EXPLORING THE FUNDING STRUCTURE FOR TEXAS PUBLIC COMMUNITY COLLEGES: ATTITUDES AND PERCEPTIONS OF COMMUNITY COLLEGE ADMINISTRATORS

By

Michelle Galindo Cruz

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Abstract

Today, it seems that receiving a quality education is more important than ever. However, the challenges to providing a higher education are also greater than ever. As our world evolves into a more global community, we are faced with higher standards and expectations to hold ourselves accountable. Never has there been a time when employers have sought such a broadly trained and educated workforce. Society, as a whole, also has high expectations from its system of higher education.

Because higher education now plays such a crucial role in enabling an individual to enter the work force and the middle class, more people are eager to pursue an advanced education. Additionally, due to the rapid acceleration of the information and technology revolutions, it is necessary to change and improve our educational systems in order to adapt to the new demands of a changing society. Changes, however, are difficult to promote without the proper financial and governmental support. This is perhaps why many institutions of higher education, specifically public community colleges, are struggling to cope with the educational demands of students while carefully balancing their respective financial situations.

Thus the focus of this Applied Research Project is to assess the current funding structure for public community colleges in Texas. Structured interviews are the chosen research methodology for an exploration into the attitudes and perceptions of Texas public community college administrators regarding the current funding structure for Texas public community

colleges. Specifically, the applied project explores the reliability and political nature of available revenue sources, formula funding as a method for appropriating funds to community colleges, and the various political elements of the current funding mechanism are assessed from the perspectives of Texas public community college administrators.

The research findings suggest that the funding structure for public community colleges in Texas is a complex mechanism that is affected by various external and internal factors. The research findings also indicate that the interviewed community colleges administrators are dissatisfied with certain aspects of the current funding structure for public community colleges, but are relatively satisfied with others. In specific, administrators are generally pleased with formula funding and its impact upon the funding structure, and are generally displeased with the reliability of the revenue sources available to them.

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Chapter One: Introduction

Introduction

For a number of reasons, including the rising costs of education at universities and most institutes of higher education, national interest in public community colleges has grown tremendously. According to the National Profile of Community Colleges, "between 1965 and 1996, community college enrollment has increased by more than four hundred percent." Additionally, the National Center for Education Statistics indicate that "in 1997, more students in the United States enrolled in public community colleges than at public four-year colleges.¹"

This recent trend in enrollment growth is expected to continue. For example, approximately eighty percent of high school graduates "indicate that they intend to continue on to institutes of higher education" (Education Commission of the States, 2000, 17). Not all of these students, however, will obtain part, or all, of their education from four-year universities. Because the costs of obtaining an education are increasing rapidly, and the policies of competitive and limited enrollment at universities are employed more frequently, it is reasonable to conclude that

¹ As cited in the 2000 report by the Education Commission of the States, page 16.

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an increased number of students will turn to public community colleges² for their educational needs.

Enrollment Growth in Texas

Increased interest in public community colleges and increasing enrollment figures are not traits unique to the national statistical perspective of higher education. Many states are realizing a tremendous growth in their public community colleges. For example, since 1995, community college enrollment in Texas exceeded enrollment in four-year universities (Legislative Budget Board, 2001, 39). According to the Texas Special Commission on Twenty-First Century Colleges and Universities³ (2001, 5), currently there are approximately one million students in the state's higher education system⁴, with a projected enrollment increase of another three hundred thousand students by the year 2030 - if current participation rates continue.

 $Additionally, \ the \ state \ of \ Texas, \ has \ established \ goals^5 \ to \ enroll \ more \ students \ in \ institutes$

² The terms "community college" and "junior college" can be used interchangeably without compromising the meaning and definition of the words. While both terms describe two year institutions, the researcher prefers to use the term "community college."

³ The Texas Special Commission on 21st Century Colleges and Universities was established by Governor Rick Perry to analyze and assess the state of higher education in Texas. Subsequently, this group is responsible for establishing goals and recommendations for universities and colleges to the Texas Legislature.

⁴ The enrollment of students in higher education accounts for only five percent of Texas' total population (Texas Higher Education Coordinating Board, 2002).

⁵ Specific higher education goals are defined in the *Moving Every Texan Forward* report by the Texas Special Commission on 21st Century Colleges and Universities.

of higher education as a means of increasing the overall education of the population, as well as to reach out to historically disadvantaged minorities. In 2000, the Texas Higher Education Coordinating Board adopted a strategic plan, Closing the Gaps by 2015 (see Appendix A-The Texas Higher Education Plan), for higher education⁶. The first of the plan's four goals focuses on increasing enrollment and student participation.

Goal One: Close the Gaps In Participation-By 2015, close the gaps in participation rates across Texas to add 500,000 more students.

With the goal of adding more students to the higher education system of Texas, it is assumed that an increased number of students will be added at the public community college level. In fact, the Texas Higher Education Coordinating Board estimates that between 60 and 70 percent (300,000 to 350,000) of the additional 500,000 students to be added by the *Closing the Gaps by 2015* plan will begin their studies in Texas public community colleges (Texas Higher Education Coordinating Board, 2002, 5).

Demographic Changes in Texas

Several specific reasons may account for the rise in public community college enrollment in Texas. Lower costs associated with public community colleges, the open-door nature of community college admission, an increase in demands by businesses and industries for highly

⁶ As cited in the Strategic Plan for Texas Public Community Colleges 2003-2007, issued by the Texas Higher Education Coordinating Board.

skilled employees, and the availability of traditional and non-traditional class formats⁷ have all contributed to the increase in enrollment (Texas Higher Education Coordinating Board, 2002, 17). The growth of the Texas population, however, may be the most significant factor influencing public community college enrollment.

The Texas population is expected to increase by approximately 5.1 million between 2000 and 2015, resulting in a population of approximately 29 million. From 2000 to 2025, Texas is also expected to have a population increase of 8.7 million people (41.7 percent increase). With an average growth rate of 1.6 percent, Texas will outpace the nation's growth rate of 1.1 percent (Texas State Data Center, 2001).

Of this population increase, Hispanics and African Americans are estimated to account for approximately 55.4 percent, or 16.4 million, of the Texas population by 2025⁸ (Texas Higher Education Coordinating Board, 2002, 4). If this historically under-educated segment of the population is to be given a fair opportunity to enter the Texas economy in a productive and effective manner, adding funding resources will be a necessity. Thus, the goal of the *Closing the Gaps 2015* plan to educate historically disadvantaged students becomes imperative.

With a foreseen continuation of increasing enrollment at institutions of higher education - specifically public community colleges - the government is faced with the difficult task of funding these institutions at a level that educates students in an efficient and effective manner. State funding for higher education per student in constant dollars is expected to increase through the

⁷ Non-traditional formats include evening and instructional telecommunication courses.

⁸ The Anglo population is expected to account for 39.8 percent, or 11.8 million, of Texas' total population

year 2009 (Legislative Budget Board, 2001, 39). Many leaders at institutions of higher education, however, question the funding structure's ability to appropriate funds in a manner that will allow them to better educate students through quality programs and services.

Research Purpose

The purpose of this research is to investigate the attitudes and perceptions of community college leaders toward the current funding structure for Texas public community colleges. Literature on budgeting, formula funding, and revenue sources in higher education, specifically Texas public community colleges, is examined in order to gain a historical perspective of the issue and to develop a framework that can be used to collect data. Specifically, the attitudes and perceptions of Texas community college administrators regarding the budgetary process, formula funding, and available resources are explored in order to obtain a practical perspective of the issue.

Structured interviews are the primary research methodology used to explore the attitudes and perceptions of Texas public community college administrators regarding the community college funding structure. Ultimately, this research serves to expand the literature regarding

in 2025.

community college funding in Texas, as well as initiate dialog among leaders regarding this issue.

Chapter Summaries

A historical context of the origin of public community colleges is addressed in Chapter Two. The original mission of public community colleges is provided in this chapter, as well as background on the financial components that have ultimately shaped modern funding structures for public community colleges. Finally, a discussion of public community college structures both nationally, and locally in Texas, is included.

Chapter Three provides an overview of the budgeting structure for higher education in Texas, specifically public community colleges. Formula funding is addressed as a popular method for financing and appropriating funds to public community colleges. A background of this funding method is discussed. Additionally, an overview of the general characteristics of formula funding, as well as the impact this funding method has upon higher education and public

community colleges is included. Furthermore, details about the revenue sources available to

public community colleges are provided. Specifically, the strengths and weaknesses of state

appropriations, federal appropriations, local contributions, revenue from tuition and fees, and

"other sources of revenue" are examined, as these sources relate to the funding of Texas public

community colleges.

Chapter Four addresses the methodology for the study. A discussion of the methods

used as well as the sampling technique are included.

Chapter Five reports the results of the research and describes the related analysis.

Finally, Chapter Six provides the conclusions and recommendations for the study, which can

possibly be used by legislators and Texas public community colleges for policy development and

future research.

Chapter Two: Community Colleges

Introduction

This chapter examines the historical context of public community colleges. The original

mission of public community colleges is provided in this chapter, as well as background on the

financial components that have ultimately shaped modern funding structures for public

community colleges. Finally, a discussion of public community college structures both

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nationally, and locally in Texas, is included.

Community Colleges: A Historical Overview

William Raney Harper, president of the University of Chicago from 1890 until his death in 1906, is generally credited as the father of the junior college, or community college, movement (De La Garza, 2000, 2). Harper believed that the first two years of college were more similar to high school than to the university experience, and that it was best not to confuse university studies (such as research or advanced studies in a specialized area) with general education and prerequisites. Thus, in 1892 Harper divided the University of Chicago into upper and lower division colleges. The lower divisions were known initially as "academic colleges," but in 1895 Harper coined the term "junior colleges" (Gleazer, 1986, 226).

Harper also envisioned a network of free-standing junior colleges affiliated with universities, with the transferability of junior college courses to their affiliate universities guaranteed. Harper's vision of two-year, free-standing colleges, however, went unrealized for some time. Instead, a number of high schools offered to conduct college-level courses on their own. The teaching of college-level courses at the high school level, expanded the high school curriculum from four to six years, with the last two years consisting of college-level courses (De La Garza, 2000, 2). All other community colleges had their origins as applied vocational and technical schools (Education Commission on the States, 2001,1). It was not until 1901 that the first junior college, Joilet Junior College, was established in Joilet, Illinois (Gleazer, 1986, 227).

Ultimately, the development of junior/community colleges as extensions of high schools,

rather than universities, had major consequences for how these schools were, and remain, financed (De La Garza, 2000, 2). While high schools were financed on the principle of public support with no cost to students in the form of tuition, universities charged tuition and almost exclusively served the wealthy. In fact, the first junior colleges charged little to no tuition. Thus, from the beginning, junior/community colleges in the United States "operated on the premise of providing wide access to higher education through public funding at little or no cost to students" (De La Garza, 2000,2).

The Mission of Community Colleges

In 1918, junior college administrators were surveyed to assess their opinions on the functions and responsibilities of junior colleges. According to De La Garza (2000, 3), primary components listed as part of the junior college mission were:

- ï To meet specific local needs,
- To compensate for geographical remoteness from a senior college or university,
- ï To compensate for financial difficulties,
- ï To provide vocational training, and
- To provide educational opportunities for those students unable toqualify for university admission.

Although articulated over eighty years ago, these components formed, and have remained, the principles of the mission of the comprehensive community college. The three elements that

would ultimately transcend to shape future financial models were (1) local control, (2) public funding, and (3) lowest possible costs to the student (De La Garza, 2000, 3). It is from these very elements that community college funding in the United States is currently based upon.

Community College Structures

Because local control is a principle of community colleges in the United States, it is easily understood that there is no single governing body, nor a single method for financing community colleges. While in some states, like Connecticut and Hawaii, community colleges are part of a single, statewide system, in other states, like Alabama, they are directed by a single chief executive officer who reports to a state Board of Education (De La Garza, 2000, 4).

In Texas, however, each of the state's fifty community college districts has its own popularly elected governing board, each of which appoints a chief executive officer (Texas Higher Education Coordinating Board, 2000, 1). This chief executive officer serves as the president in the case of single-campus colleges, or the chancellor for those with multiple campuses or colleges. An eighteen member Coordinating Board appointed by the governor, coordinates and approves educational programs for the community colleges (Community College Policy Center, 2001,1).

Essentially, each state has a unique model for governance of its public community colleges, including its methods for financing them. While the basic components of funding-state appropriations, local tax revenue, tuition and fees, and federal appropriations are similar from state to state (De La Garza, 2000,4), the method of securing funding, including the amount and reliability of each source, differs greatly.

Public Community Colleges in Texas

The first public community colleges in Texas were Grubbs Vocational Institute in Arlington and John Tarleton College in Stephenville. Both schools were taken over by the state in 1917 and managed by Texas A&M College (now Texas A&M University). Their purpose was to provide agricultural training to students (De La Garza, 2000, 8.). At the time, Texas was considered at the forefront of the community college movement, with seventeen institutions founded between 1922 and 1927 (De La Garza, 2000, 8).

