize them from the rest of society. Institutions of higher education need to understand that though offering

information and services on the Internet will increase access to some, it will probably not help those most in need.

## Argument for Change

Many low-income high school students and their parents begin discussing college too late. They find that the energy, time, and cost necessary to meet various deadlines, complete standardized tests, and apply and pay for student housing is prohibitive. Providing parents and students with steady streams of information gives them the opportunity to have multiple visits with high school counselors, higher education representatives, and financial aid officers. This allows parents to map out an educational plan for their child and develop specific steps to achieve it.

In the public schools, counselors are overworked and assigned tasks that do not utilize their skills appropriately. The student-counselor ratio often limits counselors' ability to give individual attention to their students.<sup>7</sup> Furthermore, there is little money available in districts for professional development, which means that counselors may not be up to date on changes in or additions to state legislation regarding access to higher education. Middle school and high school counselors should be allowed to use the bulk of their time counseling students and identifying special talents and skills. This will allow them to place students in appropriate internship/mentoring programs and coursework that will prepare the student for entry into higher education.<sup>8</sup>

## Discussion

Alternative sources can be found to help short-staffed school districts prepare students for college. The business community and higher education institutions can provide public school counselors with information and opportunities to create a continuum of learning that flows seamlessly from middle school through college graduation. For example, businesses that partner with public school districts and provide internships, workshops, seminars, class projects, and/or mentors for middle and high school students could be given tax abatements by the state.

The THECB could coordinate the efforts of existing public school/private business ventures concerning higher education and disseminate this information to school counselors. THECB would give resources to counselors who would educate students and parents. Presentations and written materials should be targeted to all grade levels. For example, oral presentations could be made in classrooms or school assemblies and informational videos could be used to facilitate discussions about college. Many colleges already have recruitment videos that show academic programs and student life. The Better Information Project administered by the State Council for Higher Education in Virginia is an example of this type of program.<sup>9</sup>

Another way to disseminate information early and often would be to offer grants to schools that develop their own information dissemination programs. This would offer more "local control" to

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<sup>7</sup> See Appendix E: Survey

<sup>8</sup> See Appendix C: Career Shadowing.

<sup>9</sup> See Appendix D: Virginia.

school districts and allow them the creativity to tailor programs to their community needs. One especially innovative high school had a bait-and-switch approach to educating parents.<sup>10</sup> The school offered free assistance to parents in filling out their income tax forms. While the parents were at the income tax workshop, the school took the opportunity to give the parents information about higher education. A community could partner with a local business to implement a program such as this one. Groups of accountants, lawyers, and other business could offer free workshops on their services to attract parents, or the school could use the state grant money to provide a stipend.

Many higher education institutions offer science- and technology-oriented summer enrichment programs or camps for all grade levels. The THECB could support “scholarships” to provide low-income students with the opportunity to attend these programs. The THECB could also provide all students in Texas with one scholarship to attend one of these programs. Universities and businesses can partner to form some of these programs. For example, a student could spend a day at a business after four days of “college.”

## Policy Implications

This additional accountability would require the THECB to modify its organizational structure. This recommendation would also require legislation to make the grants available. If local communities were given grants to form information dissemination programs, the THECB task force would also need additional or reallocated resources and personnel to monitor the local communities’ programs. If this money is in the form of an optional grant, schools cannot complain of additional state mandates that exert more control over the school district.

Many charitable foundations (The Meadows Foundation of/for Texas, The Sid W. Richardson Foundation, Houston Endowment, et al) in the state of Texas have allocated millions of dollars to programs geared towards improving the state's educational system. These organizations are searching for innovative and effective programs and would serve as a valuable ally for the state. The THECB should seek to create partnerships for these entities to work with other Texas organizations focused on improving education, such as the Texas Federation of Teachers (TFT), Texas Education Agency (TEA), Texas Business and Education Coalition (TBEC), and the Education Service Centers.

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<sup>10</sup> See Appendix E: Survey.

# Financial Aid

Governments and higher education institutions have typically considered financial aid issues to be centered on the amount of money available. Texas is no exception to this rule, and the state has traditionally used a low-tuition approach to access through financial aid. Unfortunately, this tactic has allowed the state and its institutions of higher education to ignore other viable ways to increase student financial aid utilization. For example, innovative financial disbursement, increased information dissemination, and a student tracking system could all improve Texas' financial aid systems.

## **Texas should offer substantial funding to help close the gap between low-income families and those that receive tax breaks for higher education costs.**

Marginal funding issues have generally been regarded as the primary financial aid issue. Traditional theories claim that more money allocated will result in more individuals being educated. The influence of personal preferences and existing financial aid disbursement mechanisms has, for the most part, been ignored. Texas financial aid policy is a product of this traditional theoretical argument; thus, it has utilized state funds to maintain low cost tuition almost to the exclusion of other strategies. Texas and its higher education institutions/systems must find innovative ways to contain costs, so tuition and fee increases can be slowed. Other states have explored several programs to help students meet minimal funding requirements, and there are a number of innovative approaches to funding dispersal that Texas could implement.

### Argument for Change

Since Texas has no income tax and federal income taxes are progressive, truly low-income households pay little to no taxes. Therefore, tax incentive programs meant to alleviate the burden of higher education cannot help these groups.<sup>xiii</sup> For them, more substantial financial aid must be dispersed. Also, in the last 50 years, annual total expenditure per full-time students has risen three percent.<sup>xiv</sup> Between 1976 and 1996, the average tuition at public universities rose from \$642 to \$3,151.<sup>xv</sup>

### Discussion

Universities/colleges must search for more ways to contain costs so that tuition and fees can be kept lower. Texas could alleviate the burden of higher education funding through the implementation of a "fair-share" approach to funding, which might involve partnerships with industries and other organizations. A "fair-share" approach to funding implies that businesses, non-profits, students, families, schools, and other institutions that benefit from higher education would share in the burden of its cost.<sup>xvi</sup> For example, scholarships from outside government should be strongly encouraged, especially those funded by businesses hiring large numbers of postsecondary education graduates. More innovative approaches might include direct funding from industries to relevant training programs within higher education, possibly with businesses

in each economic sector pooling financial resources to provide loan/scholarship or program funding. These partnerships between industry and higher education providers would promote the production of human capital in high-demand occupations.

Texas can move toward meeting its workforce needs by offering targeted loan forgiveness programs in high-demand occupational fields. A good example of one such loan forgiveness program is the Advantage Missouri loan and debt forgiveness program, which is designed to address Missouri's workforce needs by targeting annually determined high-demand occupational fields.<sup>11</sup> Students entering or enrolled in instruction programs related to the designated high-demand fields may apply for loans. Upon program or degree completion, the student earns one full year of loan forgiveness for each full year of employment in a designated high-demand occupational field in the State of Missouri. Missouri's plan addresses the "brain drain" that many states have experienced in high-demand fields. In order to have this program increase access as well as maintain a quality workforce, Texas should implement a similar program with a financial need requirement, so those who truly need the funding will receive it.

The Hopwood Decision temporarily crippled Texas' ability to target minority students; to alleviate this problem, the state must develop innovative ways to identify underrepresented groups. One possibility is through targeting first-generation college-bound students. Another is through targeting economically disadvantaged students. By targeting both of these underrepresented groups, institutions of higher education will aid students with limited access. Further, they will aid minority students as a result of these actions because studies show that minorities tend to be economically disadvantaged and first-generation.

The State of Texas can raise students' academic performance through the use of driving-related incentives. Texas could work with the car insurance companies to develop a comprehensive method of giving insurance breaks to all students with good grades. Currently, Texas teenage drivers are given a 10% reduction on car insurance if they maintain a 3.0 GPA. Insurance companies should provide a bigger reduction for all students who achieve a 3.0 GPA or above. This provides an incentive to low-income students who have marginal grades to improve performance, thereby making them more attractive for higher education recruitment. Another option would be the creation of a sliding scale in which students with averages above 3.0 would benefit from increased reductions as their GPA approaches 4.0.

A more formal way in which the state could link the privilege of driving with academic performance is to institute minimum grade requirements for the procurement of a driver's license. For example, in order to receive a driver's license a student must maintain a 2.0 GPA throughout the duration of their high school enrollment. An exemption would be necessary for those students whose families rely on their ability to drive a car (handicapped parents, low-income level, etc). This requirement would only include those enrolled in high school or under the age of 18.

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<sup>11</sup> See Appendix C: Advantage Missouri Program.

## Policy Implications

Targeted funding based on economic status and family educational background will encourage minority attendance at institutions of higher education by allowing them to be absorbed into the system under policies that cover other background characteristics. Innovations may also include the termination of unproductive programs or courses as well as more deliberate planning strategies during budgeting time. For example, Texas could assess the number of institutions/programs offering certain disciplines and the specialization and/or duplication of those programs. It may be found that certain institutions need not be operating a given program while other institutions could increase specialization in the same area. It may also be found that highly specialized “niche” programs could be consolidated to a reduced number of schools/regions and then paid for cooperatively.

### **Texas should focus more efforts on the dissemination of financial aid information.**

A second promising but often overlooked aspect of improvement to financial aid is increased student information about access to available funds. State and local agencies should examine how information can be used to improve financial aid processes despite the variation in the level of funds available.

#### Argument for change

Even if funding were increased, minority and underprivileged students would only attain increased access to higher education if they (and their families) are made aware of the financial assistance available and how to obtain it. In addition, the application process for financial aid can be intimidating to those who are not familiar with forms like the Free Application for Federal Student Aid (FAFSA).

#### Discussion

Expansion and more aggressive marketing of the Texas Tomorrow Fund will increase its usage by low-income families.<sup>12</sup> The Texas Tomorrow Fund allows families to pay for their children's future education at today's cost. The money can go to a community college, technical school, university, college, or private school. Texas should increase awareness of this program and find ways to offer more flexible plans for families that live hand-to-mouth. Flexibility is key in this scenario because money may not be available even if parents want to save for their children's futures. In addition, Texas could extend the program by offering matching funds for extremely low-income families; for example, a one-to-one match for low-income family contributions would stretch those families' dollars while controlling the burden on the state.

Another problem for low-income families may be the limitations to spending; currently, the money can be applied for tuition and fees but not for books, parking, room/board, etc. This may

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<sup>12</sup> See Appendix C: Texas Tomorrow Fund.

make it difficult for low-income families to fully utilize the fund because any financial burden—not just tuition—is a barrier for their children to enroll in higher education institutions.

Texas could also benefit from innovative approaches such as the implementation of “bait and switch” programs could provide incentives for parental attendance at financial aid information sessions. Encouraging parental involvement is an important facet of the attempt to enroll students in higher education. The State of Texas needs to find more creative ways of informing parents about higher education costs and convincing them that early planning for college is necessary. For example, offering free tax advice services in conjunction with financial aid counseling might attract more parents than a financial aid counseling session alone. Furthermore, because there is a natural link between a family’s tax filing and its ability to secure financial aid, these would be logical programs to partner, and program design could include collaboration with providers of tax counseling. This program will benefit the parents and their children as well as industry professionals, who could be offered incentives for volunteering.

## Policy Implications

Increased resources focused on information dissemination could increase the efficiency of financial aid programs. By reaching out to underrepresented groups through innovative approaches, parents and students can become more knowledgeable and comfortable with financial aid information. Texas’ financial aid system must be prepared for a possible increase in the overall amount of applicants for aid and an increased proportion of those applicants who qualify. Additional resources for processing and funding of these programs should be anticipated.

## **Texas Higher Education could benefit from a student tracking system that would function as a measurement and evaluation system as well as a tool to identify the need for resource allocation.**

An important part of evaluating program success is to measure the effects of policy decisions. A student tracking system would assist in measuring the effects of implemented policies and also identify areas of access that call for more resources and innovative approaches. All students who attend Texas institutions of higher education should be tracked throughout their entire educational careers to ensure accurate measurement and reporting of all four access issues (recruitment, enrollment, retention, and graduation).

## Argument for change

When access is consistently understood to include recruitment, enrollment, retention, and graduation, it becomes necessary to be concerned with issues other than recruitment and enrollment. A good example of the need for tracking can be found at the community-college level. One reason is that many students choose to transfer to four-year institutions following their first or second year of enrollment at a community college. A means of tracking students throughout their educational experience would be beneficial.

## Discussion

Expanding the use of the Texas Common Application for higher education would enable transfer students to be tracked at the state level by including questions regarding complete educational histories. A universal student identification number would also assist in tracking students. Upon entrance to any Texas higher education institution, students would be registered in the system. From that point forward, students' mobility between and among institutions would be recorded in a statewide database for longitudinal tracking.

## Policy Implications

Longitudinal student tracking systems are now capable of serving a multitude of masters. Growing accountability demands from states, accredits, and the federal government prominently feature such measures as persistence and graduate rates and time-to-degree. At the same time, resource shortfalls are driving institutions and state higher education systems to examine their operations more carefully in order to achieve greater coherence and efficiency; understanding and monitoring student flow should be a prominent part of this effort.

## Partnerships with Employers

One of the goals of providing education is to create an educated and skilled workforce. It is, therefore, beneficial to forge a direct and visible relationship between Texas' industries and its educational institutions. This relationship should be formed during a student's elementary or secondary education, and it should be maintained and enhanced through all levels of school until college graduation.

An early understanding of career options ensures that students will have the opportunity to direct their studies toward the development of the necessary knowledge, skills, and abilities for success in their desired career. For example, economic forecasts of high demand occupations include careers in engineering and technology that mandate knowledge and competence in math and science.<sup>13</sup> If students are exposed to the demands of their chosen profession early, they may focus their efforts on the necessary science and math courses in high school that will facilitate their later success in college. Frequently, students have already limited their options in higher education by failing to adequately prepare in high school.

Early exposure to industry should include increased state support of mentoring relationships between students and community business leaders. Organizations should be offered incentives to provide students with "real-world" experiences and projects. Through these educational experiences beyond the classroom, students will gain understanding of the skills required for the profession.

### **Students should be connected with mentors and advisors throughout their educational careers, including secondary and higher education, for both personal and career development.**

Mentoring involves a one-on-one relationship between two persons. In this relationship, the mentor supports, teaches, counsels, and assists the student on a regular basis for an extended period of time.<sup>xvii</sup> The mentoring relationship can be an invaluable resource to a student (in elementary, secondary, or higher education) who is deciding which career path to take and learning skills needed as he/she enters the workforce. Meaningful relationships with mentors allow students to get advice and counsel from experienced people as well as get an inside look at the realities of the workplace. Mentors can provide real-world knowledge about a particular career path that a student may not be able to get from teachers and parents. Having the opportunity to see how academic work applies in the workplace may stimulate high school students' interest in their classes as well as their interest in enrolling in higher education.

### Argument for Change

The Texas Commission of Volunteerism and Community Service's newly adopted Governor's Mentoring Initiative is promoting mentoring of minority or economically disadvantaged children

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<sup>13</sup> See Appendix A: Economic Development

to discourage possibly self-destructive lifestyles.<sup>xviii</sup> However, mentoring can also serve as an important tool in enhancing academic aptitude and guiding personal career development. In 1996, the Baylor Community Mentoring for Adolescent Development (CMAD) group studied Waco I.S.D. middle school students involved in a mentoring program. They found a 76 percent increase in students with good attendance and an 84 percent increase in students passing their class work.<sup>xix</sup> In addition, students introduced early into the workplace through mentoring will have the opportunity to interact with successful people that can give them advice and direction as they decide their future. This important relationship can provide the springboard that allows students to interact with other members of the working community.

The Texas Workforce Commission's School-to-Careers program, which includes mentoring opportunities, attempts to build on these strengths, but unfortunately, activities do not always continue into college. As of June 30, 1999, local School-to-Careers partnerships reported that 834,044 students had participated in program activities. Of those, less than 12 percent were in college.<sup>xx</sup> For companies, mentoring college students can aid in retaining interns and create a larger pool from which to draw workers. The National Action Council for Minorities in Engineering (NACME) suggests that mentoring programs provide employers with opportunities to teach interns their corporate cultures, engage them in a developmental process that may lead to future employment, and recruit high performing interns as company employees.<sup>xxi</sup> A 1998 study by NACME found that successful mentoring contributed substantially to an intern's interest in returning to their host companies. In addition, mentoring contributed to a positive evaluation of their workplace experience.<sup>xxii</sup>

## Discussion

Mentoring and advising programs should be implemented at all levels of education, including secondary and higher education, targeting students for both personal and career development. High schools also have a large resource of possible mentors in their alumni pool. As suggested by many high school counselors,<sup>14</sup> high schools should develop programs that will involve their alumni once they have graduated. Inviting recent graduates (typically of less than one year) to serve on panels that discuss their first year at college gives current students an inside look at what college is really like and what it takes to be successful. Teachers can invite alumni to talk about specific professions that relate to their classes. Another option involves encouraging alumni to send in examples of their work that can be prominently displayed around the school so that current students can see how their classes relate to the real world. These works could include artwork, architectural or engineering designs, books or reports completed by former students for college classes or jobs. This gives current students a variety of persons to get into contact with regarding careers and possible jobs.

Colleges and universities may be in the best position to provide special programs for both their current students and prospective students. Summer institutes, weekday visits and weekend activities introduce younger students to college level work, professors and college life. This also gives current students the opportunity to mentor and interact with younger students, thereby reinforcing their knowledge and abilities.

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<sup>14</sup> See Appendix E: Survey.

## Policy Implications

Due to the nature of mentoring relationships, local control and implementation are necessary for successful programs. However, the state plays an important role in fostering partnerships and coordinating statewide activities. The Texas Workforce Commission and The Commission on Volunteerism and Community Service should coordinate efforts to expand the promotion and coordination of mentoring programs for student career development into all levels of education. Such a commitment would require additional funds for the Texas Workforce Commission to continue School-to-Careers programs after its federal grant expires in 2002.<sup>15,xxiii</sup>

### **Texas must provide financial incentives to businesses to encourage participation in School-to-Careers and other career development activities.**

Currently, there are numerous programs underway that introduce students in middle and secondary school to the work environment. In Texas, projects such as the School-to-Careers initiative, apprenticeship programs, and summer jobs programs bring participants face-to-face with working professionals. Despite these programs, direct contact with members of potential professions/occupations for these students is often limited to campus visits by college representatives and members of various professions on college and career days.

Federally aided School-to-Work programs such as the Texas School-to-Careers program have found great success in connecting students to career development opportunities. These programs share three elements: school-based learning, work-based learning, and connecting activities. Classroom instruction is based on business-defined occupational skill standards, and opportunity is given for career exploration, work experience, structured training, and mentoring at job sites. In addition, courses are developed that integrate classroom and on-the-job instruction, matching students with participating employers and building the bridge between school and work.<sup>xxiv</sup>

Outside of the School-to-Work program, apprenticeship programs sponsored by the Department of Labor's Employment and Training Administration provide a combination of on-the-job training and related classroom instruction. Eligible students learn the practical and theoretical aspects of a highly skilled occupation. Apprenticeship programs are sponsored by joint employer and labor groups, individual employers, and/or employer associations.<sup>xxv</sup> These programs offer meaningful opportunities for workplace preparation.

Both high schools and colleges should encourage cooperatives and internships with local businesses that can give students a first-hand look at the work environment. Partnerships can be developed between schools, local businesses, and community organizations to provide students with job shadowing, internships, field trips, or educational experiences that will prepare them for college or the work world.

### **Argument for Change**

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<sup>15</sup> Texas School-to-Careers program is funded through a five-year, \$61 million, federal implementation grant given under the School-to-Work Opportunities Act of 1994.