Over time, the mission of community colleges in Texas has adapted to economical and societal needs and demands. According to Section 103.003(e) of the Texas Education Code, the current purpose of each community college in Texas is to provide:

technical programs leading to associate degrees or certificates
 vocational programs leading directly to employment in semi-skilled and
 skilled occupations
 freshman and sophomore courses in the arts and sciences
 continuing adult education programs for occupational or cultural upgrading
 compensatory education programs
 workforce development programs
 adult literacy and other basic skills programs for adults (Texas Education

Code, 2001, 665).

As the demands for public community colleges increased nationally, more institutions were established in communities in Texas (See Table 2.1). There are currently fifty public

Table 2.1 Texas Public Community College History 9

Number	Institution	Year	2000-2001 Enrollment ¹⁰
		Established	
1	Alamo Community College District	1945	68,441
2	Alvin Community College	1948	7,831
3	Amarillo College	1929	32,542
4	Angelina College	1966	9,980
5	Austin Community College	1972	53,920
6	Blinn College	1937	21,200
7	Brazosport College	1948	6,714
8	Central Texas College	1965	22,921
9	Cisco Junior College	1939	4,478
10	Clarendon College	1927	1,672
11	Coastal Bend College	1965	6,032

⁹ Statistics courtesy of the Texas Higher Education Coordinating Board, 2002.

¹⁰ Annual unduplicated headcount

12	College of the Mainland	1966	8,210
13	Collin County Community College	1985	33,777
14	Dallas County Community College	1965	133,246
15	Del Mar College	1951	20,296
16	El Paso Community College	1969	37,076
Number	Institution	Year	2000-2001 Enrollment
		Established	
17	Frank Phillips College	1946	6,628
18	Galveston College	1935	5,339
19	Grayson County College	1964	6,754
20	Hill College	1962	4,604
21	Houston Community College	1971	78,704
22	Howard County Community College	1945	10,617
23	Kilgore College	1935	13,680
24	Laredo Community College	1946	13,206
25	Lee College	1934	10,747
26	McLennan Community College	1966	11,970
27	Midland College	1969	10,984
28	Navarro College	1946	9,080

29	North Central Texas Community College	1924	8,525
30	North Harris-Montgomery College	1973	53,900
31	Northeast Texas Community College	1984	4,015
32	Odessa College	1946	11,656
33	Panola College	1947	2,958
34	Paris Junior College	1924	6,826
35	Ranger College	1925	1,571
36	San Jacinto	1960	42,923
37	South Plains College	1957	13,117
38	South Texas Community College	1993	18,765
39	Southwest Texas Junior College	1946	6,231
40	Tarrant County College District	1965	60,436
41	Temple College	1926	6,581
42	Texarkana College	1927	9,111
Number	Institution	Year	2000-2001 Enrollment
		Established	
43	Texas Southmost College	1949	11,764
44	Trinity Valley Community College	1946	9,137
45	Tyler Junior College	1945	16,650

46	Vernon Regional Junior College	1970	7,761
47	Victoria College	1947	8,565
48	Weatherford College	1921	6,605
49	Western Texas College	1971	3,964
50	Wharton County College	1946	9,128

community college districts in Texas (see Figure on page 14). Because each community college district in Texas is based on taxing districts (see Appendix B- Community College Taxing Districts), most of the state's 31 senators and 150 representatives have community colleges in their district, and thus have an interest in the development of these institutions (De La Garza, 2000, 9).

Public community colleges are financed through a combination of state appropriations, federal appropriations, local revenue, tuition and fee charges, and contributions from private sources. Thus, while details on course offerings may have changed, funding elements and purpose of Texas public community colleges are consistent with the original mission of junior colleges and funding practices established in 1918.

It was not until 1941, that the Texas Legislature granted funding directly to community colleges, with the Texas Education Agency (TEA) acting as the supervisory agency for community colleges. (Blair, 2001, 1020). State appropriations were generally made in two ways. First, funding for academic courses were allocated directly to institutions based on enrollment.

There were no

attempts from the state to determine the actual cost and need of the community college to provide various programs (De La Garza, 2000,8). Consequently, due to a lack of financial incentive,

community colleges were discouraged from offering high-cost programs, such as those in the technical and medical fields. Second, vocational programs were funded through grants administered by the Texas Education Agency. The Texas Education Agency used program costs, rather than enrollment, in their allocation decision (De La Garza, 2000).

During the late 1950's Texas moved to a different method of funding higher education. In 1955, the Texas Legislature created the Commission of Higher Education and made the Commission statutorily responsible for establishing formulas that determined financial needs for Texas institutions of higher education (Texas Higher Education Coordinating Board, 2000, 1). Ultimately, the formulas devised by the Commission of Higher Education were used by the Texas legislature to develop appropriations during legislative sessions. In 1959, the 56th Legislature became the first Texas legislature to use formulas to determine appropriations to public institutions of higher education, including community colleges (Texas Higher Education Coordinating Board, 2000, 1). In fact, to this day the Texas legislature relies upon recommendations expressed through the applications of formulas when determining appropriations.

In 1965, the Commission on Higher Education was replaced with the Coordinating Board, Texas College and University System (Texas Higher Education Coordinating Board, 2000, 2). Through the Higher Education Coordinating Act of 1965, statutory power to administer the formula system was given to the Coordinating Board. Under Section 61.059, of the Texas Education Code, the Coordinating Board is statutorily assigned to:

devise, establish, periodically review and may revise formulas for the use of the Governor and the Legislative Budget Board in making appropriations and recommendations to the Legislature for all institutions of higher education, including the funding of post-secondary vocational-technical programs (Texas Education Code, 2001).

The formulas designated by the Coordinating Board are designed to: (1) recommend a level of funding for the colleges and universities and (2) provide for an equitable distribution of funds appropriated by the Texas Legislature (Texas Higher Education Coordinating Board, 2000, 2).

Formulas are created at the Coordinating Board through the use of advisory committees. These committees are appointed by the Commissioner of Education and are tasked with modifying, reviewing, and designating formulas used in the appropriations process (Texas Higher Education Coordinating Board, 2000, 2). Under the current formula funding structure, the average cost of instruction in both academic and vocation programs is calculated on a statewide basis and is expressed in terms of a dollar amount per contact hour ¹¹. This is in direct contrast to Texas universities, which are funded according to enrollment per semester hour (De La Garza,

¹¹ A contact hour is defined as an hour of instruction in a laboratory or classroom, and is the basis for which Texas public community colleges are funded. According to the Texas Higher Education Coordinating Board, each community college reports the contact hour cost of providing instruction in each of the 17 academic and 39 technical areas. The median cost of each of these programs is used as the base for formula rate recommendation.

2000, 8).

Unlike appropriations to universities in Texas, public community college appropriations are derived from a single amount divided among the fifty community college districts (De La Garza, 2000, 8). These appropriations are made on the basis of contact-hour enrollment. The exact amount of reimbursement for a contact hour depends on the cost of the individual programs (see Appendix C -2002-2003 Biennium Basis for Legislative Appropriations). For example, programs that require expensive equipment or a smaller faculty-to-student ratio have a higher reimbursement than those with smaller faculty-to-student ratios or little equipment demand (De La Garza, 2000, 8). This means that nursing programs or applied science courses generate a higher reimbursement rate than those taught in larger classroom environments.

One of the major problems with the current funding structure for public community colleges is that the Texas Legislature has never funded public community colleges at the full formula rate (De La Garza, 2000, 8). While the economics of supply and demand prevent the satisfaction of all needs and demands, the literature reveals additional information. When compared to other institutions of higher education, public community colleges have fewer reliable resources to utilize if their demands and needs are not met by the state. Thus, if community colleges are not funded at full formula rate, they must locate and redistribute funds from other limited and often unreliable revenue sources.

Although the appropriations have increased over time (see Table 2.2), the amount has always been short of formula estimates. Each year, however, public community colleges in Texas

lobby the Texas Legislature, via the Texas Association of Community Colleges (TACC)¹², to raise the formula funding rate.

Table 2.2 Formula Funding Levels for Texas Public Community Colleges

Fiscal Year	Percent of Funding Formula
1995-1997	59
1997-1999	64
1999-2001	71

Historically, state government has funded administrative and instructional expenses for public community college districts, districts have funded expenses related to physical plants and facilities (Texas Higher Education Coordinating Board, 2002,10). Because public community colleges have been funded at less than the full formula rate, the costs of administrative and instructional expenses incurred by these institutions have not been met (Texas Higher Education Coordinating Board, 2000, 3). Thus, public community colleges have been forced to come up

¹² The Texas Association of Community Colleges (TACC) is comprised of all 50 public community college districts in the state and represents the interests of the colleges before the Texas Legislature and state agencies. The General Appropriations Bill and legislation affecting public community colleges in general have been and remain the principal concerns of TACC.

with the necessary funds through other means. Consequently, local revenue (taxes) and tuition

and fee charges must be increased.

To further illustrate the economic background of public community colleges in Texas, a

chapter is devoted to details specific to the funding structure. Chapter Three provides an

overview of the current funding structure utilized by Texas public community colleges.

Moreover, detailed information regarding budgeting and formula funding is addressed, as well as a

discussion of the strengths and weaknesses of revenue sources available to community colleges.

The reliability of these revenue sources are discussed.

Chapter Three: Financing Community Colleges

Introduction

This chapter provides an overview of the finance structure for higher education in Texas,

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specifically public community colleges. Background information for formula funding, a popular method for financing and appropriating funds to public community colleges in Texas, is addressed. Additionally, general characteristics of formula funding and the impact the funding method has upon higher education and public community colleges is included. With all, a detailed discussion regarding the revenue sources available to public community colleges is provided. In specific, the reliability of state appropriations, federal appropriations, local contributions, revenue from tuition and fees, and other sources of revenue ¹³ are explored, as these revenue sources are components of the funding structure for Texas public community colleges.

Working Hypotheses are developed in order to guide the data collection and determine the significance of the research questions. Working Hypotheses are ideal for this study because they can take into account multiple aspects of the current funding structure for Texas public community colleges. Working Hypotheses are most often used when a phenomenon has not yet been fully realized or conceptualization is in its early stages.

The proposed Working Hypotheses identify important facts about the dimensions of the current funding structure, as well as the revenue sources available to public community colleges in Texas. Essentially, the Working Hypotheses serve as a guide in understanding the literature regarding the current funding structure for community colleges in Texas. Each Working Hypotheses was developed, based on the literature, in order to develop a basis of the subsequent empirical investigation.

¹³ For the purposes of this research paper, "other sources of revenue" will refer to private donations in the

Characteristics of Budgeting

While many researchers and writers ¹⁴ have contributed to the works regarding budgetary processes, none is held in such high regard as those brought forth by Aaron Wildavsky. Through his many works, including the 1961 article "Political Implications of Budgetary Reform" and his 1964 book entitled *The Politics of the Budgetary Process* ¹⁵, Wildavsky has communicated the idea that the budgetary process is extremely political in nature and is greatly affected by political processes. Thus, "in the most integral sense, the budget lies at the heart of the political process" (Wildavsky, 1964, 5). According to Wildavsky, "no change can be made in the budgetary process without affecting the political process." (1964,132). In essence, the budget affects politics, and politics affects the budget.

Further, the political nature of the budget allows the opportunity for the budget to appear as many different things to many different people. Because a budget serves diverse purposes, it can be viewed as: "a political act, a prediction, a source of enlightenment, a means of obfuscation, a mechanism of control, an escape from restrictions, a means to action, a brake on progress, even a prayer that the powers that be will deal gently with the best aspirations for fallible men" (Wildavsky, 1964, v). Therefore, Wildavsky asserts that budgeting is political in nature.

The myriad of perspectives and meanings of a budget contribute to the complexity and

form of endowments, gifts, bequests, grants from foundations, and research grants.

¹⁴ Such as Charles Moss, Gerald Gaither, Larry Leslie, Vernie B. Lewis, V.O. Key, Jr. and Dwight Waldo.

¹⁵ While Wildavsky wrote many editions of this work, the edition used for this research project was published in 1964. The (2000) 4th edition of the *New Politics of the Budgetary Process*, by Aaron Wildavsky and Naomi Caiden, is the latest edition of this work.

difficulty in understanding, constructing, and utilizing the budgetary process. Thus, a budget evolves into a political document that reflects the perspectives, missions, purposes, and values of individuals and organizations (Layzell and Lyddon, 1990, xix).

The Politics of Budgeting

As Wildavsky suggests, budgeting can often be described as political¹⁶ in nature. For example, while the federal government provides support to higher education via research grants and student aid, state governments bear the principal responsibility in budgeting funds for higher education. This means that great competition for limited resources takes place each budget cycle. Thus, appropriating funding to institutions of higher education is considered a political process.

In 2000, David Rejino conducted a survey of Texas university chief financial officers and university presidents to examine their opinions and expectations of the budgeting and formula funding process. Rejino asked whether the budgetary process and budgeting in higher education is political. The respondents overwhelming confirmed the political nature of budgeting for higher education.

According to Rejino (2000, 80) the respondents felt that "the role of higher education in society impacts the way that higher education is perceived by members of the Legislature; higher education is held to a different standard than are other state agencies because of the perceived

¹⁶ For purposes of this paper, "political" is defined as relating to, involving, or characteristic of politics or politicians, or having or influenced by partisan interests.

role." He also notes that budget requests for higher education are not treated any differently than those of other agencies (Rejino, 2000, 81). Thus, Rejino's study affirms the concept that both the budgetary process and higher education funding are political.

Additionally, Berdahl (1971,102) notes that excessive lobbying on behalf of the institutions of higher education, and the unwillingness of some administrators to provide straight facts and answers on the need and demand of requested appropriations complicates the budgetary process and adds to the political nature of budgeting. Berdahl concludes that administrators refusal to thoroughly explain their requests and financial needs, results in fierce competition over funding among schools.

Another factor complicating and politicizing the higher education budgeting process are the levels of institutions of higher education. Each institutional level of higher education has varying economic situations and needs; each with differing revenue and expenditure patterns (Johnstone, 1999, 347). While there are many different classifications for institutions of higher education, most are typically categorized as research institutions, comprehensive universities, or community colleges. Research universities, considered the largest of the public state institutions, receive federal research grants and contracts, and are often referred to as "flagship" universities (Rejino, 2000, 14). These universities are usually the most well-known, and command a high level of state support as they bring a sense of respect and knowledge to the state.

Comprehensive universities, which rank just beneath research universities, tend to accommodate the overflow of students because research universities have limited and selective

enrollment (Rejino, 2000, 14). These universities are growing in size, and often convey to legislators their wish to attain research university status and funding levels. Community colleges, on the other hand, are both the largest in number of all the public institutes of higher education, and until recent years, have been the smallest in terms of enrollment.

Thus, state budgeting in the area of higher education is a complex set of political activities involving various competing interests, parties, and issues. This perspective can lead to the expectation that:

Working Hypothesis 1: Appropriating funding to institutes of higher education is a political process.

The Competitiveness of Budgeting

While budgeting is often described as political, it can also be described as competitive. For example, Texas public community colleges typically receive the least amount of funding from the state. This is partially because they depend on local taxes as a source of revenue. In fact, community colleges are the only division of higher education in the nation that rely on revenue from local taxpayers. This means that Texas public community colleges are in constant competition with other institutions of higher education for limited state funding.

While local tax revenue represents anywhere between one-quarter and one-half of all revenue funds for community colleges, local dollars represent less than five percent at public four-year institutions (Layzell, 1997, 22). Thus, when the amount of financial support from the state declines, community colleges must increase reliance on other revenue sources. Due to the

financing differences between these types of higher education institutions, it is no surprise that there is often competition between them when it comes to appropriating resources.

While institutes of higher education must compete against one another for appropriations, they must also compete against other governmental entities in the fight for appropriations. Since the 1970's, corrections, welfare, and public education for K-12 schools have eroded higher education's share of the budget (Layzell, 1997, 22). Also, due to the increasing demand for healthcare services and prescription drugs, as well as the turbulent economy, many states have faced smaller budgets and more requests than they can fulfill. Therefore, it is up to legislators to create a careful funding balance among all of the entities that they are responsible for maintaining.

Thus, if the allocation of resources to institutes of higher education is political, and it is expected that:

Working Hypothesis 1a:
There is rivalry and competition for state appropriations within Texas public community college districts.

Characteristics of Formula Funding

While there are many different ways to appropriate resources, many states rely on formulas as a means of funding their institutes of higher education. James Miller defines formula budgeting as "an objective procedure for estimating future budgetary requirements of an institution by manipulating data about future programs and by utilizing relationships between

program and costs" (Floyd, 1982, 18). Charles Moss and Gerald Gaither (1976, 550) assert that formulas are based on the concept of estimating future requirements, such as enrollment projections, by multiplying projected loads, such as credit hours, and projected unit costs or rates. They also note that current formulas can be classified into one of the following three basic computational methods: (1) the rate-per-base factor unit, (2) a percentage of base factor, and (3) a base-factor-position ratio with salary rates (Moss and Gaither, 1976, 550).

Formula funding has increasingly become a popular method of financing for institutions of higher education. According to Moss and Gaither, "the politics surrounding institutional funding was perhaps the greatest single factor contributing to a recent increase of formulas in higher education" (1976, 546). The four most outstanding reasons for the development and implementation of modern budget formulas, as described by Moss and Gaither (1976, 546), can generally be classified as:

ï political complexities;

i the need for a more equitable distribution of resource;

ï inadequate resources; and

i increased demands for accountability.

Berdahl (1971, 123) asserts that formulas are attempts by the government to estimate the future fiscal needs of an agency on the basis of particular assumptions; in higher education these assumptions relate to faculty/student ratios, enrollment, or the utilization of teaching space in buildings. While all of these assumptions are important, perhaps the most significant driving factor of funding formulas is enrollment (Leslie and Ramey, 1986, 11). It has been said that

public institutions of higher education purposely structure their enrollment policy around the belief that higher education enrollments mean an increase in state appropriations (Leslie and Ramey, 1986, 1).

This means that there is a belief that there is a positive relationship between state appropriations and enrollments, where both variables will rise and fall together simultaneously. In formula funding, the average cost of instruction in each discipline, usually academic and vocational, is calculated on a statewide basis and expressed in terms of a dollar figure per contact hour; with a contact hour usually defined as an hour of instruction in a classroom or laboratory (De La Garza, 2000, 8). Therefore, the more students enrolled, the more contact hours a school collects; thus, the more funding the school should receive from the state under the formula funding structure.

While there are elements, such as enrollment, that tend to drive formula funding, there are several characteristics of formulas that are essential for formula funding to be effective. Halstead (Moss and Gaither, 1976, 559) suggests that certain criteria are necessary in order for a formula to serve a useful purpose. These criteria are listed by importance in the following order:

- (1) Validity (measures what it purports to measure);
- (2) Quantitative definability (expressed in measurable terms);
- (3) Sensitivity to change (responsiveness);
- (4) Adaptability (flexibility);
- (5) Comparability (standardized on a wide basis); and
- (6) Understandability (simple and straightforward).

Miller (1965, 153) asserts that formulas have been used for three distinct purposes: (1) to assist in the analysis of budgetary needs, (2) to help in the presentation of budgetary information, and (3) in a few selected cases, to provide the basis for distributing additional funds among agencies when faced with specific policy issues. Miller (1965, 163-164) agrees with the Moss and Gaither's necessary criteria for formulas in order to work well, but adds the following:

- The new procedure should show promise of providing meaningful benefit to most of the participants.
- i All parties should understand that the procedure is to be used for budget preparation and for budgetary control.
- There should be sufficient flexibility either in the formula itself or in its administration to provide recognition not only for differences in existing programs, but for differences in institutions' educational philosophy and administrative style and for the differences which inevitably will develop after the formula is adopted.
- Formulas should be capable of describing in quantitative terms the type of programs and institutions in the area for which it was designated to govern.
- Data should be collected, analyzed, and presented in such a way as to permit and even facilitate comparisons among institutions and programs within the state.
- The data should reflect national trends as well as present standards at the local institutions for where the budget is being prepared.

For functional activities for the institutions, the methodology which is employed should be chosen on the basis of its appropriateness to the specific activity in question.

The Inadequacy of Formula Funding

As previously mentioned in Chapter Two, Texas public community colleges are appropriated state funds through the use of formulas. Because of the many complexities of formula funding and the competition of those involved in the process, formula funding is often perceived as political in nature. Additionally, formula funding is also perceived as inadequate in terms of assessing the actual needs of Texas public community colleges.

Although funding formulas for Texas public community colleges are developed and recommended by the Texas Higher Education Coordinating Board to the Texas legislature, the formulas have never been funded at the full rate (Texas Higher Education Coordinating Board, 2000, 3). While over time, formula funding rates have fluctuated, community colleges have received only a percentage of what the Texas Higher Education Coordinating Board deems they deserve and need to provide services to students. This means that community colleges are forced to make

up the difference in the cost of the program by raising additional revenue from other sources.

Thus, the needs of public community colleges are not adequately met by the formula funding process that the Texas legislature utilizes, and it can be hypothesized that:

Working Hypothesis 2:

The state budgeting process for appropriating funding prevents the Texas legislature from determining community college "needs." 17

The Unpredictability of Formula Funding

While formulas do have advantages when used in the budgetary process, they also have limitations. Miller (1965, 155) states that if formulas "are to be used effectively, it is important to know and appreciate not only what they are, but what they are not- not only what they can do, but what they cannot do." It is also important to remember that the formula-derived requests are only the starting point for funding after which a number of non-formula adjustments are made (Floyd, 1982, 19-20). Moss and Gaither (1976, 553-558) also realize the limitations of the use of formulas in higher education and list the following as disadvantages:

- Budget formulas provide a linear approach to funding- if enrollment declines, formulas generate less dollars. This prevents the development of new programs because formulas focus on meeting current fiscal needs with little regard for long-range efforts;
- Budget formulas are inherently detrimental to quality- particularly under steadystate conditions;
 - ï Budget formulas utilize a leveling effect (the averaging of statewide costs

¹⁷ For the purposes of this research paper, "needs" is defined as the amount of money needed to cover the academic and instructional costs associated with providing a particular program.

produce expenditure rates for all institutions, despite each institutions specific expenditures;

ï Budget formulas are unable to recognize economies of scale;

Budget formulas fail to recognize and fund nontraditional learning,
 continuing educational activities, and other such innovative efforts that
 attract older students;

Budget formulas are unsuccessful in their ability to reactquickly to rapid fluctuations in the national market.

Essentially, Moss and Gaither's observations of the limitations of formulas prove to be evident within the use of formulas in the appropriation of state funds to public community colleges in Texas.

Floyd (1982, 19-20) also realizes the limitations of the use of formulas in higher education and lists the following as disadvantages:

- Formulas reduce an institution's incentives to implement innovative practices;
- Formulas discourage non-traditional and non-credit instruction;
- Formulas provide no start-up cost funding for new programs; and
 - ï Formulas place too much emphasis on "fundable" units without regard to

quality.

Institutional dependency upon enrollment numbers is also a problem that is associated

with the use of formulas in the budgetary process for higher education. Institutions rely on

enrollment figures because state appropriations are awarded in terms of the number of students

enrolled in a particular course, multiplied by the cost of teaching such a course. Thus, the more

students in a program, the more state funding the institution will receive. However, Bruce

Johnstone (1999, 353) notes that enrollment (however measured, and however sensitive to fields

of study), levels of education, or methods of instruction, are still merely a proxy for the hard-to-

measure real output, which is student learning.

In a 1986 study, Leslie focused upon the enrollment/appropriation relationship. Leslie

(1986, 18) found that formula-funded states experience an increase in appropriations when their

enrollment grows, as long as the state has not changed their particular funding formulas or decided

to fund them at lower rates. Also, reducing or slowing appropriations posed a political difficulty

in formula states, although some states altered their formulas in order to alleviate this problem.

Leslie (1986, 18) notes that these changes in formula funding help explain the declining

relationship between enrollments and appropriations in these states.

Because many factors, such as enrollment, can be used to influence funding formulas, it is

expected that:

Working Hypothesis 2a:

The utilization of formulas provide a projection rather than an accurate prediction of state

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appropriations to public community colleges in Texas.

The Appropriateness of Formula Funding

While there are disadvantages, several advantages associated with the utilization of formula funding have been cited throughout the literature. Some states credit formulas for their increase in secured funding, as well as the creation of an environment in which budget requests are simpler and more systematic in an irrefutable way (Miller, 1965, 153). Berdahl (1971, 123) notes that formula funding brings increased fiscal flexibility to the budgeting process, as well as more adequate support by the state and more equitable treatment of institutions once the funding formula process is implemented. Additionally, Moss and Gaither (1976, 553-555) list the following advantages of

using formulas in higher education budgeting:

- i Provide uniformity and ease in budget preparation and presentation;
 - Provide an objective cost productivity measure for comparison between institutions and between activities with institutions;
 - Provide equal distribution of funds and also minimizes institutional rivalry and conflict between state officials and institutions;
 - Result in more adequate levels of support for all institutions, not merely
 who has political clout;

- Prevent the rich from getting disproportionately richer and the erosion of funds from less powerful institutions; and
- Tend to generate funds, thereby providing a means to ensure that higher education receives its share of total state resources.

Overall, when formulas are utilized in the budgetary process there are both advantages and

disadvantages. It can be stated that:

Working Hypothesis 2b: Formula funding is an "appropriate" ¹⁸ method to employ when appropriating funds to community colleges.

Equity and Formula Funding

Despite the appropriateness of formula funding as a budgeting method, one of the major questions surrounding budget formulas is whether or not they help, or should, achieve equity. Floyd (1982, 19) affirms that formulas support the equitable treatment of various public universities so long as proper attention is payed to differences between disciplines and levels of instruction. Further, Miller (1965, 152) states that formulas provide a methodology for

¹⁸ For purposes of this research paper, "appropriate" refers to a method which is suitable for a particular person, condition, occasion, or place; fitting.

comparing institutions, identifying and correcting obvious inequities, and treat all institutions in a comparable manner in projecting financial requirements. He also claims that since formulas are created to be systematic and orderly, they should provide greater assurances that higher education will operate economically and efficiently (Miller, 1965, 154).