Through School-to-Careers programs and similar activities, students have the opportunity to gain transferable job skills that will increase their likelihood of obtaining employment after graduation while increasing academic aptitude in school. A study performed by the National Employer Leadership Council showed that students who participate in School-to-Careers programs are more likely to get better grades, stay in school, go directly to college, and approach life and work with a positive attitude.<sup>xxvi</sup> At the same time, School-to-Careers programs enhance both workforce and economic development in the state. In a report of the Economic Impact of School-to-Careers in Texas, findings demonstrate that workers who participate in School-to-Careers activities have better skills and garner higher salaries than workers who do not participate.<sup>xxvii</sup> Considering the loss of federal funds in 2002, increased partnerships with businesses and industry should be encouraged to continue the sustainability and effectiveness of career development activities.

## Discussion

The state should provide financial incentives to businesses, encouraging participation in School-to-Careers and other career development activities. Towards this goal, four strategies could be taken:

- Simplify rules and regulations surrounding work-based activities for students so that the costs of participation by the employers can be reduced.
- Publicly recognize employers who operate model internship, cooperative education, apprenticeship programs, or career development activities. This could include statewide recognition from the Lieutenant Governor or the legislature for service to the state.
- Provide businesses with insurance that protects against liability for injury of students working as participants of a School-to-Careers program.
- Reward employers who develop and participate in career development programs with tax credits. To assist in defraying costs and encouraging participation, credits should at least equate to the costs of the goods, services, equipment, and facilities provided by the business.

## Policy Implications

During the 76<sup>th</sup> session of the Texas Legislature, both the House and Senate approved HB 1418, a bill relating to optional career and technology education programs offered by public school districts. Among other provisions, the introduced version offered both liability insurance and tax credits for businesses participating in career development activities.<sup>xxviii</sup> Although the provision for tax credits was stricken, liability insurance for businesses remained in the version sent to the Governor. The Governor ultimately vetoed the bill for reasons unrelated to the liability insurance provision.<sup>16,xxix</sup> New legislation should be offered that includes tax credits and liability insurance for businesses participating in career development activities while satisfying the concerns the Governor had for HB 1418.

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<sup>16</sup> As stated in Governor Bush's veto proclamation, "House Bill No. 1418 creates a new 'certificate of initial mastery' which could dilute Texas' effort to insist on high academic standards for our public schools."

A new version to the proposed tax credit could also be sought. One method is to pattern tax incentives after those established for companies selecting to hire welfare recipients and other targeted job seekers. For example, the Work Opportunity Tax Credit (WOTC) is designed to help the job seekers most in need of employment gain on-the-job experience and move toward economic self-sufficiency. The WOTC reduces employer federal tax liability by as much as \$2,400 per new hire.<sup>xxx</sup> Another example would be the Welfare-to-Work Tax Credit. This incentive encourages employers to hire long-term welfare recipients. This tax credit reduces an employer's federal tax liability by as much as \$8,500 per new hire. Tax credits such as these create a financial incentive for businesses that would not normally participate in career development activities to do so.

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<sup>i</sup> Legislative Budget Board, *Strategic Planning and Budgeting and Performance Measures*, March 1998, State of Texas, 20 March 2000 <<http://notesweb.lbb.state.tx.us/PRFORM.nsf/>>.

<sup>ii</sup> Ara Merjanian, *Strategic Budgeting in Texas: A Systems Approach to Planning, Budgeting, and Performance Measurement*, March 2000, American Society for Public Administration, 2 April 2000 <<http://www.aspanet.org/cap/statcase.htm>>.

<sup>iii</sup> Texas State Auditor's Office, *Performance-Based Budgeting Survey Result*, March 1998, State of Texas, 25 March 2000 <<http://www.sao.state.tx.us/perfbudgsurv-f.html>>.

<sup>iv</sup> Katherine Barrett and Greene, Richard, "The Government Performance Project: Managing for Results," 1999, *Governing*, 7 March 2000 <<http://www.governing.com/gpp/gp9man.htm>>.

<sup>v</sup> Robert B. Stein, *Funding for Results: A Collaborative Initiative for Educational Excellence*, January 1999, Missouri Department of Higher Education, 8 April 2000 <<http://www.mocbhe.gov/acadafrs/ffr2.htm>>.

<sup>vi</sup> Missouri Office of Administration, *FY 2001 Executive Budget – Department Budgets, Higher Education*, January 2000, The State of Missouri, 17 April 2000 <<http://www.oa.state.mo.us/bp/budg2001/dhe/index.shtml>>.

<sup>vii</sup> *Getting Ready for College Early: A Handbook for Parents of Students in the Middle and Junior High School Years*, August 1997, Office of the Under Secretary, US Department of Education, 20 April 2000 <<http://www.ed.gov/pubs/GettingReadyCollegeEarly/>>..

<sup>viii</sup> Ann Davis Shaw, Admissions Counselor, MIT, interview by Jill Shaunfield, 22 March 2000, College Station, Texas, telephone, The George Bush School of Government and Public Service.

<sup>ix</sup> *Access and Equity 2000: Ensuring the Future of Texas—Overview*, Texas Higher Education Coordinating Board, 22 February 2000 <<http://www.theccb.state.tx.us/divisions/ane/teop89/bodteop89.htm>>.

<sup>x</sup> Mark Healy, *Back to School*, Ed. Vince Bielski, 3 April 2000, Industry Standard, 3 April 2000 <<http://www.thestandard.com/article/display/0,1151,13481,00.html>>.

<sup>xi</sup> James W. McConaughy, *Falling Through the Net II: New Data on the Digital Divide*, Washington DC: National Telecommunications and Information Administration, 1999, U.S. Department of Commerce.

<sup>xii</sup> Randall E. Stross, *Digital Divide Hooey: Access to the Internet Is No Black and White Issue*, 17 April 2000, U.S. News and World Report, 17 April 2000 <<http://www.usnews.com/usnews/issue/000417/digital.htm>>.

<sup>xiii</sup> Kenneth Ashworth, David Breneman, E.F. Infante, and Sandra S. Ruppert, *Taking Up the Challenge: A Report on the Midwestern Higher Education Policy Summit* (Oak Brook, Illinois: Midwestern Higher Education Commission, September 1998), 22.

<sup>xiv</sup> *Ibid.*, 49.

<sup>xv</sup> National Commission on the Cost of Higher Education, *Straight Talk about College Costs and Prices* (Washington, D.C.: United States Congress, 21 January 1998), 3.

<sup>xvi</sup> *Taking Up the Challenge*, 22.

<sup>xvii</sup> Shay Bilchik, *Juvenile Mentoring Program: 1998 Report to Congress*, December 1998, Office of Juvenile Justice and Delinquency Prevention, 17 April 2000 <<http://www.ncjrs.org/pdffiles1/952872.pdf>>.

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- <sup>xviii</sup> Office of the Governor, *The Case for Mentoring - Benefits of Mentoring, Why Mentor*, April 2000, The State of Texas, 20 April 2000 <<http://www.governor.state.tx.us/Mentoring/case.html>>.
- <sup>xix</sup> *Ibid.*
- <sup>xx</sup> Mark R. Butler, *School-to-Careers Activities in Texas, A Status Report*, January 2000, Texas Workforce Commission, 20 April 2000 <<http://www.twc.state.tx.us/svcs/stw/stwhp.html>>.
- <sup>xxi</sup> Robert J. Highsmith, Ronni Denes and Marie M. Pierre, *Mentoring Matters*, June 1998, Research Letter 8 no. 1, 17 April 2000 <<http://www.nacme.org/rljune98.pdf>>.
- <sup>xxii</sup> *Ibid.*
- <sup>xxiii</sup> Butler. *School-to-Careers Activities in Texas*.
- <sup>xxiv</sup> *Ibid.*
- <sup>xxv</sup> Employment & Training Administration, *Apprenticeship*, April, 2000, Department of Labor, 17 April 2000 <<http://www.doleta.gov/individ/apprent.htm>>.
- <sup>xxvi</sup> Impact Data Source, *Linking School-to-Careers with Economic Development: A Report of the Economic Impact of School-to-Careers in Texas*, November 19, 1999, Texas Workforce Commission, 20 April 2000 <<http://www.twc.state.tx.us/svcs/stw/stwhp.html>>.
- <sup>xxvii</sup> *Ibid.*
- <sup>xxviii</sup> Texas Legislature Online, *Bill History, HB 1418*, April, 2000, The State of Texas, 20 April 2000 <<http://www.capitol.state.tx.us/tlo/billnbr.htm>>.
- <sup>xxix</sup> Office of the Governor, *76<sup>th</sup> Session Veto Proclamations, HB 1418*, June 20, 1999, The State of Texas, 20 April 2000 <<http://www.governor.state.tx.us/legislative/Veto76/HB1418.html>>.
- <sup>xxx</sup> Employment & Training Administration, *Work Opportunity and Welfare-to-Work Tax Credits*, February 2, 2000, Department of Labor, 17 April 2000 <<http://www.doleta.gov/employer/wotc.htm>>.

## Appendix A: Economic Development

# Economic Development

One of the goals of providing education is to create an educated and skilled workforce. Present workforce conditions require that Texans be trained and skilled in many fields, degrees and educational settings. Anticipating the changes in Texas' economy in the 21st Century can provide direction to Texas' higher education institutions as they endeavor to meet the demands of the evolving workforce.

Using this logic, it is important to understand the economic needs of the state when discussing access to higher education. Not only is it important that all Texans have access to higher education institutions but also that this education is preparing students to be skilled in fields where employment opportunities exist. Texas' interests are also served through the existence of a competent and competitive workforce. Therefore, before commencing a study on how to address barriers to higher education in Texas, the students of the Bush School of Government and Public Service first examined Texas economic trends.

## Methods of Prediction

A shift share analysis is a statistical tool that measures the movements in a local economy and categorizes them into either faster or slower growth sectors. It also provides a means of examining the community's share of growth that is occurring in a given economic sector. There are three basic components to the shift share analysis: the national growth component (NGC), the industrial mix (IM), and the competitive share component (CSC). Furthermore, Location Quotients indicate if a community produces more than is needed for its own use and is selling the excess to non-local markets.

## Economic Observations and Predictions

The NGC component provides a snapshot of employment growth in Texas due to national growth in these industries. Because there has always been growth in the national economy, the NGC will always show positive growth. The IM suggests that there were job losses in six industries, including government. The industrial mix indicates that those industries that recorded employment losses are declining sectors nationally, which may be attributable to many factors such as cyclical events or foreign competition. The greatest job losses in the IM category were in the manufacturing and government sectors. (See Table 1)

In comparison to the rest of the nation, Texas compared has a local competitive advantage according to the Competitive Share Component of the shift share analysis. The CSC indicates that there was job creation in every single industry shown below because of the local competitiveness compared to that of the rest of the nation. (See Table 1)

The location quotients (LQ) demonstrate that Texas is a self-sufficient state. Location quotient numbers between .75 and 1.25 suggest that a particular industry is meeting local demand, it does not mean that its product is being consumed locally but that it is not losing money to imported products. Texas approximately produces as much as it consumes and in the case of mining it produces more than state demand. (See Table 1)

Table 1: Texas Shift Share Analysis and Location Quotients 1990-1997

Texas Shift Share Analysis	National Growth Component	Industrial Mix	Competitive Share Component	Earnings Location Quotient	Employment Location Quotient
Farm Employment	<b>27135</b>	<b>-42155</b>	<b>29568</b>	<b>0.87</b>	<b>1.222</b>
Ag. Serv., Forestry, Fishing, and Ag Serv	<b>11064</b>	<b>24689</b>	<b>1872</b>	<b>0.92</b>	<b>0.970</b>
Mining	<b>32228</b>	<b>-90909</b>	<b>15948</b>	<b>5.49</b>	<b>4.148</b>
Construction	<b>55141</b>	<b>20339</b>	<b>106857</b>	<b>1.10</b>	<b>1.131</b>
Manufacturing	<b>113205</b>	<b>-124590</b>	<b>124103</b>	<b>0.91</b>	<b>0.813</b>
Transportation	<b>52976</b>	<b>19145</b>	<b>53210</b>	<b>1.34</b>	<b>1.112</b>
Wholesale Trade	<b>51716</b>	<b>-14814</b>	<b>34876</b>	<b>1.07</b>	<b>1.044</b>
Retail Trade	<b>168925</b>	<b>65716</b>	<b>130985</b>	<b>0.99</b>	<b>0.998</b>
Finance	<b>79803</b>	<b>-6892</b>	<b>55891</b>	<b>0.82</b>	<b>1.003</b>
Services	<b>277293</b>	<b>341854</b>	<b>144884</b>	<b>0.92</b>	<b>0.943</b>
Government	<b>159458</b>	<b>-122313</b>	<b>155007</b>	<b>0.93</b>	<b>1.042</b>
Federal, Civilian	<b>22334</b>	<b>-48675</b>	<b>8657</b>	<b>Source: REIS<sup>1</sup></b>	
Military	<b>20775</b>	<b>-60663</b>	<b>22126</b>		
State	<b>30354</b>	<b>-7213</b>	<b>18979</b>		
Local	<b>89672</b>	<b>-1281</b>	<b>63900</b>		
Shift Share Totals	<b>1028943</b>	<b>0</b>	<b>923270</b>		

There are several industries that have exhibited faster growth rates than those nationally. Despite not having the highest change rate, one industry that deserves special attention is the services industry. During the 1990-1997 period the industries employment rate grew by 31% compared to a 25% increase nationally, that is approximately 764,031 jobs, more than any other industry in Texas. Further, according to shift share analysis it is an expanding sector. (See Table 2)

Included in the services industries are the education, engineering, and computer-related sub-sectors services amongst others<sup>1</sup>, which are also some of the fastest growing sectors in the services industry. Furthermore, the services industry is self sufficient with an employment location quotient of .92 and earnings location quotient of .94. (See Table 2)

Another industry that has shown considerable growth is the construction industry<sup>1</sup>. With a growth rate Double of the US at 37% this industry is strong in Texas. A quick calculation of average wages from the US Census County Business Patterns suggest that this industry has an average wage of \$29,260, nearly equal to the US average of 31,915. Construction jobs number 428,411, approximately 17% if the Texas work force, compared to 19% of the US workforce in the same industry. LQ's for these industries indicate we are meeting the demand. Earnings LQ's of 1.10 and employment LQ's of 1.31. (See Table 2)

The educational service sub-sector is an example of the diversity of the services industry, which requires post-secondary education. This industry in Texas grew at a 20% rate compared to the national growth rate of 15%. Additionally the average wage rate grew faster than that of the nations with a 15% increase compared to the 11% nationally. (See Table 2)

Health related services are a dynamic sector of the Texas economy. With a growth rate of 17% and 30% share of the services industry this sector merits attention. Nationally this sector has a growth rate of 9% and an average wage increase of 12% compared to Texas' 14%. However, the importance of this sector is that within the health related services there are a multitude of services that require a variety of post-secondary education. In fact, the greatest employment is nursing, home health care and hospital staff. (See Table 2)

Retail trade in Texas also exhibited a fair amount of growth. This industry in Texas grew by 24% with only 15% growth nationally. This industry is characteristically employed by low-wage/low-skill employees, and therefore, would not need a large amount of post-secondary education. However, this industry also needs managers and other skilled people that have two-year post-secondary educational backgrounds. (See Table 2)

**Table 2: Growth Rates in Employment Sectors, 1990-1997**

	U.S.Change	Texas Change Rate
Farm Employment	<b>-0.06</b>	<b>0.06</b>
Ag. Serv., Forestry, Fishing, and Ag Serv	<b>0.36</b>	<b>0.38</b>
Mining	<b>-0.20</b>	<b>-0.15</b>
Construction	<b>0.15</b>	<b>0.37</b>
Manufacturing	<b>-0.01</b>	<b>0.11</b>
Transportation	<b>0.15</b>	<b>0.26</b>
Wholesale Trade	<b>0.08</b>	<b>0.15</b>
Retail Trade	<b>0.15</b>	<b>0.24</b>
Finance	<b>0.10</b>	<b>0.18</b>
Services	<b>0.25</b>	<b>0.31</b>
Government	<b>0.03</b>	<b>0.13</b>
Federal, Civilian	<b>-0.13</b>	<b>-0.09</b>
Military	<b>-0.21</b>	<b>-0.09</b>
State	<b>0.08</b>	<b>0.15</b>
Local	<b>0.11</b>	<b>0.19</b>
Shift Share Totals	<b>0.11</b>	<b>0.21</b>

Source: REIS<sup>1</sup>

The Texas average income is quite competitive to the national averages. Some sub-sectors outperform the national averages, while others are not as competitive. For these fields, although not growing as fast as services, it is important to attract businesses that provide these jobs because of the higher salaries they provide. (See Table 3)

**Table 3: US/Texas Average Income Percent Change for Selected Business Services Sub-sectors 1993-1997.**

Earnings	US Avg Income % change	Texas Avg Income % change
Computer Data Svc.	<b>0.92</b>	<b>0.85</b>
Computer Programing	<b>0.66</b>	<b>0.77</b>
Software Pkg.	<b>1.46</b>	<b>2.10</b>
computer integrated Systems	<b>0.73</b>	<b>0.33</b>
Data Processing	<b>0.50</b>	<b>0.34</b>
Information Systems	<b>1.75</b>	<b>0.29</b>
Computer Facilities Management	<b>1.44</b>	<b>1.46</b>
Computer Maint and Repair	<b>-0.04</b>	<b>8.65</b>
Computer related Svc.	<b>2.22</b>	<b>2.58</b>
Totals	<b>0.92</b>	<b>0.89</b>
Source: REIS <sup>1</sup>		

## Appendix B: Access in Texas

# Access in Texas

## Statement on Access and its importance from the Texas Higher Education Coordinating Board<sup>1</sup>:

The future economic vitality of Texas depends in large part on the state's ability to educate all of its people and to help them develop the work and social skills needed to compete with workers of other nations and states in our global economy.

The ability of Texas and the nation to cooperate and trade with other nations will be enhanced through an appreciation for other cultures and their contributions to the world. This appreciation begins with the acceptance of diversity as it reflects the population of the state. There must be a continuing effort to increase the number of underrepresented students enrolled and the number of minority faculty, administrator and professional staff employed at predominantly White institutions. Likewise, there is a need for a similar effort to increase the numbers of underrepresented White students and faculty, administrators, and professional staff at the state's historically minority institutions.

## Working Definition of Access guiding the research and analysis in *Beyond the Barriers*:

Texas should provide higher education (recruitment, enrollment, retention, and graduation) to all Texans, regardless of a person's race, ethnicity, economic status, gender or disability.

## Historical Overview of Access Issues in Texas:

- Historically, Texas has supported access to higher education by establishing undergraduate tuition rates at one of the lowest levels in any state.<sup>1</sup>
- NAACP case filed in 1970 *Adams v. Richardson*; 1964 Civil rights act violation--de jure system; 1973 order for United States Department of Education to issue guidelines for desegregation in 6 states, including Texas
- 1983-1988 Texas Plan: Federally monitored and designed to desegregate and increase representation of Blacks and Hispanics
- 1989-1994 Texas Plan: Voluntary attempt to avoid enforcement proceedings
- Access and Equity 1994-2000 Access and Equity 2000: perhaps first time access is defined in terms of enrollment, retention, completion
- Hopwood 1996 and beyond: Hopwood case and Attorney General Daniel Morales' rulings raise difficulties for continued implementation of Access and Equity 2000
- September 1999 Attorney General John Cornyn issued Opinion JC-0107, which advised state universities to await resolution of Hopwood in either the U.S. Court of appeals or the U.S. Supreme Court before restructuring of adopting new

procedures for financial aid programs. The opinion also withdrew the earlier opinion, L098-001, which applied the Hopwood decision to all institutional policies.