Larry Leslie (1980, 4) also comments on the equity issue, but does so through the term "fair share," as described by Wildavsky. According to Wildavsky: "Fair share means not only the base an agency has established but also the expectation that it will receive some proportion of funds, if any, which are to be increased over or decreased below the base of the various governmental agencies. Fair share, then, reflects a convergence of expectations on roughly how much the agency is to receive in comparison to others" (Wildavsky, 1964,22). Leslie argues that the implication here is that equity considerations dictate that each agency or function is entitled to a certain portion, more or less, of the budget and of budget increases, and that it is in this situation that the previously mentioned concepts of incrementalism and political inertia are illustrated (Leslie, 1980,4).

Nonetheless, not all people believe, and are thoroughly convinced, that equity can be achieved through the use of formulas in the budgetary process. For example, Miller (1965, 155) states that formulas are a series of generalizations that do not attempt to take into account every exception and difference among institutions. Essentially, formulas are limited in their ability to provide equity because they provide a projection of appropriations rather than an accurate prediction.

In 2000, Rejino conducted a study of Texas university chief financial officers and

university presidents as a means of assessing their opinions and expectations of the budgeting and formula funding process in the state of Texas. Of the thirty-nine people that responded to the survey, varying responses were given when asked if formula funding had helped bring equity to funding and helped result in more adequate levels of funding. According to Rejino "equity among the general academic institutions has not been a result of formula funding, and it has also not ensured that higher education operates in an economic and efficient way" (Rejino, 2000, 81). Thus, given the above literature one would expect that:

Working Hypothesis 2c: "Equity" ¹⁹ is considered when utilizing funding formulas.

Revenue Source Reliability

Johnstone (1999, 347) notes that the funding of higher education is a large and complex topic because of its multiple revenue sources and its multiple outputs, or products, which are loosely connected to different revenue sources. Due to the differences in governance and legislation, institutions of higher education are funded differently from state to state. Additionally, the varying levels of institutes of higher education are funded differently within the states.

 19 For purposes of this research paper, "equity" is defined as fairness in determination of appropriations; impartiality.

For example, generally community colleges are funded through state appropriations, tuition and fees, federal appropriations, local contributions, and other sources of revenue, such as donations or gifts. This is in direct contrast to the funding of research or comprehensive universities. Community colleges are the only segment of higher education in the nation that receives, and depends on, local revenue from local taxpayers (De La Garza, 2000, 6).

Because of the existing budgetary and appropriations process in Texas, community colleges are funded differently than research or comprehensive universities. While the foundation of university funding is a combination of state and federal appropriations, and donation and gift funds, Texas' public community colleges rely on state and local funds as main sources of revenue (Texas Association of Community Colleges, 2001, 4). Unfortunately, these main sources of revenue are usually unpredictable as they are dependent upon many external and economic factors.

Thus, considering the revenue resources available to public community colleges in Texas

and the dependence of these colleges on these resources, it can be anticipated that:

Working Hypothesis 3: Revenue sources available to community colleges are not considered "reliable" ²⁰ sources of

 $^{^{20}}$ For the purposes of this paper, "reliable" refers to a source that is capable of being relied on, or dependable.

funding.

State Appropriations

While local contributions are significant, states are typically considered the largest source of governmental funding for higher education. In the early 1990s, states annually provided approximately \$45 billion for higher education in general support of public institutions, state student aid programs, and a host of categorical programs (Layzell, 1997, 22).

The single largest expenditure of the state of Texas is education (Stallman, 2001, 6), and it is through the use of formulas that the legislature determines state appropriations for community colleges. Once the formulas have been reviewed and reestablished, funds are then appropriated to the community colleges to the extent that revenue is available (Community College Policy Center, 2001, 1). Essentially, this means that community colleges are only funded at full-formula rates if, and when, the resources are available. However, the legislature attempts to fund community colleges as close to the full-formula rate as possible. For example, during the 76th Legislative Session (1999), only seventy-one percent of the formula was appropriated.

In general, not being funded at full-formula rate is not a new concept to community colleges, much less institutions of higher education. Over time, the amount of funding that has

been appropriated to community colleges has declined. For example, in fiscal year 1984 the state's share of community college funding was sixty percent, but in fiscal year 1999 the state's share was thirty-eight percent (Texas Association of Community Colleges, 2001, 4).

This means that in order to function at consistent levels, cope with rising costs, and expand the quality of services and instructional programs available to students and faculties, community colleges have been forced to levy revenue from other sources. With the increasing constraints on rising costs for the state of Texas, the amount of funding available for community colleges is hard to predict. Thus, it is the expectation that:

Working Hypothesis 3a: State appropriated funds are not a reliable source of funding for community colleges.

Local Contributions

Layzell notes that nationally, local governments contributed close to \$5 billion annually to higher education since the 1990's. The majority of this revenue was awarded to community colleges where local tax dollars represent a significant amount of total revenue sources available (Layzell, 1990, 22). In terms of local contributions, the locally-elected governing boards of Texas public community colleges have the authority to levy local property taxes in order to support college operations (Community College Policy Center, 2001, 1). The Texas Association of Community Colleges (2001, 4) states that the local tax levy for community college districts has increased 135 percent since 1991. This figure translates into \$217 million

in local tax contribution for fiscal year 1991, and \$510 million for fiscal year 2000 (Texas Association of Community Colleges, 2001, 4).

Leonardo De La Garza (2000, 6) notes that the most common form of taxation comes in the form of property taxes, which allow for a tax rate to be applied to the value of the property of an individual or business. Specifically, most community colleges in Texas levy one of two tax rates; (1) the maintenance and operation tax (M&O) - which raises revenue for general operating expenses, and (2) the Debt Service and Shrinking rate (I & S) - which generates income to pay off interest bonds sold to finance construction projects or for major capitol projects (De La Garza, 2000, 9). However, these rates vary tremendously and are based upon various factors including: (1) the wealth of the community college district in terms of taxable property; (2) the amount of revenue necessary; (3) the size of the institution; as well as (3) the amount of debt that is being carried by the community college district (Texas Higher Education Coordinating Board, 2001, 192).

For example, the total local tax base for public community colleges in Texas reached \$524 billion for fiscal year 2000 (FY 2000), with individual tax bases for districts ranging from \$60 million to \$109 billion (Texas Higher Education Coordinating Board, 2000,192). The tax rate per 100 dollars of valuation ranged from 2 to 34.8 cents, with a median of 12.4 cents (Texas Higher Education Coordinating Board, 2000, 192). However, while local contribution tend to be a seemingly stable source of income to community college districts, there are several disparities that exist when using local revenue to fund community colleges.

For example, due to varying tax rates and property values (see Appendix D-2001-2002

Tax & Valuation Figures by Taxing District), some districts are at a greater disadvantage than others. Specifically, a district with a very high property valuation is able to raise its needed revenue at a much lower tax rate than some "property poor districts" (De La Garza, 2000, 10). Thus, due to declining revenue sources, community colleges are forced to rely heavily on unpredictable, local property taxes, thus imposing a heavy burden on Texas homeowners and taxpayers (Richards, 2002, 8). Therefore, based on the literature, it can be hypothesized that:

Working Hypothesis 3b: Local revenue sources are not a reliable source of funding for community colleges

Federal Appropriations

While the federal government spent approximately \$25 billion annually on higher education in the early 1990s (Layzell, 1997, 24), the American Association of Community Colleges states that only 5.4 percent of community college revenue comes from federal appropriations (De La Garza, 2000, 7).

In general, federal monies serve higher education through three purposes. The first role of the federal government is to sponsor a wide variety of student aid programs, such as workstudy, loans, and grants. In the 1990s such funding accounted for more than 2/3 of all available student aid. It should be mentioned, however, that because an associate's degree or technical/vocational certification is typically the highest level of education one can attain at a public community college, students who plan to solely attend these institutions are least likely

to assume loans and acquire educational debt. Therefore, much of the student aid provided by the federal government goes unrealized at public community colleges.

The second role of the federal government is to provide funds for university-based research, providing as much as 3/4 of all the funding for this purpose. The federal government's third role in higher education is to provide support to institutions through an assortment of categorical programs (Layzell, 1997, 24). However, due to limited resources and smaller student populations, community colleges are unable to offer such programs and instruction that would merit federal appropriations. Thus, although the role of the federal government is significant in terms of its contributions to higher education, community colleges seldom benefit from such relationships.

As national trends suggest, Texas public community colleges receive small amounts of these funds. Generally speaking, community colleges only qualify for these types of appropriations by offering particular courses, special training, or through hosting a special project. According to the Texas Higher Education Coordinating Board (2001, 192) only \$361.2 million in federal appropriations was appropriated to community colleges in the 1998-1999 academic year, with the majority of the funds, fifty-six percent, awarded directly to students through Pell Grants. While seventy-five percent of community colleges received Technology Preparation Grants and community colleges received vocational grants, these grant amounts only comprised of eight and

two percent, respectively, of the total \$361.2 million awarded.

Thus, while federal monies are appropriated to community colleges, they are not

considered a significant source of revenue. It is therefore concluded that:

Working Hypothesis 3c:

The federal government is not a reliable source of funding for community colleges.

Tuition and Fees

Tuition and fees also contribute to the revenue sources available to community colleges. In the past several years, income from tuition and fees has grown dramatically. According to Leslie (1980, 12) the major reason for these increases is that institutions have sought to maintain a more or less constant income growth while other direct incomes, such as those from the federal and state government, have declined or grown at a much slower rate. Thus, decreasing levels of federal support, the availability of local support, and a drop in state funding has led to a reliance in nearly all states on student tuition and fees (Education Commission of the States, 2000, 16). "Whether the institution is public or nonpublic, tuition and fee income, to a major degree, represent the flexibility that allows a college or university to balance its budget" (Leslie, 1980, 12.) After all other revenue sources are estimated and accounted for, tuition and fee rates are set in order to bring the total amount of revenue to a level that is needed for the next academic year.

Levying tuition and fee rates, however, is not as simplistic as it may sound.

According to Rejino (2000, 68), the tuition and fees revenue raised by state higher education institutions can be described as "political." In a 2000 study of university administrators, Rejino found that seventy-eight percent of university presidents and ninety

percent of chief financial officers showed some form of agreement that increases in tuition and fees must be justly thought out before implementation, due to the political ramifications that an increase in tuition and fees can bring. Thus, Rejino's findings that schools are reluctant to raise fees due to the political nature of the situation are consistent with those found by Leslie (1980, 12). Essentially, an increase in tuition and fees is generally accompanied by an outcry from the public, especially from students.

Thus, in raising the rates on tuition and fees, colleges are constrained by the same sort of incrementalism that prevails when appropriations are reduced or increased (Leslie, 1980, 13). This means that community colleges must charge approximately the same tuition and fee rates that they charged the year before. Ultimately, tuition increases are acceptable, but they must be gradual and incremental in order to satisfy the public.

From a Texas perspective, as other sources of revenue has declined, tuition and fee rates have increased in order to compensate for disruptions in funding (Layzell, 1997, 24). In Texas, tuition is determined as amount paid per semester hour, with the amount of tuition depending on the number of courses taken by the student, as well as the nature of the courses (De La Garza, 2000, 10). Fees, generally charged on a per-semester basis and varying in their degree in cost, range from course-related fees (such as laboratory and room fees) to specific fees (such as fees for graduation and parking) to general fees (such as library fees and technology fees).

The average tuition and fee bill for a Texas public community college student taking twelve semester hours in the 1999-2000 school year was \$377.00, an increase over previous years (De La Garza, 2000, 10). Increases in tuition and fee rates, however, have been the norm

for many years. Johnstone (1999, 356) notes that from 1975 to 1999, tuition and fee rates have risen by 228 percent at community colleges, and one hundred and eight percent at public universities by comparison (See Appendix E-2002/2003 Tuition and Fee Figures).

Despite the source's ability to raise revenue, increases in tuition and fee related charges are not politically easy for community college administrators to impose. Layzell (1997, 24) notes that rising costs can limit accessibility to community colleges. As the costs increase, the amount of people that can afford to attend college decreases. This concept is especially detrimental to community college students because so many of them refuse to receive federal aid in order to obtain a technical or vocational degree.

Therefore, due to the many complexities associated with increases in tuition and fee related charges, it is anticipated that:

Working Hypothesis 3d:

Tuition and fee charges are not a reliable source of funding for community colleges.

Other Sources of Revenue

While endowments and private giving are a large part of finances for universities, they generally play a small role in the funding of community colleges (Layzell, 1997, 25). In fact, revenue from private sources, such as gifts, bequests, and grants from foundations, account for only 1.1 percent of public community colleges nationally (De La Garza, 2000, 7). These funds are generally used for student scholarships, university-based research not funded by the federal

government, and "enhancement" activities such as faculty development or rewards for faculty performance. Further, these funds, which are a major source of unrestricted funds, are also utilized for instructional innovations, financing experimental programs, or other projects that might prove difficult to support with public funds (Leslie, 1980, 13).