### A New View of Higher Education in the Texas Legislature, 1999

- Prior to 1999, the only higher education comparison with other states was to document that Texas has more higher education employees per capita than other states because of 1) comparatively low enrollment in private institutions, and 2) comparatively strong role of state (vs. local financing)
- Implicit recognition of link between higher education and economic development High-tech growth industries, including computers and related machinery, software and support services, electronics, communications, and biotechnological research will continue to drive the state's economy in the near term. Growth in these industries, however, will be partially offset by sluggish performances in the energy and agricultural sectors and reduced consumer spending.

### Efforts to Increase Efficiency

- Undergraduate subvention terminated at 45 hours above minimum required for degree
- Ph.D. subvention terminated at 100 hours
- Undergraduates who graduate within 3 hours of minimum required receive \$1,000
- Institutions authorized to reduce tuition for students taking more than 15 semester hours or retention and graduation.
- Senate Bill 1853, 1999, requires community colleges to report student enrollment status to the Texas Higher Education Coordinating Board. It is intended to track the completion rate of certificate-or degree-seeking students.

### New Financial Aid Programs

- The TEXAS program provides college scholarships to students who have graduated from high school and completed the recommended or advanced high school curriculum. The highest priority is to be given to students who have the greatest financial need. The amount of the grant is the statewide average tuition and required fees for the type of institution the student attends. It is estimated that this will be approximately \$1,200 per semester for university students, \$470 per semester for community college students, and \$700 per semester for technical college students, based on a course load of 12 hours per semester. To maintain the grant, a student must make satisfactory academic progress toward a degree and continue to meet the financial need requirements.
- The Teach for Texas grant is a conditional grant to a junior or senior student pursuing a baccalaureate degree who agrees to enter the teaching field in a critical shortage area or field. The grant recipient is required to teach full time for five

years to complete the obligation, or the grant becomes a loan and must be repaid. The grant is double the amount of a TEXAS grant.

- House Bill 2857 authorizes public and private institutions to use state appropriations or other scholarship funds to match scholarships for Texas students who receive admissions and scholarship offers from out-of-state institutions.

### An Access for Mandate for the Higher Education Coordinating Board: HB 1678, 76th Session (1999)

- House Bill 1678 requires the Texas Higher Education Coordinating Board to develop and annually update a uniform strategy to identify, attract, enroll, and retain students who reflect the state's population
- Longitudinal data base on line: populations, enrollments, retention, degrees awarded, faculty

### Higher Education Coordinating Board Strategic Plan 1999 - 2003

#### Mission

The mission of Texas state government is to support and promote individual and community efforts to achieve and sustain social and economic prosperity for its citizens.

#### Guiding Principles

- Texas should provide access to quality higher education for all qualified students, regardless of individual ability to pay
- Institutions must maximize access through efficient use of existing higher education capacity
- Black and Hispanic higher education participation and graduation rates must improve
- Higher educational institutions must respond to public needs.

## Appendix C: Innovative Programs

## Overview

Organizations across the nation have implemented programs in an attempt to creatively overcome barriers to access. These provide useful programmatic skeletons as models for potential Texas initiatives. In addition, several ideas in the report refer to these programs. A wide range of programs is highlighted, providing insight on program initiatives, student eligibility, administration, and evaluation of success. Many of these programs focus on financially disadvantaged and minority students. Programs target all ages (middle school and beyond). Innovations are implemented by governmental departments, non-profit agencies, and private firms. Programs include scholarships, job shadowing, counseling, and information dissemination. Evaluation techniques tend to vary. The amount of financial support fostered for the program and the age of the program has a propensity to effect the evaluation process.

## Texas Tomorrow Fund

**Source:** *Welcome to the Texas Tomorrow Fund.* Texas Tomorrow Fund. 11 March 2000  
<[www.texastomorrowfund.com/main.cfm](http://www.texastomorrowfund.com/main.cfm)>.

**What is the purpose?** The Texas Tomorrow Fund aims to alleviate the discrepancy between the rise in higher education costs and the rise in real family income, making it possible for families (and peers) at any income level to freeze educational costs for children.

**Who is eligible?** Unlike other, similar programs, the Texas Tomorrow Fund allows anyone to purchase prepaid tuition contracts—parents, grandparents, relatives, friends, businesses, civic organizations or clubs. The beneficiary of a given fund must be a Texan and must not yet have graduated from high school. The only exception to the residency requirement is for beneficiaries whose parent is both a Texan and the purchaser of the fund.

**When is the program administered?** A fund can be opened anytime up to 12 months before the beneficiary's graduation from high school.

**Where/by whom is the program administered?** Texas State House Bill 1214 approved the program, and in the fall of 1997, Proposition 13 passed, cementing the Texas Prepaid Higher Education Program through a constitutional amendment.

**What does the program do?** The Texas Tomorrow Fund allows individuals and organizations to invest in a given child's education by paying today's cost for tomorrow's education. Participants fulfill a monthly payment obligation in much the same way one pays for a home mortgage or car loan. When the recipient graduates high school, his/her fund can be applied to any eligible Texas public or private institution and to out-of-state institutions in some cases.

**How effective has the program been?** Since the Fund is only beginning its fifth enrollment period, it is too early for an evaluating body to determine its effectiveness to date. However, some aspects of the program are atypical of similar state programs across the nation and are especially noteworthy for low-income families:

- The payment options are sufficiently low to allow economically disadvantaged families to take advantage of the program. Payments begin as low as \$26 per month for one year of public college.
- There is a scholarship component built into the Fund, which encourages organizations to participate in the future of low-income and disadvantaged Texas youth.

# Promotion and Awareness of Graduate Engineering and Science Studies (PAGESS)

**Source:** *PAGESS--Promotion and Awareness of Graduate Engineering and Science Studies*. 17 April 2000. PAGESS. 20 April 2000 <[www.tamu.edu/maes/pageess/](http://www.tamu.edu/maes/pageess/)>.

**What is the purpose?** The Society of Mexican American Engineers and Scientists (MAES) works to erase negative stereotypes of and increase prosperity for Mexican Americans. It accomplishes this through the Promotion and Awareness of Graduate Engineering and Science Studies (PAGESS) program by supporting Mexican American and Hispanic students in engineering and science at the postsecondary level.

**Who is eligible?** The PAGESS Program works with Mexican American and Hispanic students at the undergraduate and graduate levels.

**When is the program administered?** MAES members carry out activities under the PAGESS Program year-round.

**Where/by whom is the program administered?** Programs exist at a number of mostly southwestern universities, including but not limited to: Texas A&M University, University of Houston, University of Notre Dame, Stanford University, University of New Mexico, University of California, and California State University.

**What does the program do?** Support is formed and maintained via a graduate student network, which promotes student recruitment and retention. Graduate students receive research and professional development assistance, internship opportunities, and mentoring. This network is also used to encourage undergraduate Latino students to seek graduate education in engineering, science, technology, health, and related fields. Undergraduates in PAGESS receive mentoring, GRE training, personal statement and reference assistance, and summer research/internship opportunities.

## Promotion and Awareness of Careers in Engineering and Science (PACES)

**Source:** *El MAEStro*. March 2000. Society of Mexican American Engineers & Scientists. 28 March 2000 <[www.tamu.edu/maes/paces/](http://www.tamu.edu/maes/paces/)>.

**What is the purpose?** The Society of Mexican American Engineers and Scientists (MAES) works to erase negative stereotypes of and increase prosperity for Mexican Americans. It accomplishes this through the Promotion and Awareness of Careers in Engineering and Science (PACES) program by providing continual efforts at improving education and increasing the number of Mexican Americans studying science and engineering.

**Who is eligible?** The PACES Program works with Mexican American and Hispanic students in junior high and high school.

**When is the program administered?** MAES members carry out activities under the PACES Program year-round.

**Where/by whom is the program administered?** Programs are planned and implemented at the local chapter level, allowing relative autonomy to members in each chapter.

**What does the program do?** PACES places engineering and science students as role models and mentors to Mexican American and Hispanic youths. Through mentoring, tutoring, and field trips, PACES participants encourage interest in engineering and science, thereby encouraging youth to prepare for and seek engineering and science degrees. Participants also share information with parents to interest them in future educational planning for their children.

## Advantage Missouri Program

**Source:** *Missouri Student Assistance Programs*. 21 March 2000. Missouri Department of Higher Education. 28 March 2000 <<http://www.mocbhe.gov/mostars/scholar2.htm>>.

**What is the purpose of the program?** The Advantage Missouri Program provides financial assistance for higher education while addressing the workforce needs of the state.

**Who is eligible?** To be eligible, one must:

- be enrolled full-time at a participating Missouri post-secondary school
- maintain satisfactory academic progress according to standards of the school
- be a Missouri resident and a United States citizen or eligible noncitizen, and
- not be pursuing a degree or certificate in theology or divinity

**When is the program administered?** At the beginning of each year of higher education. This program provides \$2,500 per year for a maximum of \$10,000.

**Where/by whom is the program administered?** Missouri Student Assistance Resource Services, a division of the Missouri Department of Higher Education, administers the program.

**What does the program do?** This loan and loan forgiveness program is designed to address Missouri's workforce needs by targeting annually determined, high-demand occupational fields. Students entering or enrolled in programs of instruction related to these fields may apply for loans. Upon program or degree completion, the student will have one year of loans forgiven for each full year of employment in a designated high-demand occupational field in Missouri. Based on appropriations scheduling, it is anticipated that this program will be effective fall 1999. The borrower has one year after graduation to obtain employment in an eligible occupational field in Missouri. The borrower must repay the loan funds, with interest, if the employment obligation is not fulfilled.

## Career Shadowing

**Source:** *Job Shadowing*. 19 January 2000. Wisconsin Department of Public Instruction. 12 April 2000 <<http://www.dpi.state.wi.us/dpi/dlsis/let/lejjobshw.html>>.

**What is the purpose of the program?** Job Shadowing occurs when professionals allow a child or a teen to work with them for a few hours or an entire workday. The goal is to give youth exposure to and information about a job or a career field.

**Who is eligible?** This is different for each program. The schools and the program coordinators would determine eligibility, but it would likely be influenced by grades and behavior.

**When is the program administered?** Job shadowing is a career exploration strategy. As such, it is most appropriate for middle school students to explore the broad range of occupations available so that later they will be able to narrow their career interests. High school students who have not narrowed their career interests by tenth grade may also find job shadowing to be a useful activity.

**Where/by whom is the program administered?** This also varies. National organizations, such as 4-H, sponsor career shadowing programs for students. Local nonprofit organizations and individual academic programs may have similar opportunities as well. For example, the University of Kentucky Medical Center's Southeast Kentucky Area Health Education Center has a shadowing program for students interested in a particular health field.<sup>1</sup> A program could also be administered by individual schools or by a state education agency or commission.

**What does the program do?** Job shadowing is a school/community experience that allows students to observe people in the community as they perform their regular job duties. It is often a school-sponsored career exploration activity that can begin in middle school and continue into high school. During a job shadow, students observe an adult at work for a short period of time to learn about the business, industry, or profession of that individual. Job shadowing is a short-term, supervised work-place opportunity, with an emphasis on exploration, not work. Since job shadowing is exploratory in nature, most students will benefit from several job shadowing experiences over the course of several years until they become more focused on a career path.

## The Rhode Island Children's Crusade for Higher Education

**Source:** *Building Hope in Rhode Island's Children*. The Rhode Island Children's Crusade for Higher Education. 10 March 2000 <<http://www.childrenscrusade.org/>>.

**What is the purpose of the program?** The Crusaders program works to encourage low-income students to stay in school and make choices that will help them be successful in higher education.

**Who is eligible?** Students must be from a school in one of five designated cities. The Crusade began limiting its enrollment so support services could be concentrated in areas where they are needed most and where students would be most likely to financially qualify for scholarships. In order for a school in any of these cities to become an enrollment school, 80% of the children must qualify by federal regulations for free or reduced lunch. The school must also prove its commitment to high quality education for the children and involvement opportunities for the parents. Schools must fill out an application to become an enrollment school; of those, eight to ten are chosen each year to hold third grade Crusade enrollment

**When is the program administered?** Children enroll in the third grade and remain in the Crusade for ten years.

**Where/by whom is the program administered?** AmeriCorps workers, the school administrators, and program managers administer the program within each school.

**What does the program do?** The Rhode Island Children's Crusade for Higher Education, established in 1989, is an early intervention program to encourage low-income students to stay in school and prepare for higher education. Providing support programs and scholarships to all who financially qualify, the Crusade makes college, university, or trade school a possibility to all students who are enrolled and graduate. It is the first program in the country to combine long-term supports and scholarships as incentive for at-risk students to stay in school. When they apply, Crusaders pledge to avoid alcohol and drug abuse, stay out of trouble with the law, and avoid early parenthood. During their ten years in the Crusade support program (grades 3-12), enrolled students receive Crusader mailings, participate in Crusade programs and events, get information and guidance on course selection and other decisions, and receive help to plan for more schooling after high school graduation.

**How effective has the program been?** President Clinton and the U.S. Department of Education recognized the Crusade as a model program for effective early-intervention strategies.

## College Access Program at the University of Wisconsin-Madison

**Source:** *Academic Skills Development Workshop*. 6 November 1998. University of Wisconsin-Madison. 11 March 2000 <<http://www.soemadison.wisc.edu/cap/academic.htm>>.

*The College Access Program*. 16 July 1997. University of Wisconsin-Madison. 11 March 2000 <<http://www.soemadison.wisc.edu/cap/mission.htm>>.

**What is the purpose of the program?** The College Access Program is designed to prepare minority students for higher education.

**Who is eligible?** The Academic Skills Development Workshop is designed for African American, Asian American, Chicano, Puerto Rican, Latin American, American Indian or disadvantaged student. These students must also complete their freshman, sophomore, or junior year in high school by June of the relevant year and be making satisfactory academic progress and selecting course work which will prepare them for college.

**When is the program administered?** The program takes place in the summer following the freshman, sophomore, or junior year in high school.

**Where/by whom is the program administered?** The program takes place at the University of Wisconsin-Madison.

**What does the program do?** The mission of the College Access Program at the University of Wisconsin-Madison is to encourage and support middle and high school students from underrepresented groups to pursue higher education. Each summer the program offers minority middle- and high-school students an opportunity to spend two to three weeks on campus to get acquainted with college life, explore academic and career opportunities, and learn about high school prerequisites for college admission. The summer program of workshops, demonstrations, field trips, and discussions have been developed as an enrichment experience in active learning for highly motivated students.

The UW-Madison Academic Skills Workshop is a two-week, pre-college program that gives students the opportunity to:

- Discover if the University of Wisconsin-Madison will be a good match for them and their career goals
- Get a head start on preparation for college
- Explore college writing assignments and practice problem-solving skills needed to succeed academically in college
- Work with college instructors on writing assignments that will help develop writing skills
- Learn about math and science by solving real world problems

## Better Information Project in Virginia

**Source:** *Preparing for College*. State Commission for Higher Education in Virginia. 3 April 2000 <<http://www.schev.edu/>>.

**What is the purpose?** The purpose of the Better Information Project (BIP) is to disseminate information about higher education opportunities. BIP provides accurate information about college preparation, admissions requirements, financial assistance, and career opportunities for elementary and secondary school students and their parents.

**When is the program administered?** BIP targets all ages. Information is available to students beginning in elementary school.

**Where/by whom is this program administered?** The State Commission for Higher Education in Virginia administers the program in schools, colleges, and homes.

**What does this program do?** This information is disseminated through presentations, publications, and funded program initiatives. All presentations and publications are free of cost.

The Better Information Project Committee conducts workshops for students, parents, counselors, and others involved in student college preparation.

- The student workshops focus on college preparation, admissions requirements, financial assistance, and educational opportunities. Workshops at the middle-school level are intended to make students aware of the importance of taking high school classes in the academic diploma program, to help students begin to think about future careers, and to develop strong study skills. High school workshops provide information about Virginia's colleges, how to select a college, dual enrollment and transfer options, admissions procedures, financial aid, and transfer contacts.
- The parent workshops are designed to help parents understand their role in assuring the personal and academic success of their child.
- The regional counselor workshops promote a sense of counselor accountability regarding college preparation.
- The SAT Teacher Training Workshops are designed for public school and community college teachers, counselors, and others responsible for preparing students to take the SAT.

Publications and media programs explain academic and financial planning for college. Some are broadcast into high-school classrooms, into middle-school classrooms, and on public broadcast stations in Virginia. *Pathways to College* explains dual enrollment, transfer, advanced placement, and international baccalaureate diploma programs. *Financial Aid: You Can Afford College* explains the options for financing college. *Virginia's Colleges: Your Investment in the Future* is a tour of Virginia's public colleges. Printed materials and videos are targeted at different age groups:

- The *Senior Year Calendar* provides a day-by-day plan for admission to college

- *Time to Grow* provides a comprehensive listing of campus pre-college enrichment and remedial summer programs.
- The *Middle School Guidebook to College* provides information on a myriad of topics, including goal setting, preparing for college, career counseling, college admissions requirements, study skills, and financial aid.

## Parkland College

**Source:** Harris, Zelema M. and Pauline Kayes. "Multicultural and International Challenges to the Community College: A Model for College-Wide Proactive Response." Paper presented at the Annual Convention of the American Association of Community Colleges, 75th Minneapolis, MN: 1995, April 22-25.

**What is the purpose?** Parkland College addresses the issue of retention for minority students and women. It is meeting the needs of the changing community through diversity training for students, faculty, staff, and administrators within the college and the community.

**When/where/by whom is the program administered?** Parkland began the process by organizing a group of faculty, staff, and students to fundamentally change the college's approach to diversity. This group included supporters of more aggressive diversity programs and resisters as well (to bring their perspectives).

**What does the program do?** The college changed its mission statement, including to "engage students actively in the process of developing a perspective on and an appreciation for cultural diversity." Parkland also included a plan for increasing diversity in its strategic plan for the 21<sup>st</sup> century.

Parkland claims the most significant result of this commitment to diversity was the establishment of the Center for Multicultural Education. The center works closely with faculty, student groups, community organizations, and businesses to provide diversity training. It also works closely with the Center for Teaching Excellence to train the administrators, faculty, and staff at the college. Faculty are trained to identify cultural barriers that inhibit learning in the classroom in a program called CultureCare. For the community, the center offers a variety of free non-credit workshops and seminars. Parkland even reaches out to K-12 teachers through the Center for Multicultural Education.

**How effective has the program been?** As a result of these efforts, the president of Parkland College reports that there has been a drop in attrition. Furthermore, the community has bestowed positive feedback on the college, and national organizations have awarded grant funding to Parkland.

## The Early Scholars Outreach Program (ESOP)

**Source:** *Gear Up: Gaining Early Awareness and Readiness for Undergraduate Programs*. National Education Association Office of Postsecondary Education. 29 March 2000 <<http://www.ed.gov/gearup/>>.

**What is the purpose?** The Early Scholars Outreach Program aims to increase the number of students who are enrolled and participating competitively in a college preparatory curriculum by the time they reach the 9<sup>th</sup> grade.

**Who is eligible?** Students who attend schools meeting demographic requirements are eligible.

**When is the program administered?** Students are identified for the program during the 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grades.

**Where/by who is the program administered?** The ESOP is a partnership between the University of Washington (UW) and nine Washington State middle schools with large enrollments of underrepresented students.

**What does the program do?** During the school year, high achieving UW students from similar backgrounds serve as role models and provide tutoring and mentoring. The ESOP provides the 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup>-graders with visits and overnight stays on the university campus, where they visit academic departments, hear presentations from faculty, participate in study skills workshops, and interact with UW students in a variety of settings. A series of workshops help families establish home environments that promote academic achievement. As a bridge to high school, incoming 9<sup>th</sup> grade participants take part in a six-week, summer enrichment program that provides training in reading, writing, language arts, mathematics, computer applications, and study skills.

**How effective has the program been?** Since 1987, 2,855 students have participated in ESOP. 97% of ESOP students graduate from high school, and 77% of those tracked reported attending a 2-year or 4-year college.

## Illinois Virtual Campus

**Source:** *Illinois Virtual Campus: A Class Connection*. 1999. University of Illinois. 4 April 2000 <[www.ivc.illinois.edu](http://www.ivc.illinois.edu)>.

**What is the purpose?** The Illinois Virtual Campus is designed to increase awareness of distance learning opportunities and assisting students in taking advantage of them.

**Who is eligible?** Students are eligible to take online courses if they are accepted by the provider institution.

**When is the program administered?** The program is administered any time a prospective student (accepted by the provider institution) is interested in taking college courses.

**Where/by who is the program administered?** The Illinois Board of Higher Education's Committee on Access and Diversity created the Virtual Campus. The Virtual Campus is a clearinghouse of courses available online through the colleges and universities of Illinois.

**What does the program do?** The Virtual Campus is a statewide electronic catalog of online and distance learning courses initially available from 35 institutions. In partnering with community colleges, the Virtual Campus has created Student Support Centers on 15 campuses. The Student Support Centers provide advising, support services, access to computers, test proctoring, and technical help for online students. Currently courses are offered through the Internet, correspondence, telecourses, computer assisted instruction, CD-ROM, and Satellite. It does not offer degrees, course credit, or provide registration and payment services.

## Working Connections

**Source:** *Working Connections*. The American Association of Community Colleges. 14 April 2000 <<http://www.aacc.nche.edu/initiatives/Connections/Index.htm>>.

**What is the purpose?** Working Connections aims to provide business/industry outreach, IT curriculum development, workforce development, and faculty/staff development.

**Who is eligible?** Disadvantaged students and underskilled workers are eligible to participate in the program. Community colleges are eligible to administer the program.

**When is the program administered?** Working Connections is administered to people after graduation from high school.

**Where/by whom is the program administered?** Major funding and support for this program comes from the Microsoft Corporation. The program is administered at several community colleges and their partnering organizations across the country. In this program, community colleges partner with tech organizations in their area. Typically, the colleges also collaborate with their communities to form curriculum advisory boards.

**What does the program do?** Working Connections strongly supports co-op programs and internship experiences for students. Special features of the program include the following:

- Forming regional IT training centers for disadvantaged students and under-skilled workers
- Hiring a Job Developer to support student transition to work by coordinating student work experiences and job development options
- Creating faculty-training components, in which faculties are trained in technical areas and pedagogy

Working connections began with a set of five mentor colleges that were already strong in IT programs. These colleges provide leadership, technical assistance, and "best practices" advice to grantee colleges, creating inter-institutional relationships that will advance project goals. There are currently two Working Connections schools in Texas: South Texas Community College and Richland College.

- South Texas Community College, which is housed in a 95% Spanish-speaking community, focuses its programs to take advantage of the bilingual abilities of students. Working Connections helps Hispanic students to pursue careers as IT technicians and professionals in the bilingual, bicultural, international commerce environment of the South Texas Rio Grande Valley. This program provides faculty professional development in Hispanic student history, language, culture, learning styles, modalities, and training.
- Richland College was chosen for its history in community and inter-institutional cooperation. The college takes advantage of its proximity to the telecom corridor, offering certification programs that are not traditionally taught in curriculum, such as Novell and Microsoft. As a Mentor College, Richland established a Password-accessible Web site containing IT curricula. It also contains information on how

to develop, fund, and successfully operate IT programs designed specifically for disadvantaged students and a "train the trainer" program. Richland College works with the Richland Chamber of Commerce, Texas Instruments Corp., Ericsson Inc., Texas Workforce Commission, U.S. Department of Labor, and Dallas WorkSource.

**How effective has the program been?** No specific information is given on measuring in the success of the program. Currently 25 community colleges across the nation participate in the program.

# Law School Data Assembly Service (LSDAS)

**Source:** *About the LSDAS*. 2000. Law School Admissions Council. 24 April 2000  
<<http://www.lsat.org/about-the-lsdas.htm>>.

**What is the purpose of the program?** The Law School Data Assembly Service provides a central location for law school applicants to send their applications. The applications are then dispersed to the specific law schools to which the applicant is applying.

**Who is eligible?** Anyone who is eligible to apply to any of the schools in the United States accredited by the American Bar Association may complete an application through LSDAS. The application process is as follows:

1. Subscribe to the LSDAS and pay all required fees (\$95 for the application and various costs for other services).
2. Take the LSAT or use a prior LSAT score that is valid and reportable.
3. Request that one official transcript be sent to LSAC from the registrar's office of each school you attended.
4. Apply to law school(s), and the school(s) will then request your report from LSAC.

**When is the Program administered?** The applications last for one calendar year. There is no set deadline, but it is suggested that the application be submitted three to four weeks before the first law school application deadline.

**Where/by whom is the program administered?** The Law School Admissions Council oversees the LSDAS.

**What does the program do?** The LSDAS prepares and provides a report, including transcripts (undergraduate and graduate), LSAT scores, any writing samples, and all letters of recommendations, for each law school to which you apply. The report is sent directly to the schools along with your application and personal essay. Most law schools require applicants to use this service to apply to law school.

## Appendix D: State Summaries

## California

Population 32,268,301<sup>1</sup>

16.3% of total population lives below the poverty level<sup>2</sup>

Racial/Ethnic Makeup <sup>3</sup>	Total	Percent
White Non-Hispanic	16,482,316	51.2
White Hispanic	9,305,748	28.8
Asian and Pacific Islander	3,777,015	11.7
Black Non-Hispanic	2,138,368	6.6
American Indian, Eskimo and Aleut	306,690	0.9
Black Hispanic	258,155	0.8

### Major Access Programs

- California has an agency that manages financial aid for California students. The California Student Aid Commission administers over \$2.3 billion in loans and grants to more than 400,000 California students each year and manages an \$11.4 billion portfolio in outstanding loans<sup>4</sup>. In addition, the CSAC provides financial aid policy analysis and leadership. This centralized system of information provides students with the tools necessary to understand and apply for federal financial aid and state initiated programs.
- ASSIST<sup>5</sup> (Articulation System Stimulating Inter-institutional Student Transfer) is a computerized student-transfer information system that can be accessed over the World Wide Web. It displays reports of how course credits earned at one California college or university can be applied when transferred to another. ASSIST is the official repository of articulation for California's colleges and universities and therefore provides the most accurate and up-to-date information available about student transfer in California.

### Innovations

- The state recently revised performance indicators for institutions for higher education. These indicators are currently broken into the following 5 scopes: Population Context, Fiscal Context, Student Preparation for College, Student Access to College, and Student Outcomes.<sup>6</sup>

## New York State

Population 18,137,236<sup>1</sup>

16.6% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	11,958,495	65.9
Black Non-Hispanic	2,647,093	14.6
White Hispanic	1,943,168	10.7
Asian and Pacific Islander	952,736	5.3
Black Hispanic	558,251	3.1
American Indian, Eskimo and Aleut	74,483	0.4

### Major Access Programs

- New York State has extensive programs aimed at smoothing the transition from early schooling to higher education for all students and at increasing access for minorities and low-income people. These are housed within the New York State Education Department's Office of Equity, Access and K-16 Collaboration. This official division works to "ensure an educational system for New York State that provides all participants with the tools, resources, opportunities and experiences needed to be successful learners, to reach their highest potential, and to become full contributors to society."<sup>1</sup> By maintaining an official branch of the state government to deal with access issues, New York State has given citizens both a symbolic and substantive body to provide increased and equalized opportunity. The three bureaus within the Office- College, School and Community Collaboration; Higher Education Opportunity Programs; and Professional Career Opportunity Programs-- have specific functions, described below.
- The Bureau of College, School and Community Collaboration<sup>1</sup> encourages and supports partnerships between higher education, schools, community organizations, families, students, the private sector, and government for the purpose of ensuring the educational success of New York's students. Programs housed within this bureau include career counseling and exploration, service learning, tutoring/remediation, life skill instruction, apprenticeships, and more. The following are specific program examples:
  - Learn and Serve America integrates service-learning programs into elementary, middle, and secondary schools and increases adult volunteering in those programs.
  - The Adolescent Vocational Exploration (AVE) and Progressive Adolescent Vocational Exploration (PAVE) Programs allow students at-risk of dropping out to receive instruction in basic skills and career counseling for one academic credit. Once students move through AVE to PAVE, they can participate in internships and apprenticeships for one academic credit.
- The Bureau of Higher Education Opportunity Programs<sup>1</sup> was formed in 1969 to expand educational opportunities for disadvantaged students and those from historically underrepresented groups. Programs housed within this bureau include grants and subsidies to programs which aid in recruitment, tutoring, summer academics, counseling, labs, tuition

assistance, and more for disadvantaged student groups. Also included are curriculum changes to incorporate technology and tech-prep or school-to-work programs.

- The Bureau of Professional Career Opportunity Programs<sup>1</sup> was created in 1984 to aid underrepresented groups in gaining access to post secondary programs in science, math, technology, or health or to the licensed professions. This Bureau's main tasks are to grant funding, train, provide technical assistance, and coordinate/maintain partnerships. The programs housed in this Bureau allow for development of math, science, and health teachers, as well as that of various post secondary institutions. Examples of this Bureau's activities are discussed below:
  - Science and Technology Entry Program (STEP) identifies disadvantaged students in grades 7-12 and awards grants to programs that prepare them for postsecondary education in science/math, technology, or health. These programs can be honors-level high school/junior high work, college-level instruction, internships, and more.
  - Collegiate Science and Technology Entry Program (CSTEP) aims to increase enrollment and retention of disadvantaged students in science/math, technology, and health programs once they are in college. Career and professional development and internships are just two of the activities offered through CSTEP.
  - Teacher Opportunity Corps (TOC) aids in preparing teachers to address the needs of at-risk students. Improved teacher education, peer support for educators, and mentoring all contribute to each teacher's success in TOC.

## Florida

Population 14,653,945<sup>1</sup>

13.9% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	10,141,306	69.2
Black Non-Hispanic	2,133,985	14.6
White Hispanic	1,952,201	13.3
Asian and Pacific Islander	253,118	1.7
Black Hispanic	118,694	0.8
American Indian, Eskimo and Aleut	54,641	0.4

### Major Access Programs

- In 1997, the Florida Legislature created the Florida Bright Futures Scholarship Program funded each year from the Florida Lottery. The Scholarship rewards students for their academic achievements during high school by providing funding for them to pursue further educational and career goals. The Bright Futures Program consists of three awards: the Florida Academic Scholars Award, the Florida Merit Scholars Award, and the Florida Gold Seal Vocational Scholars Award. Each scholarship has its own academic eligibility requirements, award amounts, and duration. The highest award, the Florida Academic Scholars Award comes with a community service requirement.<sup>1</sup>
- Sunshine State Standards are simply what students are expected to know at certain stages of their school career. The Sunshine State Standards are a collection of concepts that the state expects students to know and understand as they progress through school. The Standards do not tell teachers how or what to teach. They are only guidelines that tell teachers and parents what students are expected to know. The Standards will help teachers provide the best education possible to Florida's students from the very beginning.
- The Florida Department of Education Financial Aid web-site links students to Mapping Your Future, a national organization working to prepare students for higher education via the internet.

### Innovations

- The Florida Department of Education Office of Education and Community Partnerships (OEP) networks statewide to provide program information on training and other resources for increased parent/family involvement in education. The office created the Parent Involvement Task Force to design a Parent Primer to increase interest in Florida's educational goals. The Task Force worked to develop a Family Resource Directory that outlines the different types of assistance and resources to parents and families each bureau or office offers. This is an innovative way to share the use of resources for training and dissemination of information within the Department of Education. One specific way the OEP promotes parent involvement is through its "Take Our Parents to School Day." In 1998, over 47,000 parents participated.
- The Workforce Development Companion to Sunshine State Standards includes an applied technology curriculum for all grade levels. The document, entitled *Preparing all Learners for Tomorrow's Workforce*, is a resource and a guide for local educational communities as

they restructure their schools and programs.<sup>1</sup> This document is a resource and a guide for local educational communities as they restructure their schools and programs. It presents broad, comprehensive concepts and ideas for development of curriculum, instruction and assessment.

Instruction in all subject areas must support the development of the essential skills described in Florida's School-to-Work initiatives. Connections to the community and the work place are encouraged through real life and work-based projects. Awareness, orientation, exploration, preliminary career focus and career specialization are provided through the following benchmark levels:

- Pre-K - 2 - awareness
- Grades 3-5 - orientation
- Grades 6-8 - exploration
- Grades 9-12 - preliminary career focus
- Grades 13 + - career specialization

# Pennsylvania

Population 12,019,661<sup>1</sup>

11.3% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	10,393,750	86.5
Black Non-Hispanic	1,126,145	9.4
White Hispanic	254,084	2.1
Asian and Pacific Islander	190,541	1.6
Black Hispanic	37,983	0.3
American Indian, Eskimo and Aleut	17,158	0.1

## Major Access Programs

- The Pennsylvania Tuition Account Program (TAP) provides a safe and affordable way for families to purchase tomorrow's tuition at today's lower prices and obtain tax benefits.<sup>1</sup> TAP Tuition credits can be used at any college or technical school, public or private, anywhere in the nation. Once a child's TAP account is established, anyone can contribute including parents, grandparents and friends. Payroll deductions, automatic savings or checking account deductions make it easier to save money in the account. It is a smart, low-risk, way to save for college, because TAP guarantees to pay tuition, no matter what happens to tuition costs. TAP Tuition credits grow in value exempt from Pennsylvania state and local income tax. Federal income tax is deferred until the TAP Tuition credits are used. At that time, the difference between the amount paid for the TAP Tuition credits and the amount of tuition paid is taxable as ordinary income at the student's rate. The web site is also available in Spanish.

## Innovations

- The Registered Youth Apprenticeship Program is a joint commitment between the PA Department of Education and the PA Department of Labor and Industry. This initiative is designed to link employers in need of an educated workforce with local education agencies (school districts, charter schools, service delivery areas, vocational-technical schools, community-based organizations and other nonprofit organizations) seeking to provide work-based education to high school students. Employers that participate become actively involved in the development and training of the workforce. The student apprentice will have access to career awareness information including new and emerging occupations. The program provides access to well-paid, skilled employment, and it affords direction for academic and technical course selection.<sup>1</sup>

## Illinois

Population 11,895,849<sup>1</sup>

11.1% of the population lives below the poverty level.<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	8564,084	72.0
Black Non-Hispanic	1,768,603	14.9
White Hispanic	1,107,283	9.3
Asian and Pacific Islander	382,806	3.2
Black Hispanic	46,448	0.3
American Indian, Eskimo and Aleut	26,625	0.2

### Major Access Programs

- In August of 1999, the Illinois Virtual Campus began operations. It is designed to help expand access to higher education by increasing awareness of distance learning opportunities and assisting students in taking advantage of them. The Virtual University is also supposed to ease the burden on the state's higher education system, which is expecting an increase of 12% in enrollment. It offers a catalog of online and distance-learning courses from 35 colleges and universities.<sup>1</sup>

### Innovations

- In 1999 Illinois Board of Higher Education Adopted: "A Citizen's Agenda--The Illinois Commitment: Partnerships Opportunities and Excellence."<sup>1</sup> It is a statewide strategic plan that focuses on the needs of the state's students, employers, and the well being of the Illinois residents. This document provided the Board it's goals for higher education including the following: partnerships with businesses and K-12; higher standards for student achievement and access; and higher standards for institutions' productivity, cost-effectiveness, and accountability. The progress of colleges and universities is presented in Results Reports to the Board of Higher Education.
- The Board also allocated \$20.4 million in grants to 138 projects to foster cooperation and promote innovation among colleges and universities, elementary –secondary education, and the private sector through the Higher Education Act. Grants were awarded in the following categories: Interinstitutional, Minority Educational Achievement Grants, Minority Articulation, and Economic Development.<sup>1</sup>

## Ohio

Population 11,186,331<sup>1</sup>

11.6% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	9,610,476	85.9
Black Non-Hispanic	1,263,344	11.3
White Hispanic	152,863	1.3
Asian and Pacific Islander	123,401	1.1
American Indian, Eskimo and Aleut	22,467	0.2
Black Hispanic	14,222	0.1

### Major Access Programs

- In 1991, the Ohio Board of Regents appointed the Managing for the Future Task Force. This body has built Ohio's "Master Plan" for the future of higher education.<sup>1</sup> Among other things, the Plan outlines major objectives for the state's higher education community and offers strategies for meeting them. Individual campuses are given autonomy in considering and adapting these objectives in their own functional missions. State-level objectives and strategies are provided to assist the Board of Regents in promoting access and affordability, among other facets.
- One facet of Ohio's public higher education system is the open admissions policy. Under open admissions, there is no stratification in the system, with universities, colleges, and community colleges all holding diverse admission requirements. The open admissions law provides for any Ohio high school graduate to be admitted to the public higher education institution of his or her choice. Test scores, grade point averages, and other application aspects still have weight in the admissions decision-making process, but the open admissions policy ensures that all Ohioans have equal opportunity to be considered.

## Michigan

Population 9,773,892<sup>1</sup>

10.8% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	7,946,153	81.3
Black Non-Hispanic	1,373,776	14.1
White Hispanic	225,412	2.3
Asian and Pacific Islander	150,837	1.5
Black Hispanic	18,036	0.2
American Indian, Eskimo, & Aleut	59,678	0.6

### Major Access Programs

- The goal of the King-Chávez-Parks Initiative<sup>1</sup> is to achieve parity in the number of baccalaureate degrees awarded to student traditionally underrepresented in higher education. The College Day Program introduces high school students to university campuses and provides them with college preparatory information and skills. The Select Student Support Services Program is a grant program that supports universities in the development of retention programs for academically and economically disadvantaged students.
- Michigan Department of Career Development (MCDC)<sup>1</sup> is the State workforce development agency for Michigan. One of their roles is to work with K-12 schools and community colleges to establish a comprehensive career preparation system that would enable every Michigan student to research occupational opportunities.
- The Michigan Education Trust<sup>1</sup> program allows persons to pre-purchase undergraduate tuition for a child residing in Michigan at any state public university or college. Plans vary in that purchasers can purchase 1,2,3 or 4 years of tuition or enroll in a plan that is specifically aimed at paying for community college enrollment.
- Michigan Higher Education Assistance Authority (MHEAA) administers a variety of state and federal scholarship, grant, and loan programs as well as assists citizens through public service and outreach initiatives, and conducting research and public policy analysis activities.
- The MI-SEARCH Program is operated by MHEAA and is a database of privately sponsored scholarships and scholarships offered by Michigan colleges and universities. These listings are specific to Michigan students and can be accessed through the Internet.
- Through the Michigan Alternative Student Loan Program (MI-LOAN)<sup>1</sup> program, Michigan students and their families can obtain loans to help meet the cost of post-secondary education. This program is intended to provide assistance to families who do not qualify for gift aid and/or subsidized Federal Stafford Loans, but are still lacking in financial ability to pay for post-secondary education.
- The Michigan Merit Award Scholarship Program<sup>1</sup> is available to all Michigan students who take the Michigan Educational Assessment Program High School Test. The award is based solely on academic achievement. Students achieving a Level I or a Level II are eligible for an award of \$2,500 which can be used for either college or vocational/technical training. The

award can be used to assist in meeting tuition costs or for related expenses such as computers, books, room and board, transportation, or daycare.