Although these types of funds generate significant amounts of revenue for universities, they are typically insignificant for community colleges. Due to the large number of community colleges and their small service jurisdictions, community colleges have a difficult time raising revenue from private sources. Thus, community colleges are not dependent upon these types of sources for revenue, as they are considered unreliable.

Working Hypothesis 3e:

"Other sources of revenue" are not reliable sources of funding for community colleges.

Linking the Literature to the Research

The purpose of this literature review is to provide theoretical support for an exploration of the current funding structure for Texas public community colleges. This literature review also explores formula funding as a method for financing and appropriating funds to public community colleges in Texas. Additionally, information regarding the general characteristics of formula funding and the impact the funding method has upon higher education and public community colleges is included. A detailed discussion regarding the revenue sources available to public community colleges is provided so that the strengths and weaknesses of state appropriations, federal appropriations, local contributions, revenue from tuition and fees, and

"other sources of revenue" are assessed, as these sources relate to the funding of Texas public community colleges.

The funding and revenue literature surrounding this review supports the notion that the current funding structure for Texas public community colleges is inadequate and that the revenue sources available to Texas public community colleges are considered unreliable. Further, it is implied that administrators of Texas public community colleges are dissatisfied with the current funding structure and will provide negative responses when questioned regarding the current funding structure.

The nature and scope of this empirical exploration connects the reviewed literature with the current funding structure for Texas public community colleges. These theoretical explanations reflect the conceptual framework that links the literature within the research. The following section summarizes the conceptual framework designed for this study.

Conceptual Framework

Working Hypotheses were utilized in this Applied Research Project in order to identify important details regarding the current funding structure, as well as revenue sources available to public community colleges in Texas. As previously mentioned, each Working Hypotheses was developed, based on the literature, in order to develop a basis of the subsequent empirical investigation. The following is a summary of the working hypotheses.

Summary of Working Hypotheses

Working Hypothesis 1: Appropriating funding to institutes of higher education is political.

Working Hypothesis 1 and its sub-hypothesis, Working Hypotheses 1A, focus on the current funding structure for Texas public community colleges from a general perspective. Specifically, these Working Hypotheses help describe the current funding structure by developing characteristics and traits of the system. For example, Working Hypothesis 1 describes the appropriation of funding to institutes of higher education as "political," while Working Hypothesis 1A attributes "competitive" traits to the funding process.

Working Hypothesis 2: The state budget process for appropriating funding prevents the Texas Legislature from determining community college "needs."

Working Hypotheses 2, 2A, 2B and 2C, on the other hand, focus primarily on the utilization of funding formulas in the current structure for public community colleges in Texas. Specifically, these Working Hypotheses characterize the function and form of funding formulas when used to appropriate funds to community colleges in Texas. Working Hypothesis 2 characterizes the funding structure's inability to determine the "needs" of public community colleges in Texas, while Working Hypothesis 2A asserts that formulas provide a projection rather than accurate prediction of state appropriations for community colleges. Additionally, Working Hypothesis 2B addresses the "appropriateness" of funding formulas in terms of their application when appropriating funds to Texas public community colleges. Working Hypothesis 2C considers the presence of "equity," or lack thereof, as it relates to funding

formulas.

Working Hypothesis 3: Revenue sources available to community colleges are not considered "reliable" sources of funding.

Working Hypotheses 3, 3A, 3B, 3C, 3D, and 3E, focus on the reliability of revenue sources that are currently available to Texas public community colleges in Texas. These Working Hypotheses individually address the strength and weaknesses of each source, as well as the reliability of the source as a contributor of revenue to a community college's total income. Working Hypothesis 3 generally asserts that all revenue sources available to community colleges in Texas should be considered unreliable.

Working Hypothesis 3A focuses on the unreliability of state appropriated funds as a revenue source, while Working Hypothesis 3B addresses the unreliability of local revenue sources (taxes) and Working Hypothesis 3C details the unreliability of funds from the federal government. Similarly, Working Hypothesis 3D and Working Hypothesis 3E examine the reliability of tuition and fee charges and "other sources of revenue," respectively.

With all, Table 3.1 summarizes the Working Hypotheses and links them to works of literature, specifically those of individual scholars. An overview of Table 3.1 suggests that further study regarding funding structures for higher education and available revenue sources within the funding structure is merited.

 Table 3.1 Linking the Conceptual Framework to Literature

Working Hypotheses	Scholarly Support
WH1: Appropriating funding to institutes of higher education is political.	Leslie (1980), Floyd (1982), Layzell and Lyddon (1990), Wildavsky (1975), Berdahl (1971), Layzell (1997), Rejino (2000)
WH1a: There is rivalry and competition for state appropriations within community college districts.	Rejino (2000), Wildavsky (1975), Berdahl (1971)
WH2: The state budget process for appropriating funding prevents the Texas Legislature from determining community college "needs."	Rejino (2000), Wildavsky (1975)
WH2a: The utilization of formulas provide a projection of state appropriations rather than an accurate prediction.	Rejino (2000), De La Garza (2000), Leslie and Ramey (1986), Gross (1973), Berdahl (1971), Floyd (1982), Rejino (2000),Moss and Gaither (1976), Miller (1965)
WH2b: Formula funding is an "appropriate" method to employ when appropriating funds to community colleges.	Berdahl (1971), De La Garza (2000), Leslie and Ramey (1986)
WH2c: "Equity" is considered when utilizing funding formulas.	Floyd (1982), Rejino (2000), Gross (1973), Moss and Gaither (1976)
WH3: Revenue sources available to community colleges are not considered "reliable" sources of funding.	Layzell (1997), Zusman (1999), Johnstone (1999), De La Garza (2000)
Working Hypotheses	Scholarly Support
WH3a: State appropriated funds are not a reliable source of funding for community colleges.	De La Garza (2000), Zusman (1999), Johnstone (1999), Leslie (1980)

WH3b: Local revenue sources are not a reliable source of funding for community colleges.	De La Garza (2000), Zusman (1999), Johnstone (1999)
WH3c: The federal government is not a reliable source of funding for community colleges.	Layzell (1997), De La Garza (2000), Zusman (1999)
WH3d: Tuition and fee charges are not a reliable source of funding for community colleges.	Leslie (1980), Layzell (1997), De La Garza (2000), Zusman (1999)
WH3e: "Other sources of revenue" are not reliable sources of funding for community colleges.	Leslie (1980), Layzell (1997), De La Garza (2000)

Chapter Four: Methodology

Introduction

Following the literature review that was presented in Chapter Three, this chapter discusses the research methodology employed to test the Working Hypotheses. Specifically, this chapter operationalizes the conceptual framework of the Applied Research Project and demonstrates how the three working hypotheses and their sub-hypotheses link to an operationalization and interview method for collecting data.

Exploratory Research

Investigating and formulating a conceptual framework based on working hypotheses best addresses the research question previously defined for this project because of its exploratory nature. Further, the research is described as exploratory because the literature review does not reveal similar exploration of the attitudes of Texas public community college administrators toward the current funding structure of community colleges. While there is research of the attitudes of Texas university administrators toward the funding structure for higher education, there does there does not appear to be similar research targeted at community college institutions. Therefore, this research is unique in that there does not appear to be equivalent research on this particular and pressing issue.

Working Hypotheses

As previously suggested, working hypotheses are particularly appropriate for use in exploratory research. Pat Shields (1998, 215) posits that Working Hypotheses provide a purpose that leads to the discovery of other critical facts. A table of the working hypotheses (see Table 4.1), classified by categorical content follows:

Table 4.1 Working Hypotheses categorized by content

Working Hypotheses	Categorical Content
Working Hypothesis 1 Working Hypothesis 1A	Characteristics of Budgeting
Working Hypothesis 2 Working Hypothesis 2A Working Hypothesis 2B Working Hypothesis 2C	Characteristics of Formula Funding
Working Hypothesis 3 Working Hypothesis 3A Working Hypothesis 3B Working Hypothesis 3C Working Hypothesis 3D Working Hypothesis 3E	Reliability of Revenue Resources

Table 4.3 Linking the Conceptual Framework to the Survey Instrument/Structured Interview - Continued

Due to the exploratory nature of this research, structured interviews were chosen for this research project. Structured interviews are appropriate for this Applied Research Project because the insights of a larger group (administrators of public community colleges in Texas) are sought (Babbie, 1995, 257). Consequently, this research relies on data gathered through individual structured interviews with administrators of public community colleges in Texas.

The thirteen interview questions are closely linked with the conceptual framework and Working Hypotheses. In fact, the sequence of the questions in the interview followed the sequence of the working hypotheses (see Appendix H- Structured Interview Sample). The questions for the structured interviews are shown in Table 4.3. Appendix G (Responses from Structured Interviews) contains the participant's responses from the interview questions.

Table 4.3 Linking the Conceptual Framework to the Survey Instrument/Structured Interview

Working Hypotheses	Survey/Interview Question
WH1: Appropriating funding institutes of higher education is a political process.	1. How could the community college funding process be considered "political"?

Table 4.3 Linking the Conceptual Framework to the Survey Instrument/Structured Interview - Continued

WH1a: There is rivalry and competition for state appropriations within community college districts.	2. How are state appropriations to community college districts impacted by rivalry and competition for state funds within community college districts?
Working Hypotheses	Survey/Interview Question
WH2: The state budget process for appropriating funding prevents the Texas Legislature from determining community college "needs."	3. How accurately has formula funding assisted the Texas Legislature in the analysis of community colleges needs?
WH2a: The utilization of formulas provide a projection of state appropriations rather than an accurate prediction.	4. How consistent are the formula weights with community college expenses and needs?
WH2b: Formula funding is an "appropriate" method to employ when appropriating funds to community colleges.	5. In what ways is formula funding considered to be an "appropriate" method to determine appropriations to community colleges?
WH2c: Equity is considered when utilizing funding formulas.	6. Has formula funding helped incorporate "equity" into the Texas community colleges funding structure?

Table 4.3 Linking the Conceptual Framework to the Survey Instrument/Structured Interview - Continued

WH3: Revenue sources available to community colleges are not considered "reliable" sources of funding.	7. As a whole, how could revenue sources available to community colleges be considered "unreliable?
WH3a: State appropriated funds are not a reliable source of funding for community colleges.	8. What factors prevent state appropriated funds from being considered a reliable source of revenue for community colleges?
WH3b: Local revenue sources are not a reliable source of funding for community colleges.	9. Why are local revenues sources (taxes set by a local community college board) not considered a reliable source of funding?
WH3c: The federal government is not a reliable source of funding for community colleges.	10. Why do community colleges fail to receive substantial amounts of funding from the federal government?
Working Hypotheses	Survey/Interview Question
WH3d: Tuition and fee charges are not a reliable source of funding for community colleges.	11. How reliable of a revenue source are student contributions (tuition and fees)? 12. Given that the rate of tuition and fee charges are often left to community college boards, what factors prohibit a community college from levying more funding from this source?

Table 4.3 Linking the Conceptual Framework to the Survey Instrument/Structured
Interview - Continued

WH3e: "Other sources" of revenue are not reliable sources of funding for community colleges.

13. Can "other sources" of revenue be considered a reliable funding source?

Sample Identification Process

The data-gathering consisted of individual interviews with administrators²¹ of public community colleges in Texas. Although the original research proposal for this Applied Research Project suggested that five to ten respondents be selected, the eager response and interest from the first respondents was so overwhelming that the number of interviews to be conducted was adjusted. Subsequently, twelve interviews were held with administrators of public community colleges in Texas²². These respondents represented ten (20%) of the fifty public community college districts in Texas.

²¹ For purposes of this study, administrators of public community colleges in Texas are defined as presidents/chancellors, chief business/financial officers, vice presidents, community college board members, and/or their equivalents.

While more than twelve respondents expressed interest in participating in this research, only twelve were selected due to time constraints and scheduling interferences.

Table 4.4 Survey Respondents-Continued

The respondents were selected through a combination of convenience²³ and judgement²⁴sampling (Kinnear and Taylor, 398, 1994). Each of the respondents were identified through the electronic mail (e-mail) address listed for them on the website of their respective institution, or place of employment. Based on the position listed next to their e-mail address (i.e. JohnDoe@school.edu - President), each respondent was identified as being employed in an administrative capacity, and thus knowledgeable about community college funding.

Table 4.4 illustrates the identities of the respondents for this research. The name, position, and place of employment for each respondent is provided. In cases where respondents request anonymity, the respondents are provided with variables as a substitute.

 Table 4.4
 Survey Respondents

Name	Position	Institution
Dr. Ismael Sosa, Jr.	President	South Texas Junior College
Source I	Vice President - Student Development and Institutional Efficiency	Community College I
Ron Baugh	President	Trinity Valley Community College
Source K	Vice President - Student Services	Community College K

²³ Convenience samples are usually selected on the basis of convenience for the researcher.

²⁴ Judgement samples are usually selected on the basis of what an expert thinks the particular sampling elements will contribute to the research.

Table 4.4 Survey Respondents-Continued

James R. Anderson	Chancellor	Central Texas College
Bill Crowe	President	Tyler Junior College
J. William Wenrich	Chancellor	Dallas County Community College District
Name	Position	Institution
Elwin Gene Gooch	Dean of Administrative Services Chief Financial Officer	<u>Vernon College</u>
Robert Aguero	Vice Chancellor of Educational Affairs	Dallas County Community College
Bob Smith	Vice President of Business Services	Cisco Junior College
John Brockman	President	Coastal Bend College
Larry Phillips	President	Angelina College

Analysis of the results consists of an examination of the notes from the interviews, and an attempt to identify similarities and dissimilarities from the responses. This research explores the fiscal attitudes and perceptions of twelve Texas community college administrators. Their perceptions of the Texas Legislature's practice of formula funding and reliability of other sources of funding for community colleges will be synthesized, in Chapter 5, into recommendations to the Texas Legislature or for use in future research.

Table 4.4 Survey Respondents-Continued

Chapter Five: Results

Introduction

The purpose of this research is to explore the attitudes and perceptions of community

college leaders about the current funding structure for Texas public community colleges.

Structured interviews were utilized to achieve this purpose. This chapter includes the results of

the data collection derived from the structured interviews used to test the working hypotheses.

The study includes descriptive data on attitudes and perceptions of twelve Texas public

community college administrators regarding the current funding mechanism for public

community colleges in Texas.

As indicated in Chapter Four, the research uses a structured interview approach as the

methodology to explore the attitudes and perceptions of Texas public community college

administrators toward the current funding mechanism for public community colleges in Texas.

The data for this study is based on respondent/participant perceptions and attitudes using

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structured interviews. Throughout the chapter, simple descriptive statistics are employed. The following are results presented for the interviewed administrators for Texas public community colleges.

Characteristics of Budgeting

The Politics of Budgeting

Working Hypothesis 1: Appropriating funding to institutes of higher education is a political process.

As discussed in Chapter Three, the literature provides theoretical support for the notion that a political process is employed when appropriating funds to institutes of higher education.

A recent study (Rejino, 2000) of university presidents in Texas revealed that these administrators felt that the appropriations process for their institutions could be described as political. Similarly, this research explores the attitudes and perceptions of twelve community college administrators with regard to the appropriation process for their respective institutions.

The first question in the structured interview asks respondents to identify how the appropriations process might be considered political. Of the twelve respondents, all agreed that the funding process for community colleges possesses political aspects. Just how political, however, varied among the respondents. The existence of scarce resources, the participation of several groups (including the Texas Association of Community Colleges), and the competition for funds were some of the reasons that respondents provided to describe the political process. The most popular response, however, was that the appropriations process is political because the Texas Legislature is in control of the total amount of funds that will be dispersed among community colleges.

The Competitiveness of Budgeting

Working Hypothesis 1A: There is rivalry among and competition for state appropriations within community college districts.

One item of the structured interview questioned respondents regarding the presence or absence of rivalry and competition when obtaining state appropriations. Some respondents did feel that rivalry and competition exists among community colleges. The rivalry and competition

is described as a large community college district vs. small community college district issue²⁵, a wealthy vs. poor district issue²⁶, and older vs. new district issue²⁷, and an issue of which community college can attract the most students or offer a particular course. Some respondents even commented that when a community college requests "special item funding" from the Texas Legislature the amount of rivalry and competition among the community college districts increases enormously.

On the other hand, some respondents feel that competition and rivalry are absent from the process that appropriates money from the state to community college districts. The reasons the respondents provided to quantify this statement include the fact that community college appropriations from the state are set by contact hour reimbursement, the fact that community colleges operate in an agreed service area, and the fact that the total amount of dollars is divided equally among the total number of colleges.

Characteristics of Formula Funding

 $^{^{25}}$ "Large" and "small" refer to the number of students enrolled in a particular community college as well as the size of the community that is served by the college.

²⁶ "Wealthy" and "poor" in terms of the total tax base and budget available to a particular community college.

²⁷ "Old" and "new" district refer to the age of the district as well as the facilities in the community college district.

²⁸ "Special item funding" is uncommon in appropriations to community college districts from the State of Texas. In an agreement through the Texas Association of Community Colleges, community colleges are not to request this type of funding unless it is approved by the entire organization. When these appropriations are requested, however, it is usually to supplement a new building or to overcome an enormous and unexpected budget shortfall that a community college can not recover from.

The Inadequacy of Formula Funding

Working Hypothesis 2: The state budget process for appropriating funding prevents the Texas Legislature from determining community college "needs".

The third item of the structured interview questioned respondents attitudes and perceptions toward the extent to which the Texas Legislature accurately determines community college needs. The responses for this question were split fairly evenly. The majority of the responses, however, supported the notion that the formula funding is inaccurate in terms of assessing the needs of community colleges in Texas.

For example, several respondents noted that while the formula funding process worked well in the past, it has failed the community colleges (due to low reimbursement rates) in recent years. One respondent even commented that the funding process often leaves the Texas Legislature "blind to the needs of individual schools." Additionally, while several respondents concluded that the formula funding process accurately assesses community college needs, almost all of the respondents noted that a great problem with the system was that the Texas legislature does not provide full funding as suggested in the formulas.

Thus in both groups, those who did and did not support Working Hypothesis 2, noted limitations of the formula funding process. The tone of voice used by many respondents suggests that the "needs" issue is very sensitive for community college administrators. Further, the full extent of this sensitive issue was probably not reflected in their answers.

The Unpredictability of Formula Funding

WH2a: The utilization of formulas provide a projection of state appropriations rather than an accurate prediction.

Respondents were queried regarding the ability of formula funding to provide an accurate prediction, rather than a projection, of state appropriations. The respondents were split in regards to the ability of formula funding to provide an accurate prediction of funding levels.

Respondents with negative replies were both adamant and convincing. One respondent referred to formulas as "an antiquated model that does not take productivity, efficiency, or effectiveness into consideration." Another respondent noted that "the disparity between expenses and needs is growing wider." The answers suggest that the respondents are frustrated with the formula funding system and the outcomes that accompany them.

On the other hand, those who supported the notion that formulas to project funding were confident and certain of their responses as well. Accordingly, the respondents used terms such as "consistent," "appropriate," and "correct" to describe the ability of the formula weights to address community college needs. It should be noted, however, that several respondents who were positive about formula funding also commented that the impact of formula weights are weakened when not fully funded by the Texas Legislature.

The Appropriateness of Formula Funding

WH2b: Formula funding is an "appropriate" method to employ when appropriating funds to community colleges.

Respondents were questioned regarding their attitudes and perceptions toward the appropriateness of formula funding as a method to appropriate funding to community colleges.

The responses to this question were somewhat confusing. On the surface almost of all the respondents agreed on the appropriateness of using formula funding as an appropriations tool.

On the other hand, many had reservations with the manner in which formula funding is currently utilized.

For example, several respondents commented that while the use of formula funding was appropriate, not fully funding the formulas was inappropriate. Others commented on the ability of the formula to "level the playing field" or bring equity into the process, however, these respondents also complained about the Texas Legislature's inability to fund these formulas at full rate. Essentially, it is believed that most of the respondents equate the appropriateness of formula funding with its ability to produce a desired outcome (full formula funding).

Equity and Formula Funding

WH2c: "Equity" is considered when utilizing funding formulas.

One item of the structured interview focused on the consideration of equity when utilizing funding formulas for public community colleges in Texas. The respondents overwhelmingly agreed that equity is considered when utilizing funding formulas. Nevertheless, many respondents held reservations about the degree to which equity has been incorporated into the Texas community college funding structure.

For example, while most of the respondents agreed that equity has been incorporated into the funding structure, several complained that economies of scale and individual needs of schools were unrecognized. These responses referenced the calculation of the contact hour based on an average of state costs rather than the individual institutional calculation of costs by a particular institution.

The language of the responses provided suggest that many of the respondents answered the question based on the financial circumstances of the community college they represent rather than based on their responsibilities and duties as a community college administrator in Texas. Thus, it appears that the respondents have applied their personal opinions to the responses for this question. With all, the bias involved with this question has led the researcher to believe that

clear and impartial answers were not provided.

Revenue Sources Reliability

WH3: Revenue sources available to community colleges are not considered "reliable" sources

of funding.

Several items of the structured interview attempted to gauge the attitudes and

perceptions of community college administrators toward the reliability of the revenue sources

available to community colleges. While the first question was meant to serve as a general query

with more specific questions regarding individual revenue sources to follow, many of the

respondents provided very specific answers. Notwithstanding, the majority of the respondents

argued that the revenue sources available to public community colleges in Texas are considered

unreliable. The specific answers provided by some of the respondents will be discussed later as

they relate to a specific revenue source.

State Appropriations

WH3a: State appropriated funds are not a reliable source of funding for community colleges.

Respondents were questioned regarding the reliability of state funds as a revenue source

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for community colleges. The question regarding this issue is intended to assess the attitudes and perceptions of community college administrators toward state funding as a reliable revenue source. Consistent with the literature, all of the respondents agreed that state appropriated funds are not a reliable source of funding for public community colleges in Texas.

Citing the unpredictability of the state economy, the priorities of a given session of the Texas Legislature, and the competition among state entities for limited resources, the respondents concluded that state appropriated funds are an unreliable revenue source. The inability of the Texas Legislature to fund the funding formulas at full rate was the most commonly cited source of state funding unreliability.

Local Contributions

WH3b: Local Revenue Sources are not a reliable source of funding for community colleges.

The respondents were also questioned regarding the reliability of local revenue (taxes) as a revenue source for community colleges. The question for this Working Hypothesis is intended to assess the attitudes and perceptions of community college administrators toward local revenue as a reliable revenue source. The respondents were split evenly regarding local revenue as a source of funding for public community colleges in Texas.

The respondents who agree that local revenue is an unreliable source of revenue for

community colleges attribute this to the political aspects of the revenue source. For example,

several respondents noted that because taxes are controlled and set by community college

boards, and in turn these boards are controlled by the constituents who elected them, local

revenue sources are inherently political and unreliable. In other words, because a community

college board member is elected by the people, he or she may choose to raise, maintain, or lower

taxes based on the will of the people instead of the needs of a college.

Additionally, some respondents also commented that the economic conditions

(unemployment, change in property tax valuations, rise in K-12 taxes) of a community, as well

as local politics, can also contribute to the unreliability of local revenue sources.

The respondents who feel that local revenue sources are a reliable source of income also

gave examples as to the reliability of the source. For example, contrary to what was stated

earlier, some of the respondents feel that the reliability of local revenue can be attributed to the

local control (community college boards) of the source.

Federal Appropriations

WH3c: The federal government is not a reliable source of funding for community colleges.

The reliability of federal appropriations as a revenue source for community colleges was

also addressed in the structured interviews. The question for this Working Hypothesis is

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intended to assess the attitudes and perceptions of community college administrators toward the federal government as a reliable revenue source. The respondents were split fairly evenly regarding federal appropriations as a source of funding for public community colleges in Texas.

The respondents who agreed that the federal government is not a reliable source of revenue provided several examples to justify their answers. For example, a few respondents noted that because grant writers are needed in order to appeal to the federal government for federal grants, many community colleges are at a disadvantage because they cannot afford to fund them. Several respondents also noted that community colleges are considered "second class" institutions because they are not engaged in national research projects. One respondent even commented that community colleges are "the stepchild of the education system with K-12 and universities receiving the bulk of the federal dollar."

Additionally, the respondents who feel that the federal government is a reliable source of income also provided justifications to their comments. For example, several respondents commented that the federal government provides grants to community colleges, if institutions apply for them. Other respondents opined that it is not a role or function of the federal government to provide funding to public community colleges in Texas.

Tuition and Fees

WH3d: Tuition and fee charges are not a reliable source of funding for community colleges.

Two items of the structured interview were used to assess the attitudes and perceptions

of the participants toward the reliability of tuition and fee charges as a reliable source of funding.

The first question dealt specifically with this issue, while the second question served to address

the presence of strengths and/or weaknesses with the revenue source.

The majority of the respondents supported the notion that tuition and fee charges are a

reliable source of revenue for community colleges. Citing increasing student enrollment and the

fact that students must pay to attend courses, the majority of respondents argued that tuition

and revenue charges could be relied on. Those who disagreed, stating that the these charges are

unreliable, justified their statements by commenting that it is easy to price a community college

out of the market by increasing tuition and fee charges.

In fact, regarding tuition and fee charges, many respondents listed market price as a

reason that community college boards are cautious with increasing fees. Other responses alluded

to the notion that community colleges were founded on the basis of access and affordability and

should remain that way. One respondent went as far as to comment that because students are

becoming more savvy and shopping around for the best deals, community colleges must strive to

remain financially competitive.

Other Sources of Revenue

WH3e: "Other sources" of revenue are not reliable sources of funding for community

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colleges.

Working Hypothesis 3E focuses on the reliability of "other sources" as revenue sources for community colleges. The question for this Working Hypothesis is intended to assess the attitudes and perceptions of community college administrators toward "other sources" as a reliable revenue source. The respondents were overwhelmingly in support of the notion that federal appropriations is unreliable as a source of funding for public community colleges in Texas.