- Student to Registered Apprenticeship Program (STRA)<sup>1</sup> provides classroom instruction and on-the-job training for a variety of occupations. Students, who are at least 16, become paid employees of participating companies. The program takes approximately 2-5 years to complete, after which students receive a “Certificate of Completion” from the United State Department of Labor, Bureau of Apprenticeship and Training.
- The University of Michigan’s Center for Ultra-fast Optical Science facilitates the Southeastern Michigan Math-Science Learning Community Coalition<sup>1</sup> which helps link and communicate science, math, technology, and engineering learning and career exploration resources with youth, teachers, counselors, parents, and youth leaders. This is accomplished through a web site with links to various resources that support mentoring, career shadowing, college and career planning, tutoring and science related clubs. Coalition members include businesses, community organizations, institutions of higher education, government, parents, and representatives of K-12 education.

## New Jersey

Population 8,052,849<sup>1</sup>

9.0% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	5,611,263	69.7
Black Non-Hispanic	1,061,491	13.2
White Hispanic	826,310	10.3
Asian and Pacific Islander	423,738	5.3
Black Hispanic	108,551	1.3
American Indian, Eskimo, & Aleut	21,496	0.3

### Major Access Programs

- Middle and high school students participating in the New Jersey Gaining Early Awareness & Readiness for Undergraduate Programs (GEAR UP)<sup>1</sup> receive educational support and assistance to complete high school and enroll in a college or university. Students, parents, and guidance counselors in targeted schools participate in workshops on financial aid opportunities. NJGEAR UP includes a six-week summer program, academic instruction on Saturdays, after school tutoring, college visits, college application assistance, mentoring, academic and personal counseling, PSAT and SAT prep classes, and cultural and educational field trips.
- The Educational Opportunity Fund (EOF)<sup>1</sup> provides financial aid, academic enrichment, counseling, and developmental services to students from educationally and economically disadvantaged backgrounds. EOF also provides summer program and leadership training activities. The fund also supports campus-based outreach and support services that are aimed at helping students succeed and graduate.
- ARTSYS<sup>1</sup> is an on-line transfer system that allows students to evaluate their transcripts, determine course equivalencies, and assess their prospects for transfer to other institutions. Students can determine which community college courses will transfer into their intended majors at any New Jersey senior institution.
- New Jersey Better Educational Savings Trust (NJBEST)<sup>1</sup> allows contributors to set up an investment account in the name of a beneficiary. The investment strategy is age-sensitive so that savings for younger beneficiaries are placed in a more aggressive portfolio while savings for beneficiaries closer to college age are invested more conservatively. Contributions can be withdrawn when the beneficiary enrolls in an institution of higher education. The money withdrawn can be used for tuition, fees, books, room and board or other expenses. Beneficiaries receive an additional \$500 if they attend college in New Jersey. In addition, up to \$25,000 in NJBEST savings can be excluded from consideration in the awarding of State need-based financial aid.
- New Jersey Virtual University<sup>1</sup> provides an on-line index to distance learning courses and programs offered by New Jersey colleges and universities. Information includes direct links to institutions and course information. Course listings cover various formats for distance learning including courses utilizing audio tapes, CD-ROMs, correspondence, e-mail, interactive television, Internet, and video tapes.

- Academic-Business Connection Conference<sup>1</sup> is part of the New Jersey School-to-Work Program. This three-day conference for teachers, counselors and administrators is designed to encourage partnership opportunities with members of the business community. The conference aims to provide schools with information about what skills New Jersey employers desire most. Employers serving as hosts for the event conduct workshops and business tours.
- Through the Jersey City Public Schools & Merrill Lynch Corporation<sup>1</sup> partnership, Merrill Lynch Corporation provides work-based learning programs for students in the grades 10 and 11. In addition, they provide a summer internship for students in the 12<sup>th</sup> grade. These experiences give students industry training that prepares them to successfully obtain employment with the corporation or compete in the marketplace.
- New Jersey Works<sup>1</sup> is a weekly television show that airs on New Jersey Public television. It informs viewers about different careers, finding new jobs, and improving performance on the job. In addition, local businesses can showcase their products and services while communicating the skills and training necessary to fill positions with their company. The show is supported by a web-site that allows viewers to learn more information about topics discussed. School-to-Work activities are often highlighted on the show.
- The Washington Township Chamber of Commerce<sup>1</sup> mentoring program gives high school students the opportunity to interact with business leaders to clarify career goals. High School junior and seniors intern at various Chamber of Commerce employer sites to gain an appreciation of the knowledge, competencies, attitudes and daily activities required to perform the duties of that occupation.
- Publications:
  - Going to College in New Jersey:<sup>1</sup> A Guide to Undergraduate Opportunities -- This document, prepared by the New Jersey Higher Education Student Assistance Authority, covers all aspects of attending college. The document describes the differences between universities, colleges, and other post-secondary schools (such as vocational, technical and hospital schools). Also included is information on the different types of degrees available, federal and state financial aid information, and a listing of New Jersey institutions of higher learning including the cost of attendance, size of school, and undergraduate degree programs offered.
  - Job Shadowing Handbook<sup>1</sup> – This handbook was developed by the New Jersey Schools to Career Partnership to assist local school districts and business partners understand the role of job shadowing in the School-to-Careers system. Job shadowing entails a student following an employee for one or more days to learn about a particular occupation or industry. Students are not engaged in productive work in the workplace. The handbook also includes examples of discussion, written, and evaluation activities for students before they participate in job shadowing as well as information for workplace mentors and school-based coordinators.

## Innovations

- The Student Advisory Committee<sup>1</sup> advises the Higher Education Student Assistance Authority (HESAA) on policies and regulations governing financial aid programs. Membership is comprised of New Jersey college students representing county community

colleges, state colleges and universities, independent colleges and universities, Rutgers-the State University, and the New Jersey Institute of Technology. The two primary responsibilities of the Committee are advising HESAA on the student perspective regarding college financial aid policies and serving as a means of communication between HESAA and the students of New Jersey's institutions of higher education.

## Georgia

Population 7,486,242<sup>1</sup>

14.3% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	5,024,403	67.1
Black Non-Hispanic	2,107,670	28.1
White Hispanic	181,112	2.4
Asian and Pacific Islander	137,108	1.8
Black Hispanic	18,456	0.3
American Indian, Eskimo and Aleut	17,493	0.2

### Major Access Programs

- Georgia Applications and Electronic Advisor System (GA EASY)<sup>1</sup> is an online resource for prospective students. It contains information on the programs, admissions requirements, and costs at all of the University System of Georgia schools and also contains an online application process through which students can fill in one application to be sent to multiple schools. Career guidance is also available from the site, but it could not be accessed without a password.
- Post-Secondary Readiness Enrichment Program (PREP)<sup>1</sup> is aimed at increasing student planning during the middle-school years. It provides exposure to post-secondary education through on-campus programs, linkages to adults who have knowledge about higher education, and information on "hot" occupations. Programs are structured around yearlong programs, summer outreach programs, and middle-school campus visitations.

### Innovations

- Georgia's state-sponsored Helping Outstanding Pupils Educationally (HOPE) Scholarship Program<sup>1</sup> guarantees students who meet a set of criteria funding for higher education. This "threshold funding" approach has been used in other areas (Kentucky's KEES program, for example), but Georgia's is one of the largest and most successful efforts thus far. Students who have taken the required classes (These are different for different graduating classes) and who have achieved a 3.0 in college prep or a 3.2 in technical/career coursework are eligible for the aid. Especially interesting is that the aid can be applied to any degree, diploma, or certificate programs at eligible public and private Georgia colleges/universities.
- Georgia P-16 Initiative<sup>1</sup> is the state-level coordinating body that works to ensure college readiness and a smooth transition from secondary to post-secondary school. Programs such as PREP (above) are housed within the P-16 Initiative. This body also works on narrowing the gaps between minority/low-income and mainstream/financially secure students.

### Problems to Avoid

- While Georgia does provide a wealth of information online, it takes a patient and relatively talented user to find relevant programs. The University System of Georgia's site offers the most comprehensive information, but it combines all student-related information in a long, confusing list of electronic links that could deter students from researching further.<sup>1</sup>

## North Carolina

Population 7,425,183<sup>1</sup>

12.5% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	5,466,108	73.6
Black Non-Hispanic	1,628,846	21.9
White Hispanic	128,661	1.7
American Indian, Eskimo and Aleut	95,398	1.3
Asian and Pacific Islander	92,036	1.2
Black Hispanic	14,134	0.2

### Major Access Programs

- The North Carolina State Education Assistance Authority (N.C. SEAA)<sup>1</sup> funds a low-income student grant program entitled the North Carolina Student Incentive Grant (N.C. SIG). It is administered by College Foundation, Inc. (CFI). The grant is for North Carolina residents who are enrolled full-time in eligible North Carolina postsecondary programs at the university, college, technical school, or vocational school level and who demonstrate substantial financial need. This level of need is defined by a FAFSA-determined family contribution of \$600 or less.

### Innovations

- The College Vision Fund<sup>1</sup> is a savings plan that allows both parents and grandparents to set aside money for the future educational costs of North Carolina children. Payments are made monthly, much like mortgage or car payments, in the time previous to a given child's graduation from high school and subsequent attendance at a North Carolina higher education institution. Payments are calculated using the family budget and average expected college costs and are taken through electronic or payroll deduction. Educational costs are calculated using projected future costs, unlike the Texas Tomorrow Fund, which allows families to pay today's cost for tomorrow's education.

### Problems to Avoid

- Payments into the College Vision Fund's savings component can be reduced in times of financial hardship, which is helpful for lower income families, but payments into the loan component must remain constant unless prepaid by a lump sum payment. This is problematic because savings payments are at set amounts unless a family also takes on loan planning. This almost ensures that low-income families will be locked into a set payment amount despite possible financial hardship.

## Virginia

Population 6,733,996<sup>1</sup>

11.3 percent of the population lives below the poverty level.<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	4,930,299	73.2
Black Non-Hispanic	1,324,589	19.7
Asian and Pacific Islander	232,930	3.5
White Hispanic	208,570	3.1
Black Hispanic	19,352	0.3
American Indian, Eskimo and Aleut	18,286	0.2

### Major Access Programs

- The State Council for Higher Education in Virginia affordable college education for qualified students a top priority. The Governor and the Council supported a 20% rollback of tuition and mandatory instructional fees to lower the total cost of college for Virginia undergraduates to 35% of per capita disposable income.<sup>1</sup>
- The Tuition Assistance Grant <sup>1</sup>(TAG) program grants \$2,600 to \$2,700 to assist Virginia residents who attend in-state private, not-for-profit institutions. This encourages students to remain in Virginia instead of leaving the state for private education.

### Innovations

- The State Council for Higher Education in Virginia administers an academic audit program. This assesses the results of academic programs based on student outcome and measures in two and four-year cycles.<sup>1</sup>
- The Better Information Project<sup>1</sup> (BIP) provides accurate information about college preparation, admissions requirements, financial assistance, and career opportunities for elementary and secondary school students and their parents. This information is disseminated through presentations, publications, and funded program initiatives.

# Massachusetts

Population 6,117,520<sup>1</sup>

10.3% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	5,225,726	85.4
Black Non-Hispanic	318,900	5.2
White Hispanic	283,912	4.6
Asian and Pacific Islander	209,871	3.4
Black Hispanic	64,701	1.1
American Indian, Eskimo, & Aleut	14,410	0.2

## Major Access Programs

- The School-to-Career Program<sup>1</sup> provides a system that looks to employers to work with educators to ensure high school students graduation with relevant skills and knowledge. This program consists of local partnerships throughout the state which coordinate activities connecting students with careers in work-based experiences similar to an internship. Massachusetts provides assistance to the local partnerships through training for program personnel and employers as well as sample paperwork for providing work-based learning and feedback/evaluation of the student.
- Massachusetts Educational Financing Authority (MEFA)<sup>1</sup> is a self-financing, not-for-profit state authority who works to make college affordable. MEFA provides seminars on college financing for students and their families as well as provides information on financing programs to high school guidance counselors. In addition, MEFA offers low-cost loans and establishes structured college savings programs.
- Managed by MEFA, U.Plan<sup>1</sup> allows families to purchase Tuition Certificates, which they cash in when their student begins college. Participants are guaranteed that the portion of tuition they buy will keep pace with college inflation.
- The U.Fund College Investing Plan<sup>1</sup> invests money, on a tax-advantaged basis, in structured portfolios of mutual funds tailored to the age of the beneficiary. Proceeds can be used at most accredited colleges in the country and can be used to pay for expenses such as room and board, supplies and equipment.
- The Tuition Advantage Program (TAP),<sup>1</sup> is available for community college students who are enrolled in the Joint Admissions Program and maintain a 3.0 GPA. This program gives students a one-third-tuition discount at any four-year public college in Massachusetts.
- The goal of the Joint Admissions Program<sup>1</sup> is to provide a seamless transition from community college to a bachelor's degree. First-time community college students enrolled in this program are automatically admitted to the four-year campus (public institutions in Massachusetts) of their choice upon successful completion of the class requirements for a designated program. Students must also maintain a 2.5 GPA.
- Through the Dual Enrollment Program,<sup>1</sup> qualified high school students can earn both high school and college credit for courses. Students must earn a B or better in courses to earn

college credit. The Commonwealth reimburses Massachusetts institutions of higher education for a specified amount per credit for tuition and fees for participating students.

## Indiana

Population 5,864,108<sup>1</sup>

8.6% of total population lives below the poverty level<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	5,188,260	88.5
Black Non-Hispanic	475,616	8.1
White Hispanic	124,589	2.1
Asian and Pacific Islander Non-Hispanic	53,361	0.9
American Indian, Eskimo and Aleut	14,340	0.2
Black Hispanic	7,942	0.1

### Major Access Programs

- The Indiana Career & Postsecondary Advancement Center, operated under the direction of the Indiana Commission for Higher Education, informs, encourages and supports the education and career development of the people of Indiana. ICPAC operates a toll-free telephone Hotline staffed by information specialists who can answer questions and provide resources on education and career options.<sup>1</sup> ICPAC also partners with a number of innovative statewide programs in education and career information as well as several state agencies related to higher education.
- Indiana's School-to-Work system increases academic achievement and ensures career readiness of all Indiana students, kindergarten through college. School-to-Work partnerships link employers, labor, communities, schools, families and students to improve every student's chance of succeeding in the classroom and in their career. Indiana School-to-Work:
  - is grassroots and community-based
  - makes education relevant
  - increases students' career options
  - connects classroom learning with career preparation

Indiana's School-to-Work System seeks to ensure that every student graduates from high school with the knowledge and skills necessary to succeed in high performance workplaces, master challenging post-secondary curriculum and engage in lifelong learning.

Indiana has launched many innovative strategies to improve the status of the workforce. These include support for families and children, high academic standards, technology in the classroom, assistance with the costs of post-secondary education, adult education and retraining and new strategies for economic development.

While Indiana's program has been successful in some parts of the state, it is not equally implemented statewide. They are currently working to develop partnerships and resources needed to make the program more comprehensive.

- The Indiana Commission for Higher Education provides information and links to services aimed to help students and parents plan and prepare for college.<sup>1</sup>

## Innovations

- The Twenty-first Century Scholars program began in 1990 with the goal of raising the education aspirations of families with low and moderate incomes.<sup>1</sup> The program aims to ensure that all Indiana families can afford a college education for their children. Income-eligible 8th-graders who enroll in the program and fulfill a pledge of good citizenship to the state are guaranteed the cost of four years of college tuition at any participating public college or university, or a similar award for use at private and technical institutions. Through the direct services of 16 regional programs and a state-wide information campaign, the program supports students, parents, and secondary schools in preparing the Scholars for higher education. The pledge includes the following:
  - I am in the 8<sup>th</sup> grade and agree to graduate from an Indiana high school with a high school diploma.
  - I will achieve a cumulative high school grade point average of at least a 2.0 on a 4.0 scale.
  - I will not use illegal drugs, alcohol, or commit any crime.
  - I will apply for college admission and financial aid as a senior in high school.
  - I understand that I must meet regular college admission requirements.
- GEAR UP Indiana Partnership Grants<sup>1</sup> arose out of the national GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) initiative. As outlined in the President's High Hopes for College proposal, this initiative will award multi-year grants to locally designed partnerships between colleges and low-income middle schools, plus at least two other partners (community organizations, businesses, religious groups, state education agencies, parent groups or non-profits) to increase college-going rates among low-income youth. To be most effective, partnerships will be based on the following proven strategies:
  - Informing students and parents about college options and financial aid, including providing students with a GEAR UP 21st Century Scholar Certificate--an early notification of their eligibility for financial aid;
  - Promoting rigorous academic coursework based on college entrance requirements;
  - Working with a whole grade-level of students in order to raise expectations for all students; and
  - Starting with 6th or 7th-grade students and continuing through high school graduation with comprehensive services including mentoring, tutoring, counseling, and other activities such as after-school programs, summer academic and enrichment programs, and college visits.

## Washington

Population 5,610,362<sup>1</sup>

10 % of the population lives below the poverty level.<sup>1</sup>

Racial/Ethnic Makeup <sup>1</sup>	Total	Percent
White Non-Hispanic	4,701,181	83.8
Black Non-Hispanic	182,830	3.6
White Hispanic	301,515	5.4
Asian and Pacific Islander	311,310	5.5
American Indian, Eskimo and Aleut	100,309	1.8
Black Hispanic	13,217	0.2

### Major Access Programs

- To increase access to low income students, the state of Washington has implemented the Washington Promise Scholarship.<sup>1</sup> If a student graduates in the top 15% of his or her class *and* has a family income of no more than 135% of the state median, then the student is eligible to receive up to \$1,641, which is then renewable for one year.
- Students enrolled in Running Start<sup>1</sup> earn high school and college credit simultaneously without having to pay tuition and fees. However, students must pay for their own books, supplies, and transportation. The 1990 Legislature created the Running Start Program as part of the "Learning by Choice" law, which was designed to expand the educational opportunities for public high school students. Running Start was initially created to allow qualified eleventh and twelfth grade students the opportunity to take college-level courses at the community and technical colleges.

### Innovations

- Working with Cisco, the state is implementing a statewide education network to connect Washington's 6 universities, 32 community and technical colleges, and 296 school districts to vital information and resources. This network is meant to take advantage of economies of scale in order to reduce cost and increase access to education. Current goals for the K-20 Education Network include improving student access to quality education through distance learning, enhancing student research and communications capabilities with Internet/intranet access, and increasing administrative efficiency.<sup>1</sup>

## Appendix E: Survey

## **High School Counselor Survey Methodology**

In March, a survey was conducted of Texas high school guidance counselors to gauge their perspective of access issues to higher education in the state. Both resource and time constraints prohibited mailing surveys to a statewide sample of counselors. Fortunately, the Texas Education Agency (TEA) sponsored a statewide conference for high school guidance counselors in Austin on March 19<sup>th</sup> through the 21<sup>st</sup>. TEA was supportive in allowing the survey to be distributed to conference attendees during opening registration. In addition, the conference had a proven history of attracting a great number of high school counselors for all parts of the state. During opening registration, 205 surveys were completed, a response rate of nearly eighty percent. Answers from completed surveys were later compiled and data cleaned. An analysis of the results has been included.

**Survey of Access to Higher Education  
The George Bush School of Government and Public Service**

The following survey is being conducted by students of The George Bush School of Government and Public Service (Texas A&M University) in conjunction with the Lt. Governor's Special Commission on 21<sup>st</sup> Century Colleges and Universities. It is intended to gather information and insights on access problems to higher education from the perspective of high school counselors. The results from this survey will be used to formulate policy recommendations, which will be reviewed by the Commission and possibly be considered for action by the Texas State Legislature. All survey answers will remain ***confidential*** and will only be used to form general policy recommendations.

**School Type (Please check those applicable):**

Public     Private (no religious affiliation)     Private (religious affiliation)     Charter

**Location:**     Urban     Rural     Suburban

**Texas Education Region:**     (1-20)

**Median Income of Students Taught:**

\$15,000 and Below

\$15,001 to \$30,000

\$30,001 and Up

1. What do you see as the largest barriers between historically underrepresented students and their access to higher education? *Please rank on a scale from 1 to 5, with 5 being a very significant barrier and 1 being insignificant.*

Availability of Financial Aid

Academic Preparation

Personal Readiness/Preparation

Family/Peer Support

Other: \_\_\_\_\_

2. What programs have you implemented or are aware of that have assisted in breaking down access barriers to higher education?

3. Many actors play an influential role in education provision in Texas. From those listed below, describe what each can do to improve access to higher education in Texas.

Institutions of Higher Education:

The State of Texas:

School Districts:

Others you think are important:

4. What effect has the top 10% admission rule\* had on access for students entering state universities?

- Increased Access
- Decreased Access
- No Effect

Why has this change, if any, taken place?

*\*Adopted in 1997 by the Texas Legislature, HB 588 requires a general academic institution to admit automatically students who graduate in the top 10 percent of each Texas high school graduating class.*

5. What suggestions or recommendations do you have to aid students in completing college and degree earning programs?

6. Any other comments or recommendations in regard to higher education access?

*Optional:*

May we have your name and telephone number to follow-up on any recommendations or programs you have suggested on this survey?

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

E-Mail Address (if convenient): \_\_\_\_\_

Thank You for Your Cooperation!

Notes:

Data collected asking counselors to rank the largest barriers to access were answered in two different ways, and analyzed accordingly. The first way counselors responded was to rank factors *relative to one another* on the scale of 5-1. Charts 1-5 report frequencies of responses for each of the 5 opinion levels.

The category of “Other” received 102 rankings of “Very Insignificant.” However, answers in the “Other” category that might actually be of some interest include: TASP preparation, language differences, disinterest, lack of knowledge of opportunities, self-esteem and maturity problems, transportation/child care difficulties, and need for counseling.

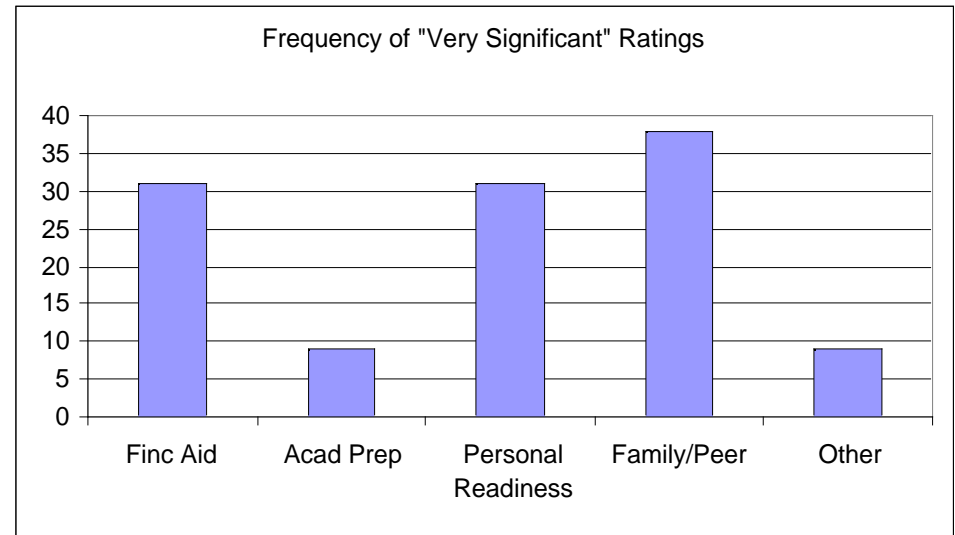


Chart 1 reflects the number of times each category received a ranking of “5,” or “Very Significant.”

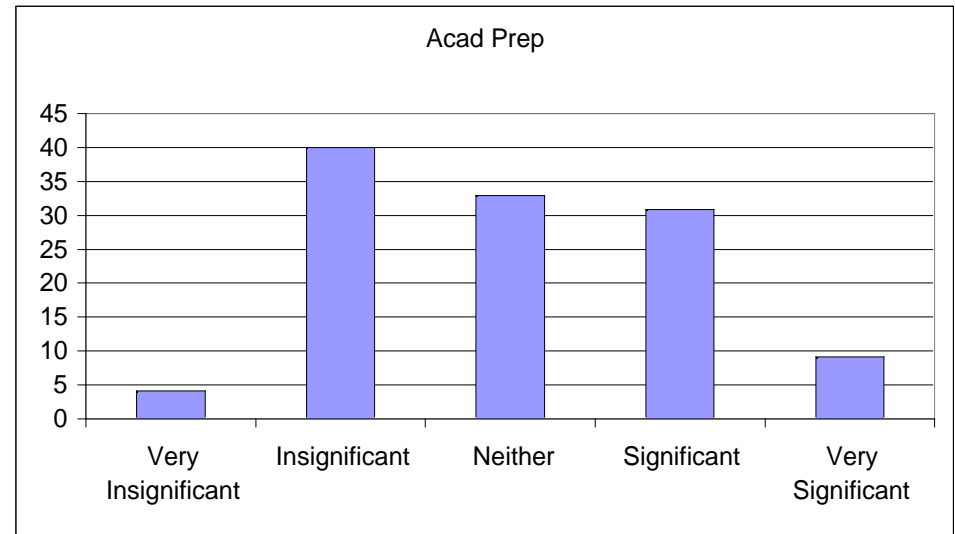
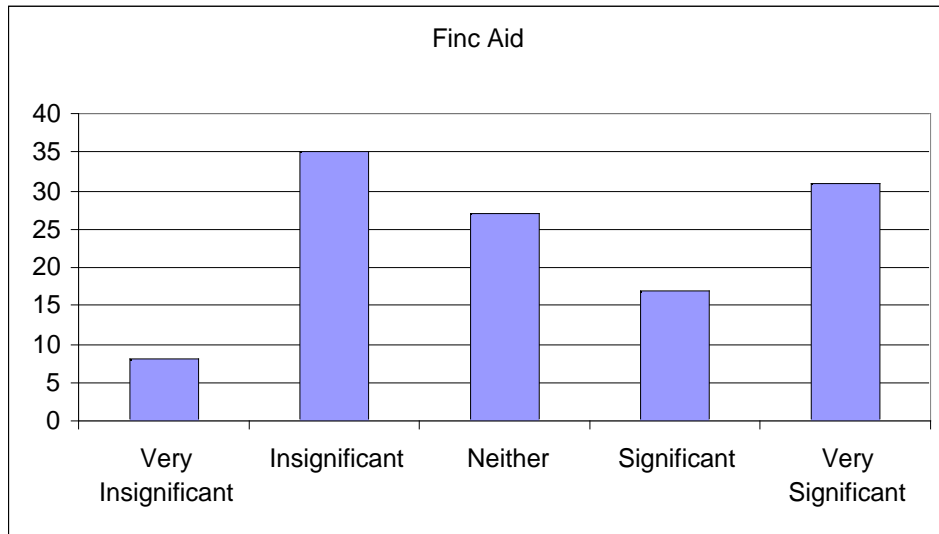


Chart 2 shows the spread of rankings for the category of Financial Aid.

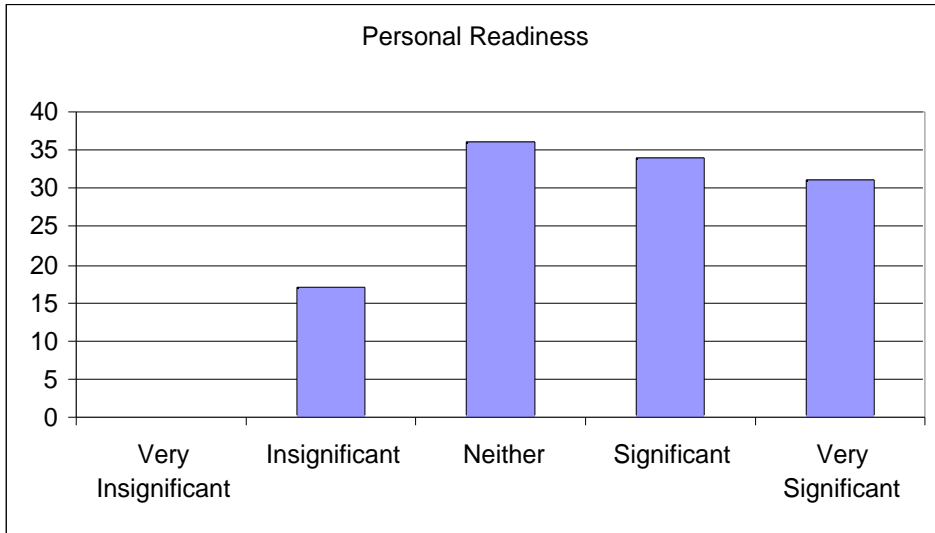


Chart 4 shows the spread of rankings for the category of Personal Readiness/Preparation.

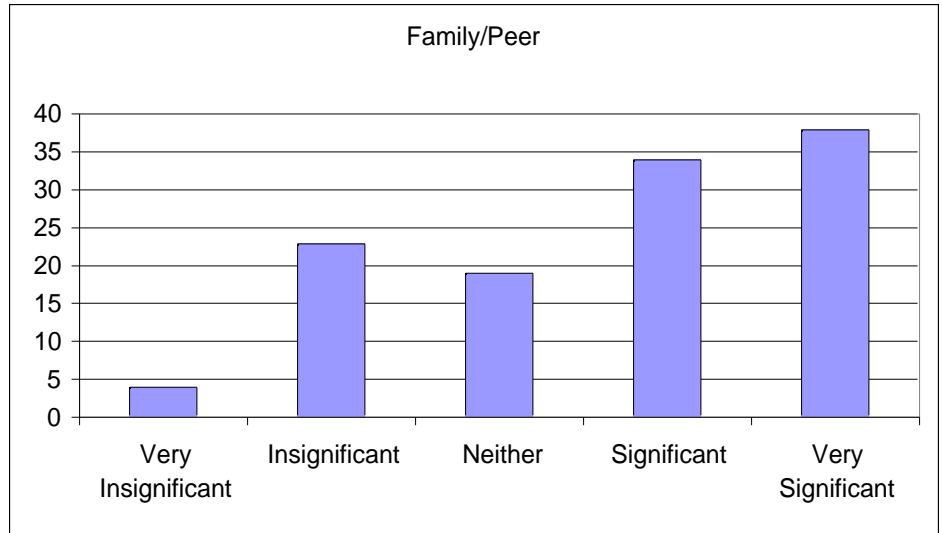
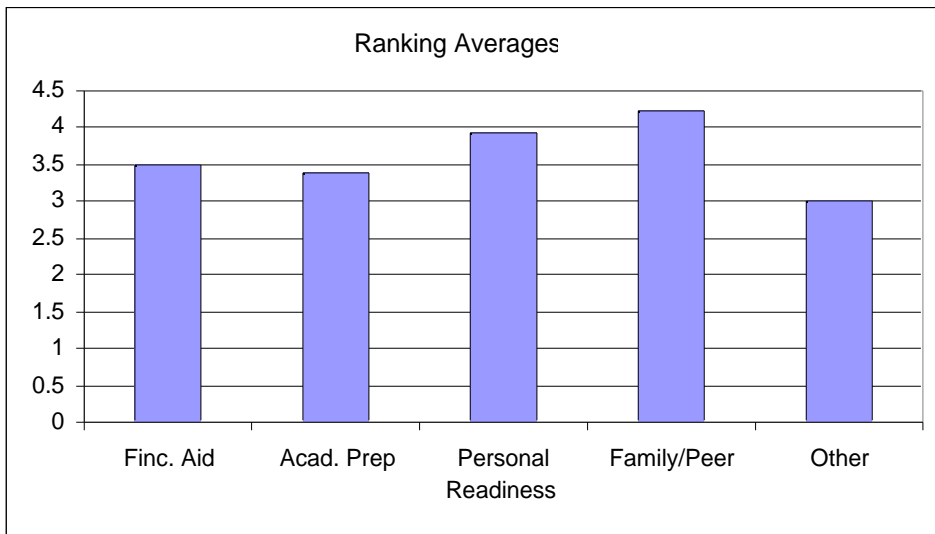
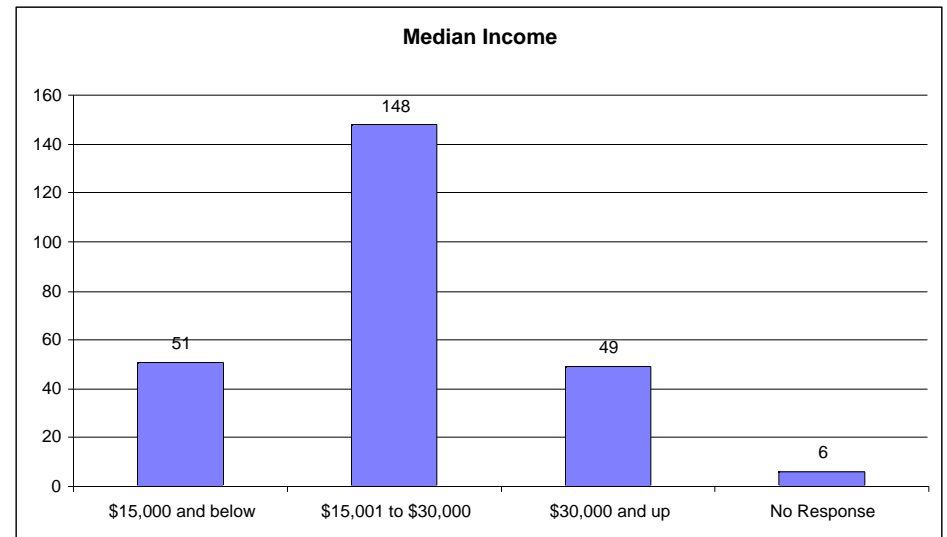
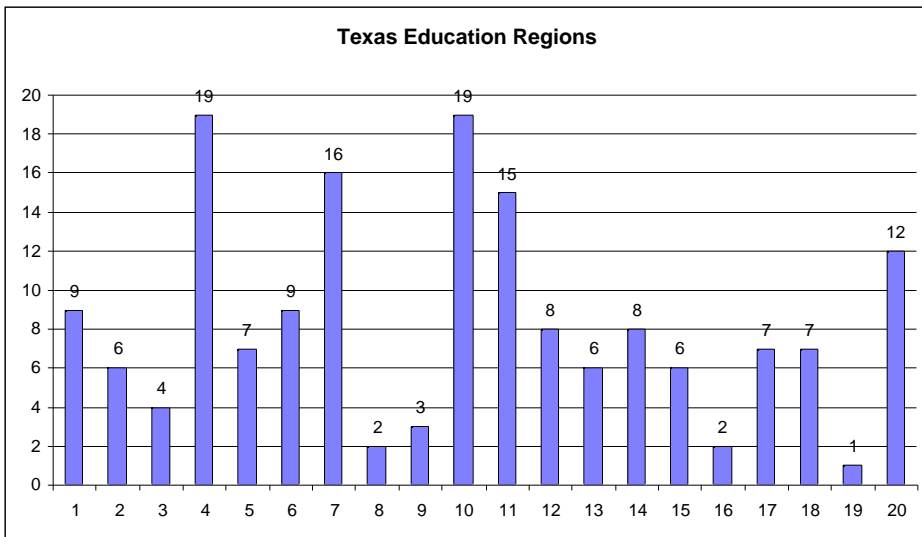
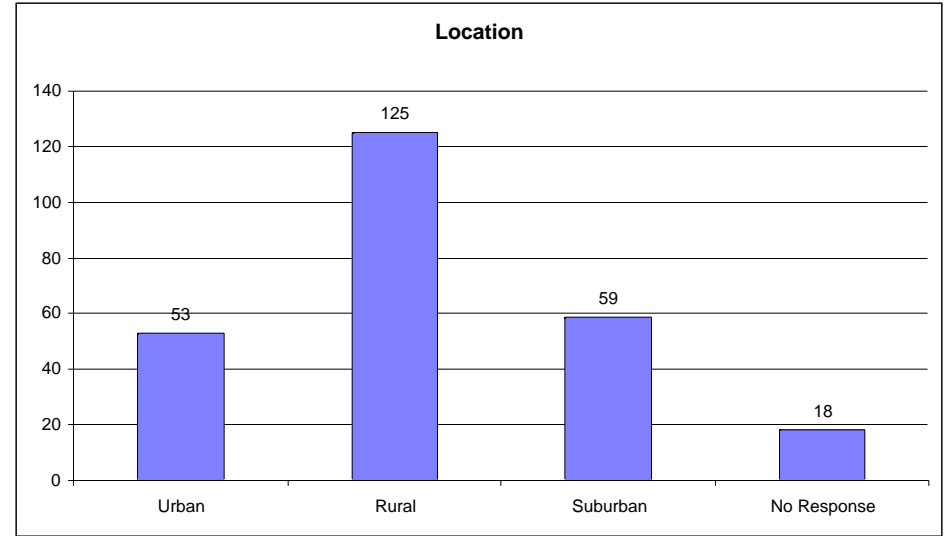
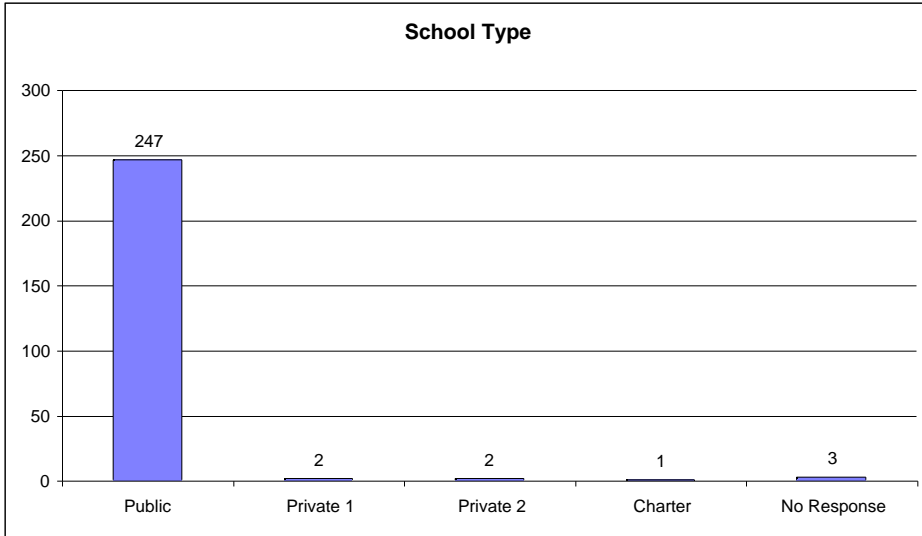