The respondents who agreed with Working Hypothesis 3E, suggested several reasons as to why "other sources" is not a reliable source of revenue for community colleges. For example, several respondents commented that at the community college level, endowments, foundations, and large donations are not the norm. According to one respondent, "giving to community colleges is not sexy for a foundation or individual." Ultimately, because these type of revenue sources are not a constant source of income they are not reliable. The two respondents who disagreed with Working Hypothesis 3E suggested that at their institutions, "other sources" of revenue are a reliable source of income.

Research Results

Table 5.1 represents the research evidence in support of the conceptual framework for the study. The evidence includes results of the structured interviews.

Table 5.1 Evidence in Support of Conceptual Framework

Working Hypothesis	Structured Interviews					
WH1: Appropriating funding to institutes of higher education is political.	Supports					
WH1a: There is rivalry and competition for state appropriations within community college districts.	Partial Support					
WH2: The state budget process for appropriating funding prevents the Texas Legislature from determining community college "needs."	Supports					
WH2a: The utilization of formulas provide a projection of state appropriations rather than an accurate prediction.	Supports					
WH2b: Formula funding is an "appropriate" method to employ when appropriating funds to community colleges.	Strong Support					
Working Hypothesis	Scholarly Source					
WH2c: "Equity" is considered when utilizing funding formulas.	Strong Support					

WH3: Revenue sources available to community colleges are not considered "reliable" sources of funding.	Supports
WH3a: State appropriated funds are not a reliable source of funding for community colleges.	Strong Support
WH3b: Local revenue sources are not a reliable source of funding for community colleges.	Partial Support
WH3c: The federal government is not a reliable source of funding for community colleges.	Partial Support
WH3d: Tuition and fee charges are not a reliable source of funding for community colleges.	Partial Support
WH3e: "Other sources of revenue" are not reliable sources of funding for community colleges.	Strong Support

The overall results for the structured interviews are mixed, but are generally supportive of the Working Hypotheses. For example, Working Hypothesis 1, concerning the political nature of appropriating funds to institutes of higher education, is strongly supported by both the literature and the data. The results for Working Hypothesis 1A, which focus on rivalry and competition among community colleges, however, are not as strong. While the literature

supports the working hypothesis, the data reveals that only a slim majority of administrators fail to note the presence of rivalry and competition among community colleges when funding is concerned. Thus, Working Hypothesis 1A is only partially supported.

The results for Working Hypothesis 2, and its sub-hypotheses, are generally supported. For example, while the literature for Working Hypothesis 2, which assesses the ability of formula funding to determine community college needs, highlighted many limitations of the utilization of formulas, the data was not as strong. A slim majority of the respondents stated that the Texas Legislature is prevented from accurately determining community college needs through the use of funding formulas. Thus, Working Hypothesis 2 is supported by the data.

Similarly, Working Hypothesis 2A, which focuses on the unpredictability of funding formulas, is supported by the data. A slight majority of the respondents agreed that the utilization of formulas provide a projection of state appropriations, rather than an accurate prediction.

On the other hand, Working Hypothesis 2B, regarding the appropriateness of formula funding was overwhelmingly supported by the respondents. This suggests that the majority of the respondents feel that formula funding is an appropriate method to utilize when appropriating funds to community colleges.

Additionally, Working Hypothesis 2C, is also overwhelmingly supported by the respondents. The majority of the respondents agree that equity is considered when utilizing funding formulas. This suggests that the respondents feel that equity is incorporated into the

funding structure for community colleges.

The results for Working Hypothesis 3 and its sub-hypotheses are generally supportive, but mixed in terms of the strength of support. For example, Working Hypothesis 3, which generally states that revenue sources available to community colleges are unreliable is greatly supported by the respondents. Respondents disagree, however, in terms of the reliability of individual sources of revenue. For example, Working Hypothesis 3A, which deals with the reliability of state appropriations, is overwhelmingly supported by the respondents. Thus, the respondents supports the notion that state appropriations to community colleges are an unreliable source of revenue.

The support for Working Hypothesis 3B, which deals with the reliability of local revenue sources, is considerably mixed. The respondents are split evenly as to the reliability of local revenue sources. Accordingly, Working Hypothesis 3B is only partially supported. Mixed results are also recorded for Working Hypothesis 3C, which deals with the reliability of federal appropriations. The respondents are in favor (58%) of the notion that the federal government is a reliable source of revenue and thus, Working Hypothesis 3C is only partially supported.

Working Hypothesis 3D is by far the least supported Working Hypothesis. Only two respondents agree that tuition and fee charges are an unreliable source of revenue for community colleges. Most of the respondents maintained that tuition and fee charges are a reliable source of funding. Working Hypothesis 3D is only partially supported. On the other hand, Working

Hypothesis 3E is strongly supported by the respondents. The majority of the respondents

agree that "other sources" of revenue are not a reliable source of funding for community colleges.

Thus, Working Hypothesis 3E is strongly supported by the data and the respondents.

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be included.

Chapter Six: Conclusions And Recommendations

Introduction

As previously stated, this research is an exploration of the attitudes and perceptions of

community college leaders toward the current funding structure for Texas public community

colleges. This chapter presents the research conclusions of the study. The three Working

Hypotheses, and additional sub-hypotheses, related to the attitudes and perceptions of Texas

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public community college administrators on the reliability of revenue sources, formula funding as a method for appropriating funds to community colleges, and the political elements of the current funding mechanism provide the framework for the analysis and discussion. Recommendations, issues related to the interpretation of the results, and the limitations of the study are also included.

Conclusions

The working hypotheses are generally supported by the data results of the structured interviews. The structured interviews were designed to elicit the attitudes and perceptions of Texas public community college administrators toward their current funding structure.

The data suggests that administrators of public community colleges in Texas believe that appropriating funding to institutes of higher education is political in nature. To some extent, these administrators also believe that rivalry and competition exists between community colleges when appropriating state funding.

Approximately half of the participants interviewed believe that the state budgeting process for appropriating funding prevents the Texas Legislature from accurately determining community college needs. Additionally, in regards to the utilization of funding formulas, a little more than half of the interviewed administrators believe that a projection, rather than an accurate prediction of state appropriations is provided.

Nevertheless, a vast majority of community college administrators view formula funding

as an appropriate method to appropriate funds for community colleges. According to the majority of the participants, equity is an important aspect of formula funding and is considered when utilizing funding formulas.

In general, most community college administrators believe that revenue sources available to community colleges are unreliable. In specific, the participants believe that state appropriated funds, the federal government, and other sources of revenue, are not a reliable source of funding for community colleges.

On the other hand, the attitudes of community college administrators regarding the reliability of local revenue sources are split evenly among negative and positive perceptions. Additionally, in terms of the reliability of tuition and fee charges, the majority of community college administrators believe that this source is a reliable funding source for community colleges.

These conclusions are drawn from the data and the scholarly focus in the literature to provide a synthesis of the findings of the research. This exploration delved into the generalities of revenue sources, formula funding, and budgeting, which are some of the factors affecting the funding structure for public community colleges in Texas.

Research Limitations

While well-planned and researched, this study has several limitations. For example, the

political nature of the issue may have prevented the respondents (community college administrators) from answering the questions truthfully and honestly. In an effort to protect, themselves, their institutions, and the Texas Association of Community Colleges, many administrators may have feared retribution, despite the offer of anonymity. Additionally, the knowledge of the issue at hand varied widely among the respondents. While some respondents noted their long history of employment within community colleges, others commented on their relative inexperience in dealing directly with funding issues.

The most pressing limitation, however, may be the number of respondents for this research. While there were twelve administrators for this research, many more are needed to complete an entire and accurate picture of the attitudes and perceptions of public community college administrators in Texas. It would be ill-fated judgement to assume that the responses of the interviewed administrators accurately represent the attitudes and perceptions of all community college administrators in Texas.

Recommendations for Future Research

The funding structure for public community colleges in Texas is a complex mechanism that is affected by various external and internal factors. Research into the attitudes and perceptions of community college administrators is important due to the unpredictable and varying economic circumstances both locally and statewide. With the landscape of educational funding at a crossroads in Texas legislative history, it is important to anticipate and know how to adapt to change.

This research provides a general perception held by twelve administrators regarding the funding structure for community colleges. Future research may be conducted anonymously in order to gain a better understanding of the political nature of funding. One area in particular worth exploring is the issue of partial and full funding which takes place with the formula funding. Additionally, it is also recommended that the scope of the research and the respondent pool to be expanded to gauge a broader sense of opinion and knowledge.

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Appendices

Appendix A: The Texas Higher Education Plan
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Appendix B: Community College Taxing

Districts

Appendix C: 2002-2003 Biennium Basis of Legislative Appropriations

Appendix D: 2001-2002 Tax Valuation Figures by Taxing District



Appendix F: Structured Interview Sample

INTERVIEW QUESTIONS FOR COMMUNITY COLLEGE ADMINISTRATORS

This interview is about the current funding structure for Texas public community colleges. I am interested in understanding the attitudes and perceptions of Texas public community college administrators toward the current funding structure. If desired, anonymity can be provided.

- 1. What is your name and current position?
- 2. How could the community college funding process be considered "political"?
- 3. How are state appropriations to community college districts impacted by rivalry and competition for state funds within community college districts?
- 4. How accurately has formula funding assisted the Texas Legislature in the analysis of community colleges needs?
- 5. How consistent are the formula weights with community college expenses and needs?

6. In what ways is formula funding considered to be an "appropriate" method to determine appropriations to community colleges?
7. Has formula funding helped incorporate "equity" into the Texas community colleges funding structure?
8. As a whole, how could revenue sources available to community colleges be considered "unreliable?"
9. What factors prevent state appropriated funds from being considered a reliable source of revenue for community colleges?
10. Why are local revenues sources (taxes set by a local community college board) not considered a reliable source of funding?
11. Why do community colleges fail to receive substantial amounts of funding from the federal government?
12. How reliable of a revenue source are student contributions (tuition and fees)?
13. Given that the rate of tuition and fee charges are often left to community college boards, what factors prohibit a community college from levying more funding from this source?
14. Can "other sources" of revenue be considered a reliable funding source ?

15.	Is	there	e any	thing	that yo	u wou	ld like	to add	l that l	nas not	already	been a	sked?
16.	In	repor	ting	scores	s, woul	d you	like to	remai	in anor	ymous?			
		A	А рр	oend	lix G	: Stı	ructi	ıred	Inte	rview	Res	pons	es

INTERVIEW QUESTIONS FOR COMMUNITY COLLEGE ADMINISTRATORS

This interview is about the current funding structure for Texas public community colleges. I am interested in understanding the attitudes and perceptions of Texas public community college administrators toward the current funding structure. If desired, anonymity can be provided.

1. What is your name and current position?

Bill Crowe, President, Tyler Junior College

James R. Anderson, Chancellor

Source K (anonymous), Vice President of Student Services

Ismael Sosa, Jr. - President of Southwest Texas Junior College

Larry Phillips, President, Angelina College

Elwin Gene Gooch, Dean of Administrative Services, Chief Financial Officer

John Brockman, President, Coastal Bend College

Source I (anonymous), Vice President Student & Institutional Development

Bobby W. Smith, Vice President of Business Services

J. William Wenrich, Chancellor, Dallas County Community College District

Ronald C. Baugh, President of Trinity Valley Community College.

Robert Aguero, Vice Chancellor of Educational Affairs, Dallas County Community College District

2. How could the community college funding process be considered "political"?

The TACC is the president's association. This organization works very closely with the legislature. We contribute monies to the candidates. All the members work with their representatives on community college issues. We compete for the dollars with universities, public schools, health centers, and city and county governments.

Because the mount of total funds for community colleges is the hands of state legislators, and they decide the shares for community colleges. The distribution, however, is not political.

As a state agency or program competing with other state agencies and programs for funding.

As political subdivisions of the state with a responsibility to raise funds by means of a property tax where taxable values vary greatly between colleges. For some 1 cent brings in \$12 million, while in another district 1 cent might bring in \$50 thousand or less. Some tax rates are 28 cents and some or 5 cents. There are filthy rich and dirt poor districts. Yet every college receives the same exact funding from the state, program by program.

There will always be competition for state funds from the many state agencies. So it gets very political as to who wins the favor of the legislature and gets increased funding. State revenue at community colleges has been decreasing as a percent of total revenue for many years, so obviously other agencies have been winning the political battles.

Highly political. Funding is set by elected legislatures, and tuition, fees and taxes are set by locally elected Boards of Trustees.

It is political since all funding decisions are made by politically elected officials. State legislators set the formula appropriation funding. Locally elected trustees set tuition and local property tax rates.

Community colleges receive funding from the state as reimbursement for teaching and administering education programs for the state. Community colleges also tax local districts for the maintenance of the physical plants.

Because a good portion of our funds come in the form of State appropriations. Appropriations are a part of the political process and our requests for appropriations compete for other requests. Consequently, our elected officials in the House and Senate decide how State funds are appropriated and at what level.

When "special" allocations are made, which was not uncommon practice in prior years. For all practical purposes the Community College Association has facilitated an agreement among most of not all the colleges in Texas to refrain from taking special funding.