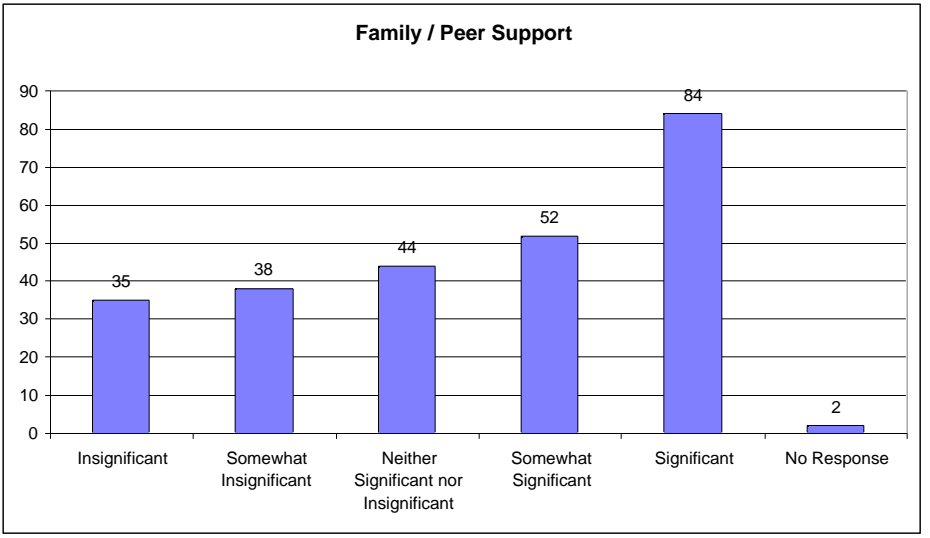
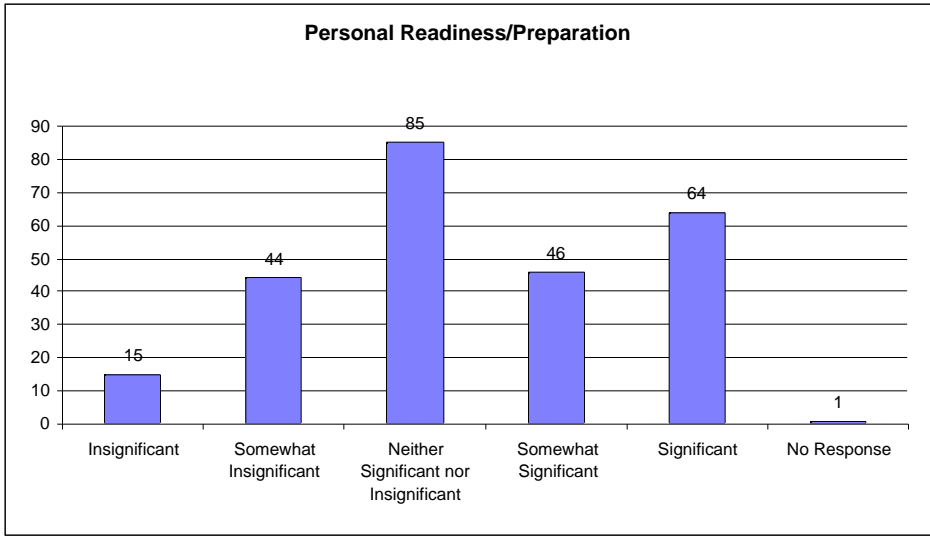
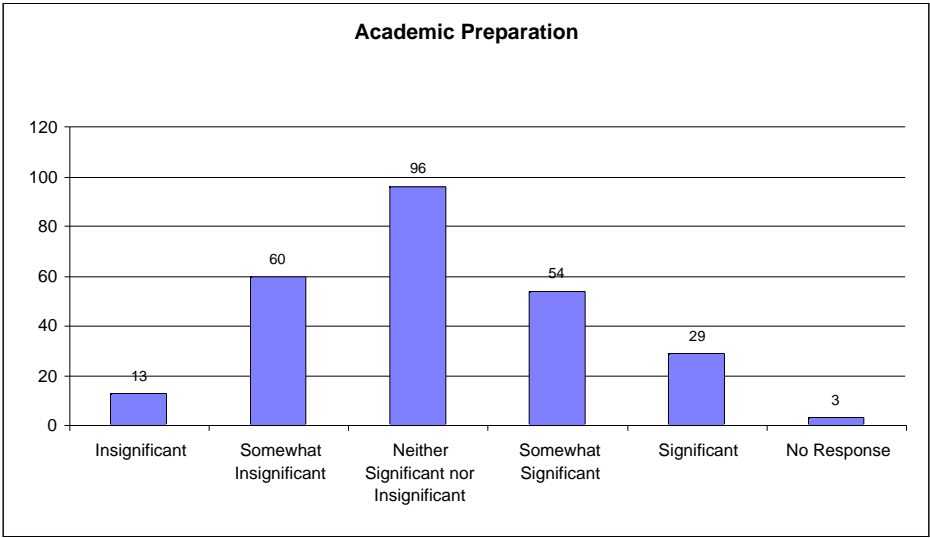
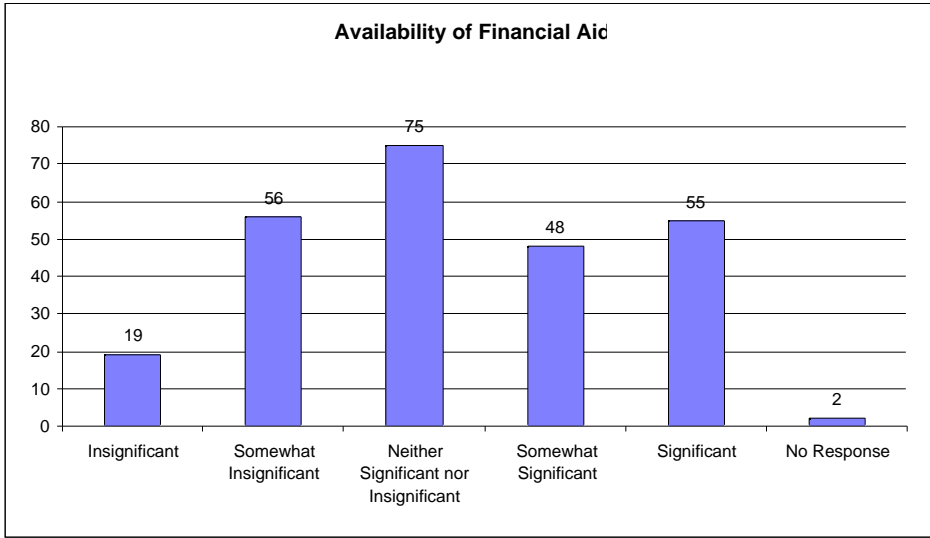
Chart 5 shows the spread of rankings for the category of Family/Peer Support.

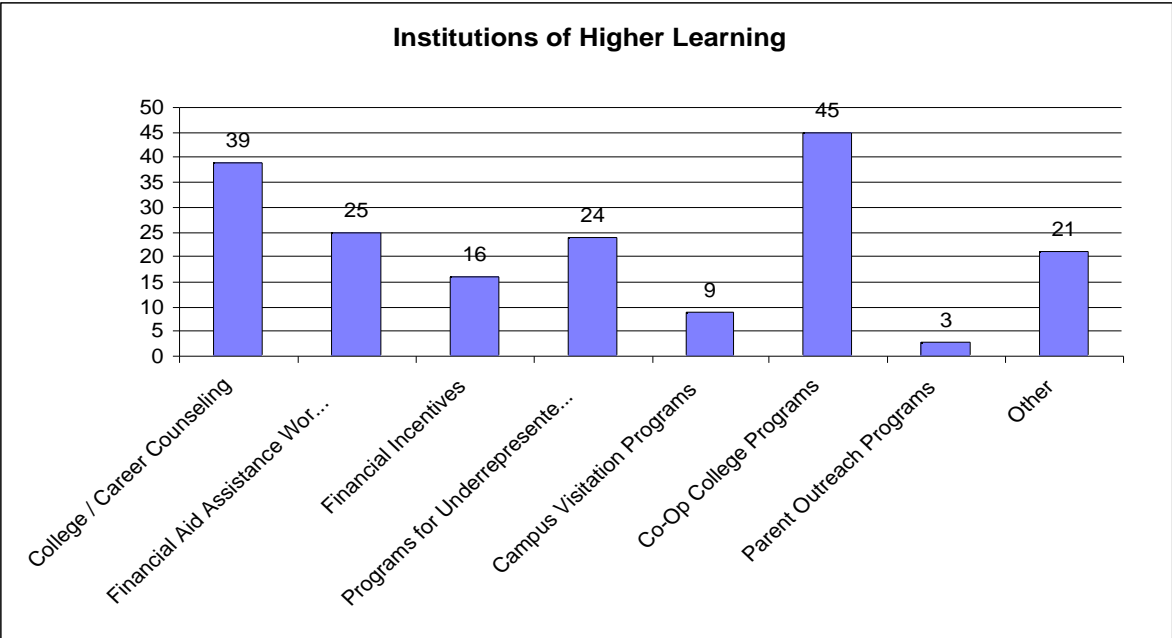
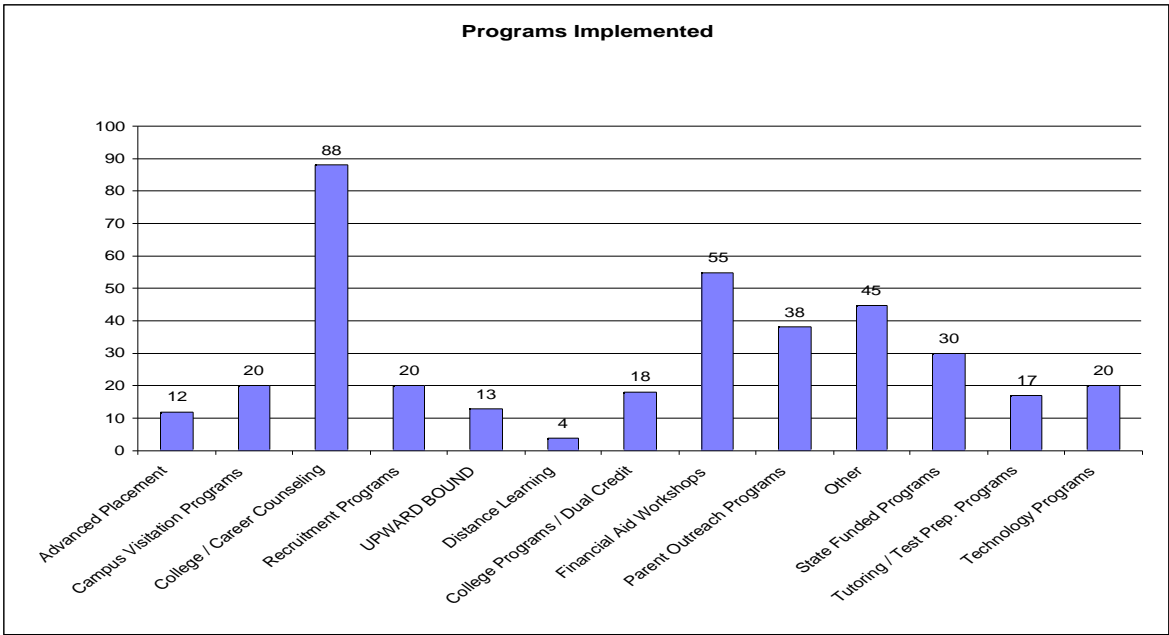


The second method used to answer the questionnaire was that of ranking the factors *independently from one another*-- each on its own scale of 5-1. The chart titled "Ranking Averages" reflects the average ranking that each category received. An average of 3 indicates responses of "Neither significant nor insignificant." An average of 4 or 5 indicates responses of "Significant" or "Very Significant," respectively. Conversely, averages of 1 or 2 indicate "Insignificant" and "Very Insignificant," respectively.

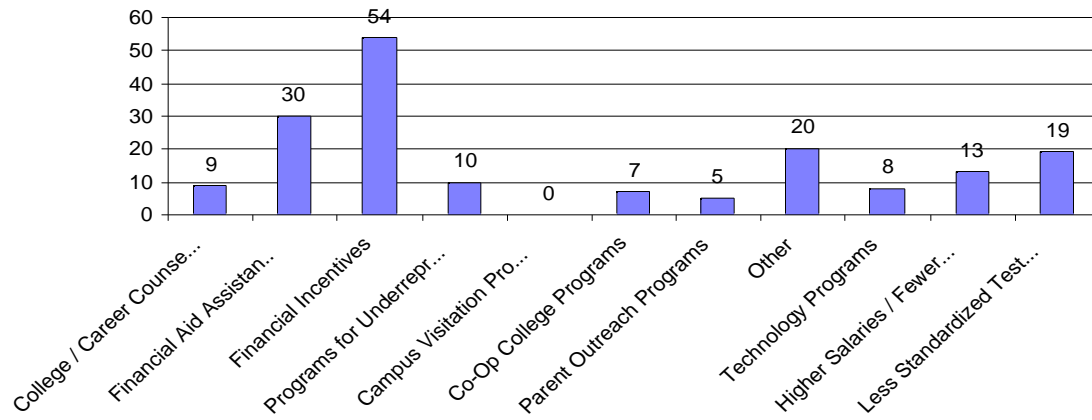
One last note: 51 of the 255 surveys were excluded from both of these analyses. 49 due to ambiguity in the scale the respondent was using, one because it was incomplete, and one because it was illegible.



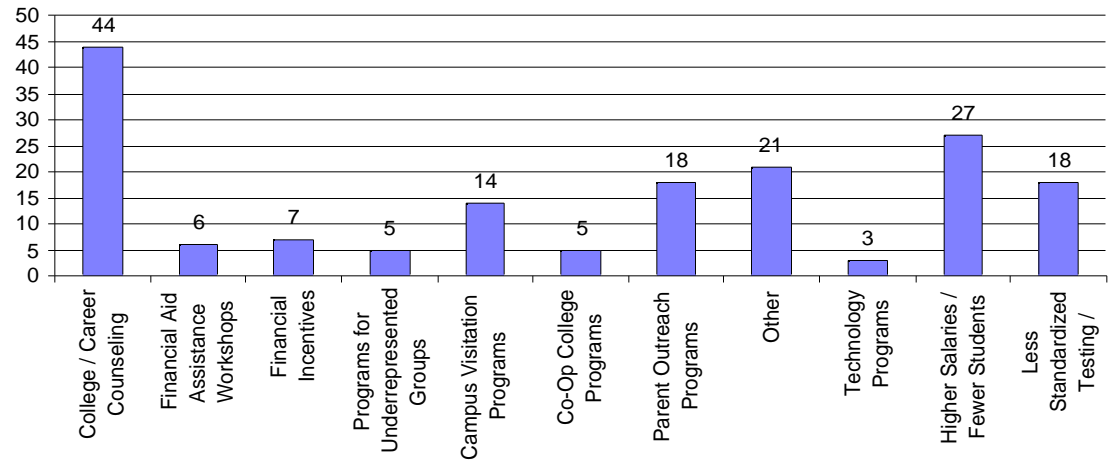




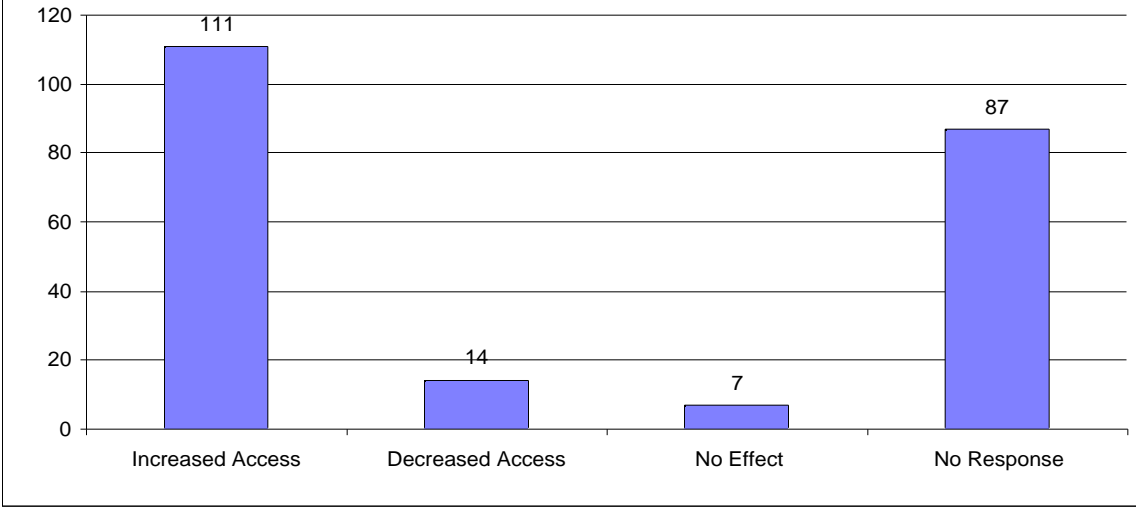
### State of Texas



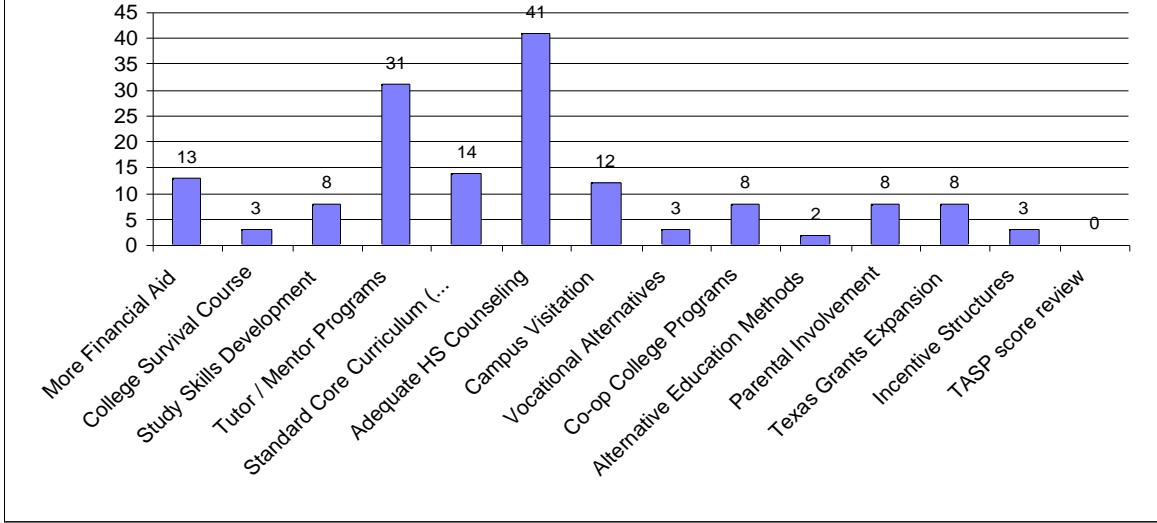
### School Districts



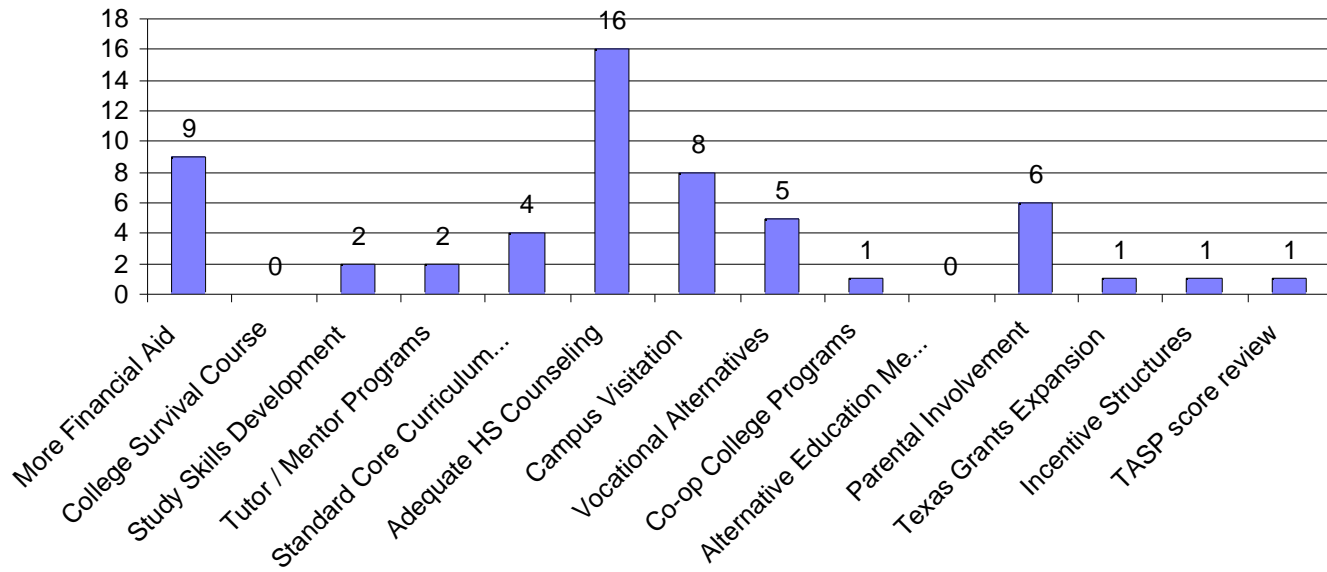
### Top 10% Admission Rule



### Suggestions / Recommendations



### Other Comments



## Appendix F: Works Cited

## Works Cited

- About CSAC*. California Student Aid Commission. 13 April 2000 <<http://www.csac.ca.gov/>>.
- About IVC*. 1999. Illinois Virtual Campus. 13 April 2000 <<http://www.ivc.illinois.edu/>>.
- About the LSDAS*. 2000. Law School Admissions Council. 24 April 2000 <<http://www.lsat.org/about-the-lsdas.htm>>.
- Academic Skills Development Workshop*. 6 November 1998. University of Wisconsin-Madison. 11 March 2000 <<http://www.soemadison.wisc.edu/cap/academic.htm>>.
- Access and Equity 2000: Ensuring the Future of Texas-- Overview*. Texas Higher Education Coordinating Board. 22 February 2000 <<http://www.thecb.state.tx.us/divisions/ane/teop89/bodteop89.htm>>.
- Ashworth, Kenneth, David Breneman, E.F. Infante, and Sandra S. Ruppert. *Taking Up the Challenge: A Report on the Midwestern Higher Education Policy Summit*. Oak Brook, Illinois: Midwestern Higher Education Commission, September 1998.
- ASSIST: Articulation System Stimulating Interinstitutional Student Transfer*. 2000. ASSIST. 13 April 2000 <<http://assist.org/>>.
- Barrett, Katherine and Greene, Richard. "The Government Performance Project: Managing for Results." 1999. *Governing*. 7 March 2000 <<http://www.governing.com/gpp/gp9man.htm>>.
- Bilchik, Shay. *Juvenile Mentoring Program: 1998 Report to Congress*. December 1998. Office of Juvenile Justice and Delinquency Prevention. 17 April 2000 <<http://www.ncjrs.org/pdffiles1/952872.pdf>>.
- BIP: Better Information Project*. 1997. State Council for Higher Education in Virginia. 13 April 2000 <<http://www.schev.edu/>>.
- Building Hope in Rhode Island's Children*. The Rhode Island Children's Crusade for Higher Education. 10 March 2000 <<http://www.childrenscrusade.org/>>.
- Bureau of College, School and Community Collaboration*. New York State Education Department. 5 April 2000 <<http://www.highered.nysed.gov/csc/enlace>>.
- The Bureau of Higher Education Opportunity Programs*. New York State Education Department. 5 April 2000 <<http://www.highered.nysed.gov/heop/>>.
- The Bureau of Professional Career Opportunity Programs (PCOP)*. New York State Education Department. 5 April 2000 <<http://www.highered.nysed.gov/pcop/>>.

Butler, Mark R. *School-to-Careers Activities in Texas, A Status Report*. January 2000. Texas Workforce Commission. 20 April 2000  
<<http://www.twc.state.tx.us/svcs/stw/stwhp.html>>.

*The Challenge is Change: Ohio's Master Plan for Higher Education*. November 1996. Ohio Board of Regents. 7 April 2000  
<<http://www.regents.state.oh.us/plandocs/masterplan96.html>>.

*A Citizen's Agenda--The Illinois Commitment: Partnerships Opportunities and Excellence*. 2 February 1999. State of Illinois Board of Higher Education. 13 April 2000  
<<http://www.ibhe.state.il.us/Board%20Items/1999/02%20February/1999-02-07.pdf>>.

*The College Access Program*. 16 July 1997. University of Wisconsin-Madison. 11 March 2000  
<<http://www.soemadison.wisc.edu/cap/mission.htm>>.

*College Foundation, Inc.: North Carolina Student Incentive Grant*. 5 April 2000. College Foundation, Inc. 9 April 2000 <<http://www.cfi-nc.org/NCSIG.htm>>.

*College Vision Fund*. 1999. State of North Carolina. 9 April 2000  
<<http://www.collegevisionfund.org/>>.

*County Business Patterns*. US Census Bureau. 22 March 2000  
<<http://tier2.census.gov/cbp/index.html>>.

*Division of Workforce Development*. 17 March 2000. Florida Department of Education. 9 April 2000 <<http://www.firn.edu/doe/bin00056/title.htm>>.

*Education Opportunity Fund*. 14 April 2000. New Jersey Commission on Higher Education. 19 April 2000 <<http://www.state.nj.us/highereducation/eof.htm>>.

*El MAEStro*. March 2000. Society of Mexican American Engineers & Scientists. 28 March 2000 <[www.tamu.edu/maes/paces/](http://www.tamu.edu/maes/paces/)>.

Employment & Training Administration. *Apprenticeship*. April 2000. United States Department of Labor. 17 April 2000 <<http://www.doleta.gov/individ/apprent.htm>>.

Employment & Training Administration. *Work Opportunity and Welfare-to-Work Tax Credits*. 2 February 2000. Department of Labor. 17 April 2000  
<<http://www.doleta.gov/employer/wotc.htm>>.

*Examples That Work*. 9 February 2000. New Jersey School to Career. 6 April 2000  
<<http://www.state.nj.us/njded/voc/examples.htm>>.

*Florida Bright Futures Scholarship Program*. Florida Department of Education. 12 April 2000  
<<http://www.firn.edu/doe/bin00072/home0072.htm>>.

*GA EASY*. University System of Georgia. 7 April 2000 <<http://www.peachnet.edu/ga-easy/>>.

- GEAR UP Partnership Grants.* GEAR UP Indiana. 20 March 2000 <<http://gear-up.indiana.edu/Partnership.html>>.
- Gear Up: Gaining Early Awareness and Readiness for Undergraduate Programs.* National Education Association Office of Postsecondary Education. 29 March 2000 <<http://www.ed.gov/gearup/>>.
- Georgia P-16 Initiative.* 10 April 2000. University System of Georgia Board of Regents. 11 April 2000 <<http://www.usg.edu/p16/>>.
- Getting into College.* 2000. Washington State Higher Education Coordinating Board. 13 April 2000 <<http://www.hecb.wa.gov/paying/Promise/pm2000.html>>.
- Getting Ready for College Early: A Handbook for Parents of Students in the Middle and Junior High School Years.* August 1997. Office of the Under Secretary, US Department of Education. 20 April 2000 <<http://www.ed.gov/pubs/GettingReadyCollegeEarly/>>.
- Going to College in New Jersey: A Guide to Undergraduate Opportunities.* 1998. New Jersey Higher Education Student Assistance Authority. 6 April 2000 <<http://www.state.nj.us/highereducation/goingtocollege.pdf>>.
- Harris, Zelema M. and Pauline Kayes. "Multicultural and International Challenges to the Community College: A Model for College-Wide Proactive Response." Paper presented at the 75<sup>th</sup> Annual Convention of the American Association of Community Colleges. Minneapolis, MN: 22-25 April 1995.
- Healy, Mark. *Back to School.* Ed. Vince Bielski. 3 April 2000. Industry Standard. 3 April 2000 <<http://www.thestandard.com/article/display/0,1151,13481,00.html>>.
- Highsmith, Robert J., Ronni Denes and Marie M. Pierre. "Mentoring Matters." June 1998. *Research Letter* 8 no. 1. 17 April 2000 <<http://www.nacme.org/rljune98.pdf>>.
- HOPE.* Georgia Student Finance Commission. 6 April 2000 <<http://www.gsfc.org/hope/>>.
- Hustedde, Ronald J., Ron Shaffer, and Glen Pulver. *Community Economic Analysis: A How to Manual.* Ames: Iowa State University Printing Services, 1993.
- Illinois Virtual Campus: A Class Connection.* 1999. University of Illinois. 4 April 2000 <[www.ivc.illinois.edu](http://www.ivc.illinois.edu)>.
- Impact Data Source. *Linking School-to-Careers with Economic Development: A Report of the Economic Impact of School-to-Careers in Texas.* 19 November 1999. Texas Workforce Commission. 20 April 2000 <<http://www.twc.state.tx.us/svcs/stw/stwhp.html>>.
- Job Shadowing Handbook.* New Jersey School to Career Partnership. 6 April 2000. <<http://www.state.nj.us/njded/voc/shadow.pdf>>.

- Job Shadowing*. 19 January 2000. Wisconsin Department of Public Instruction. 12 April 2000 <<http://www.dpi.state.wi.us/dpi/dlsis/let/lejobshw.html>>.
- Joint Admissions Program*. 23 June 1999. Massachusetts Community Colleges. 19 April 2000. <<http://www.masscc.org/joint.html>>.
- Legislative Budget Board. *Strategic Planning and Budgeting and Performance Measures*. March 1998. State of Texas. 20 March 2000 <<http://notesweb.lbb.state.tx.us/PRFORM.nsf/>>.
- Linking School-to-Careers with Economic Development: A Report of the Economic Impact of School-to-Careers in Texas*. 19 November 1999. Texas Workforce Commission. 20 April 2000 <<http://www.twc.state.tx.us/svcs/stw/stwhp.html>>.
- Looking to the New Millennium: New Jersey's Plan for Higher Education*. October 1996. New Jersey Commission on Higher Education. 14 March 2000 <<http://www.state.nj.us/highereducation/plan.htm#Academic>>.
- The Massachusetts Dual Enrollment Program*. Massachusetts Department of Education. 4 April 2000 <<http://www.doe.mass.edu/dual/brochure.html>>.
- Massachusetts Educational Financing Authority*. 18 January 2000. Massachusetts Educational Financing Authority. 8 April 2000 <<http://www.mefa.org/>>.
- Massachusetts School to Career System*. Massachusetts Department of Education. 4 April 2000 <<http://www.doe.mass.edu/stw/>>.
- McConnaughey, James W. *Falling Through the Net II: New Data on the Digital Divide*. Washington DC: National Telecommunications and Information Administration. U.S. Department of Commerce, 1999.
- Merjanian, Ara. *Strategic Budgeting in Texas: A Systems Approach to Planning, Budgeting, and Performance Measurement*. March 2000. American Society for Public Administration. 2 April 2000 <<http://www.aspanet.org/cap/statcase.htm>>.
- Michigan Alternative Student Loan Program*. 1 October 2000. State of Michigan Student Financial Aid. 9 April 2000 <<http://www.MI-StudentAid.org/index2.html>>.
- Michigan Department of Career Development*. 29 February 2000. State of Michigan. 8 April 2000 <<http://www.state.mi.us/career>>.
- Michigan Education Trust*. 1 March 2000. Michigan Department of the Treasury. 8 April 2000 <<http://www.treas.state.mi.us/college/met/metindex.htm>>.
- MI-SEARCH*. 1 October 2000. Michigan Higher Education Assistance Authority and Michigan Higher Education Student Loan Authority. 19 April 2000 <<http://www.MI-StudentAid.org/index2.html>>.

- Mission*. 4 February 2000. New York State Education Department. 7 April 2000  
<<http://www.highered.nysed.gov/oea/home.html>>.
- Missouri Office of Administration. *FY 2001 Executive Budget - Department Budgets, Higher Education*. January 2000. The State of Missouri. 17 April 2000  
<<http://www.oa.state.mo.us/bp/budg2001/dhe/index.shtml>>.
- Missouri Student Assistance Programs*. 21 March 2000. Missouri Department of Higher Education. 28 March 2000 <<http://www.mocbhe.gov/mostars/scholar2.htm>>.
- National Commission on the Cost of Higher Education. *Straight Talk about College Costs and Prices*. Washington, D.C.: United States Congress, 21 January 1998.
- Networking Success Stories*. 1999. Cisco Education Network. 13 April 2000  
<[http://www.cisco.com/warp/public/779/edu/higher\\_ed/profiles/wastate.html](http://www.cisco.com/warp/public/779/edu/higher_ed/profiles/wastate.html)>.
- New Jersey GEAR UP*. New Jersey Commission on Higher Education. 14 March 2000  
<<http://www.state.nj.us/highereducation/grant5.htm>>.
- New Jersey Virtual University*. 15 September 1999. New Jersey Virtual University. 6 April 2000 <<http://www.njvu.org/>>.
- NJBEST: A College Savings Plan*. 5 February 2000. New Jersey Higher Education Student Assistance Authority. 6 April 2000 <<http://63.72.180.30/njbest/index.html>>.
- Office of the Governor. *76<sup>th</sup> Session Veto Proclamations, HB 1418*. 20 June 1999. The State of Texas. 20 April 2000  
<<http://www.governor.state.tx.us/legislative/Veto76/HB1418.html>>.
- Office of the Governor. *The Case for Mentoring - Benefits of Mentoring, Why Mentor*. April 2000. The State of Texas. 20 April 2000  
<<http://www.governor.state.tx.us/Mentoring/case.html>>.
- Opportunity For A New Millennium: EOF Planning Report*. 1996. New Jersey Commission on Higher Education. 14 March 2000 <<http://www.state.nj.us/highereducation/eofplan.htm>>.
- PAGESS--Promotion and Awareness of Graduate Engineering and Science Studies*. 17 April 2000. PAGESS. 20 April 2000 <[www.tamu.edu/maes/pagess/](http://www.tamu.edu/maes/pagess/)>.
- Performance Indicators of California Higher Education*. 1999. California Postsecondary Education Commission. 13 April 2000  
<<http://www.cpec.ca.gov/Publications/ReportSummary.ASP?969>>.
- Policy Initiatives*. 2000. State of Illinois Board of Higher Education. 13 April 2000  
<<http://www.ibhe.state.il.us/>>.
- Population Estimates by Age, Sex and Race*. 1997. U.S. Census Bureau. 13 April 2000  
<<http://govinfo.library.orst.edu/cgi-bin/>>.

- Poverty 1998*. 30 September 1999. U.S. Census Bureau. 7 April 2000  
<<http://www.census.gov/hhes/poverty/poverty98/pv98state.html>>.
- PREP: Post-Secondary Readiness Enrichment Program*. 5 April 1999. University System of Georgia Board of Regents. 6 April 2000 <<http://www.usg.edu/admin/accaff/prep/>>.
- Preparing for College*. State Commission for Higher Education in Virginia. 3 April 2000  
<<http://www.schev.edu/>>.
- Regional Economic Information System*. United States Bureau of Economic Analysis. 22 March 2000 <<http://govinfo.kerr.orst.edu/reis-stateis.html>>.
- Registered Youth Apprenticeship Program*. 25 June 1999. Pennsylvania Department of Education. 7 April 2000 <<http://www.pde.psu.edu/ryag.html>>.
- SCHEV Approves 1999-2000 Tuition and Fee Report*. 24 June 1999. State Council for Higher Education in Virginia. 13 April 2000 <<http://www.schev.edu/>>.
- Shaw, Ann Davis. Admissions Counselor, MIT. Interview by Jill Shaunfield. 22 March 2000. College Station, Texas. Telephone. The George Bush School of Government and Public Service.
- State of Michigan Merit Award Program*. 29 March 2000. Michigan Department of Treasury. 4 April 2000 <<http://www.MeritAward.state.mi.us/>>.
- State of Michigan Student Financial Aid*. 1 October 1999. Michigan Higher Education Assistance Authority and Michigan Higher Education Student Loan Authority. 19 April 2000 <<http://www.MI-StudentAid.org>>.
- Stein, Robert B. *Funding for Results: A Collaborative Initiative for Educational Excellence*. January 1999. Missouri Department of Higher Education. 8 April 2000  
<<http://www.mocbhe.gov/acadafrs/ffr2.htm>>.
- STRA*. 3 March 2000. Michigan's School to Registered Apprenticeship. 19 April 2000  
<<http://www.stra.org/index.html>>.
- Strategies For Excellence: Advancing Virginia Higher Education-1999 Annual Report*. November 1999. State Council for Higher Education in Virginia. 13 April 2000  
<<http://www.schev.edu/>>.
- Stross, Randall E. "Digital Divide Hooey: Access to the Internet Is No Black and White Issue." 17 April 2000. *U.S. News and World Report*. 17 April 2000  
<<http://www.usnews.com/usnews/issue/000417/digital.htm>>.
- Student Advisory Committee*. 21 March 2000. New Jersey Higher Education Student Assistance Authority. 6 April 2000 <<http://63.72.180.30/sac/sacwebpage2.html>>.

- Student Information.* Indiana Commission for Higher Education. 20 March 2000  
<<http://www.che.state.in.us/stude.htm>>.
- Sulton, Dr. James E. *Mid-Year Report to the Commission on Higher Education.* 17 December 1999. New Jersey Commission on Higher Education. 14 March 2000  
<<http://www.state.nj.us/highereducation/ed1299.htm>>.
- TAG: Tuition Assistance Grant Program.* April 2000. State Council for Higher Education in Virginia. 13 April 2000 <<http://www.schev.edu/>>.
- Take Charge of Your Future.* 2000. Indiana Career and Postsecondary Advancement Center. 17 March 2000 <<http://icpac.indiana.edu/>>.
- TAP Solves the Problem of Saving for College – Guaranteed.* Pennsylvania Tuition Account Program. 15 March 2000. Pennsylvania Treasury. 5 April 2000  
<<http://www.patap.org/>>.
- Texas Legislature Online. *Bill History, HB 1418.* April, 2000. The State of Texas. 20 April 2000 <<http://www.capitol.state.tx.us/tlo/billnbr.htm>>.
- Texas State Auditor's Office. *Performance-Based Budgeting Survey Results.* March 1998. State of Texas. 25 March 2000 <<http://www.sao.state.tx.us/perfbudgsurv-f.html>>.
- Tuition Advantage and Other Financial Aid Programs.* 23 June 1999. Massachusetts Community Colleges. 19 April 2000 <<http://www.masscc.org/tuition.html>>.
- U.Fund College Investing.* 8 June 1999. Massachusetts Educational Financing Authority. 19 April 2000 <<http://www.mefa.org/savings/ufund.shtml>>.
- U.Plan College Savings Program.* 8 June 1999. Massachusetts Educational Financing Authority. 19 April 2000 <<http://www.mefa.org/savings/uplan.shtml>>.
- The University System of Georgia.* 5 April 2000. University System of Georgia Board of Regents. 10 April 2000 <<http://www.usg.edu/>>.
- Washington Promise Scholarship: Year 2000 High School Graduates.* 2000. Washington State Higher Education Coordinating Board. 13 April 2000  
<<http://www.hecb.wa.gov/paying/Promise/pm2000.html>>.
- Welcome to Scholars Central.* The Twenty-first Century Scholars Program. GEAR UP Program. 20 March 2000 <<http://scholars.indiana.edu/>>.
- Welcome to the Texas Tomorrow Fund.* Texas Tomorrow Fund. 11 March 2000  
<[www.texastomorrowfund.com/main.cfm](http://www.texastomorrowfund.com/main.cfm)>.
- Work Opportunity and Welfare-to-Work Tax Credits.* 2 February 2000. Department of Labor. 17 April 2000 <<http://www.doleta.gov/employer/wotc.htm>>.

*Working Connections*. The American Association of Community Colleges. 14 April 2000  
<<http://www.aacc.nche.edu/initiatives/Connections/Index.htm>>.