It is evident that formula allocations are driven by availability of funds after priorities are set within the legislature. The "need" for more community college funding is for the most part accepted as fact. However, prioritization more often than not puts this "need" down far enough in the pack of "needs" that an acceptable level is not reached. Colleges are forever asked to react to initiatives, and identified problems usually relating to shortages in the workforce but monies necessary to resolve those issues is usually not forthcoming.

State appropriations must be approved by various committees of the Texas Legislature competing for scarce resources with other state agencies and priorities. Any time there are scarce resources there will be politics.

Because the amount of monies allocated to any given segment of government is determined by the legislative budgeting process. One hopes to convince the legislators that their cause is worthy of special consideration and therefore worthy of a larger portion of the allocations than was received in the previous session.

The community college funding process is political by the very fact that elected assemblies listen to competing concerns. For example the Texas Higher Education Coordinating Board listens to the colleges. In turn the Texas Legislature listens to the Coordinating Board.

3. How are state appropriations to community college districts impacted by rivalry and competition for state funds within community college districts?

Even though we work very closely as an organization (TACC), there are certain community colleges that receive "Special Item Funding" from the legislature which creates rivalries within the community colleges. We also have the metropolitan vs. the rural college issues.

Little competition. The competition is manifested in terms of enrollments, i.e., more students – more state dollars.

There is no competition. Because the total amount of money is divided by the total number of colleges, no competition or rivalry exists. However, if a college attempts to get special fundingthen there is competition.

Community colleges are assigned service areas. As long as they operate within these service areas there are few problems. In the area of "free tuition and fees" for dual credit students, there are some problems. Some districts bring in so much in local taxes (even with very low tax rates) they can offer "free tuition and fees to dual credit, high school students. This does not impact state appropriations, but if some colleges had sufficient local funding so that they can offer free tuition, perhaps these same colleges could get along with less in state funding.

Community colleges have done fairly well at keeping rivalries at a minimum when competing for state funds. The Texas Association of Community Colleges, better known as the presidents association, has worked at setting state wide agendas for community colleges in order to keep this to a minimum.

Appropriations are impacted by contact hour enrollments and there is some rivalry in so far as we compete to attract students. However, because of differential tuition rates for students from within a community college district, most students go to the community college where they reside.

They are not. Community college appropriations in Texas are done by contact hour reimbursement. There are few special items and there is no distinction about where or what college generates the hours. The reimbursement is set from a cost study the Coordinating Board conducts. Reimbursement rates are based on median cost across the State. So everyone receives the same rate per hour.

I don't believe they are.

Community colleges teach both academic transfer and workforce education courses. No one community college is given the exclusive rights to teach a given course of study. Ay college can offer a program when approved for any area they feel is in the best interest of their district.

There are many reasons why districts are impacted by rivalries and competition. For example, large districts are against small districts...Wealthy districts are against poor districts...Older districts are against new districts...and so forth.

Since community colleges have agreed not to seek special item funding, unless the item being requested is approved by the Texas Association of Community Colleges, there is little or no rivalry or competition for state funds within community college districts. This sometimes creates problems with legislators who have worked their way up to important committee positions because they want to allocate funds to things in their local districts and get upset that you do not provide them with a need that they can provide funds for.

Every legislative session has unique circumstances. The coming session will be characterized by a large deficit. Consequently, there will be fewer dollars for the same or higher number of priorities.

4. How accurately has formula funding assisted the Texas Legislature in the analysis of community colleges needs?

Formula funding is not set up to be based on the needs of the community colleges. Rather it is an incremental model that functions more on the basis of historical cost than on "needs" per se.

The formula funding has given the Texas Legislature a benchmark of where the funding levels for

community colleges might be.

Not much. Many people do not understand the concept of a contact hour. While it is equitable it is not accurate.

Formula funding does little to keep the legislature informed of community college needs. That's why it is important for community colleges to set their agendas and lobby for them.

The formula measures expenditures. They call it a "cost" study, but it is really an expenditure study. If we had more money to spend on instruction we would spend more. If the legislature appropriates more money, we then have more money to spend and expenditures go up. All this being said, the formula that is built on the "All funds Expenditure Report" is fairly accurate in measuring community college needs. If the state fund 65% of instructional cost one session then increases to 71% at the next session, this increase plus enrollment growth and inflation will make it very difficult for the state to continue funding at the 71% level.

Formula funding is derived from actual instructional costs, so it is quite accurate. The problem lies in the fact that the formula is not fully funded.

I think it is a pretty accurate measure of the median cost of instruction in each of the disciplines. So the Legislature knows the costs of instruction. They just don't provide full funding.

Formula funding worked well for the first twenty years. Up until 1984, the state would appropriate dollars to the community college that was at or very near the average cost to teach each program area. Since 1984 the legislature has reduced the level of reimbursement to the community college system to as low as 60% or so of the average costs incurred. The formula now serves only as a method to distribute the funds that are appropriated to community colleges during the legislative session.

I think the cost study gives the legislature an accurate picture of our funding needs. What actually gets funded does not. Currently, the legislature funds approximately 60% of the costs. The costs funded by the State include instruction, student services and administration.

The formula is great, but it is often blind to the needs of individual schools.

Analysis does not necessarily mean payment in that amount will be made – the legislature still has to make spending priorities.

The formula process is not really formula funding. It is nothing more than a method of determining the distribution of allocated funds.

5. How consistent are the formula weights with community college expenses and needs?

The disparity between expenses and needs is growing wider. The community colleges are funded at 65% of generated contact hour. We are losing millions of dollars with the current formula.

Again it is an antiquated model that does not take productivity, efficiency, or effectiveness into consideration.

These weights need to be looked at.

The formulas weights are not consistent and do not meet community college needs.

The formulas perform quite well as far as they go. However, the formulas do not perform as well as needed when enrollments are rising, or when adding new programs, because they are calculated using old data.

Quite consistent in that the formula reflects actual cost of instruction; however, "weights" is not a term used, "rates" is the correct terminology.

See above. The formula weighs expenditures only, not needs. The community colleges supplement state funds with local funds. If needs go up, then tuition and taxes can be raised to meet the increased needs. Then the expenditure report includes state funds, local tax funds, and tuition funds used for instructional purposes. So in a way, needs are measured in the formula.

The need most likely to go unreported is equipment needs. Instructional costs supplemented by federal funds are no included in the expenditure report.

The formula weights are probably correct. The state just will not appropriate dollars to equal the community college expenses. Needs are even a greater issue to bridge. Community colleges have needs far beyond the reaches of state appropriations.

I think the formula weights are pretty consistent with actual college costs.

The formulas are very consistent since the study is conducted every two years.

Fairly consistent. Weights are obtained from cost studies and typically represent 65-70% of college needs.

The formula rates were developed to make sure that in the initial request for funds- they are

appropriately weighted. But since they are never funded at that level the concept of formula funding is nonexistent.

6. In what ways is formula funding considered to be an "appropriate" method to determine appropriations to community colleges?

As I stated earlier, it only serves as a benchmark. We are studying the formula system this year because it is not helping meet our needs financially. As long as we are not funded at 100% of generated contact hour the formula is not appropriate.

It seems to be fair to all colleges in that the median rate for each program is chosen as opposed to the average rate. It is unfair in that some college teach 80% of their classes by using part time instructors while other colleges use 80% full time instructors.

The formula is appropriate because it is equitable.

It is "appropriate" in that it reflects the instructional costs, but it just is not funded fully.

Again, because it pays for the number of contact hours (enrollments) and the actual cost to provide those hours.

It is appropriate in that it is based on performance. Therefore, you are paid for what you do.

Formula funding is a very appropriate method if the state would follow through and reimburse for the average cost in each program area.

Our contact hour allocation method appears to be fair for everyone especially since the legislature has established a minimum amount of funding. Dramatic enrollment growth funding and hold harmless funding.

It is not.

It is appropriate in that it levels the playing field. However, there are challenges (example: formula weights) that are presented with the use of this formula.

I believe the methodology is very appropriate. The issue is the level funding that is actually received.

Although, as previously stated, formula funding does not exist, the concept is a good concept because it is based on actual cost of producing the contact hour is in every given subject.

7. Has formula funding helped incorporate "equity" into the Texas community colleges funding structure?

From the standpoint that the formula pays the same rate for English 1301 throughout the state-yes. From the standpoint that we receive 65% of generated contact hour- no.

Formula funding has to the degree possible incorporated a measure of equity.

Yes.

Not a damn bit. Enrollment is the only factor considered in the funding formula. Tax and tuition/fee revenues per contact hour are not considered. Consequently, some colleges spend \$7 per contact hour and others spend \$3. Some districts collect \$7.23 per contact hour in local taxes and other districts collect less than \$0.25.

I am sure it has to certain point.

Yes. All are funded for the hours generated and each hour has the same "price" for all colleges.

The formula funding part is fairly equitable. The disparity comes in local assessed valuation property levels yielding dramatically different amounts of income for the same tax rate.

To a great degree, the formula process, even the way it is currently used, does put the individual institutions on an equal basis. However, other than for the extremely small schools, it does not take into consideration the concept of economy of scales. In other words, the cost per contact hour actually reduces if you have a larger number of student in each class, so the larger schools that have newer and larger facilities generally have a lower instructional cost per contact hour than do the smaller or older schools.

Yes.

Not at all.

The compact between the State and the local communities that start up a community college is that the State will fund instruction, administration and student services while the local community funds

the physical plant. Local funds, taxes, tuition and fees, are where some inequities exist. However, the funding from the State is very equitable.

I would think so.

8. As a whole, how could revenue sources available to community colleges be considered "unreliable?"

If the economy is not doing well, there will not be enough monies to meet the needs. Also, if enrollment is down for unexpected reasons, the revenues will be down.

Most sources are pretty reliable.

Overall, even with the formula, the colleges are at the mercy of the amount that the legislature approves in total to community colleges. In reality, the legislature decides that they will approve \$XXXX to community colleges, and then, the formula divides it among the 50 schools.

In some districts with a lot of oil and gas property, these values are subject to significant changes. State funding is unreliable in times of rapid enrollment growth.

The local taxing district valuations change from year to year. Many rural districts have valuations that are actually reducing annually. Very little to no business and industry move into these rural districts. As valuations decline, the tax rate has to be increased in order to provide the same level of services from one year to the next. The state will not appropriate state funds to cover any cost of the local district for the purchase of land, building of any building, payment for utility costs, repairs and maintenance, insurance on buildings, or any costs related to the physical plant. Local taxes are to be assessed to cover those expenditures. Small rural districts find it difficult to continue to raise taxes and many have reached the maximum rate of tax that the district may by law assess.

Tax rates which comprise a major part of the funding vary widely in the state.

Revenues are based on a number of expectations. Service, desire, need, availability, location and convenience. If you don't perform well or you are in the wrong location revenues do not magically appear.

State appropriations are a function of available money to appropriate and that changes from session to session.

They are relatively reliable---with variance coming mostly from enrollment increases or declines. State appropriation funding of course varies according to the financial situation of the State of Texas.

There is often extreme competition for limited resources. For example, this year the focus of the Legislature might be prisons. This would indeed have an impact on community colleges.

Local taxes, tuition and fees, and state funding are the three primary sources of funding for community colleges. Each of these are, to a great degree, are controlled by individuals outside of the community college. Local taxes are controlled by the appraisal district and state legislation. Tuition and fees are determined by the number of students enrolled. State aid is determined by the state legislature. Of these three, state aid is the most unreliable because it is subject to the political process.

The fact that they are part of the appropriations budget and subject to political and economic upheavals of the Texas Legislature makes them unreliable.

9. What factors prevent state appropriated funds from being considered a reliable source of revenue for community colleges?

The state is not meeting 100% of its own calculation relative to the cost of providing the educational programs.

Rapid enrollment growth. When times are bad, state revenues decline and community college enrollments soar.

Although it is pretty reliable....

1.) Biennial budget revisions and 2.) the politics of the economy can make these funds unreliable.

Available revenue and competing demands for State resources.

State appropriations are always subject to legislative approval and to the state having funds to appropriate.

The state meets every two years and appropriate dollars at that time. Community colleges typically do not have any federal mandates or court injunctions against them like what has been the case with MHMR agencies in the past. When there is an injunction against an agency then they receive priority funding in or to alleviate the injunction. Also agencies that receive matching dollar funds like the highway and transportation or law enforcement, the typically receive priority over community colleges. Although many people of Texas have attended community colleges, they tend to have a larger allegiance to the four-year institution they attended or graduated from if the earned a four-year degree. Most legislative representatives and senators graduated from four-year institutions.

As the demands on the legislators increase and revenue decreases, one can only guess at what will

occur with state funding.

Every social need of the individuals in the state must be weighed in determining who gets what money from the state budget. Therefore, if there are limited dollars available to distribute, what is perceived as the most pressing social need will get the most attention and the largest allocation. These include so many different important areas that it is difficult to determine true fairness, but such external influences such as the courts have a great impact on the final outcomes. Bottom line, there is never enough money to meet what everyone sees as the priority needs, thus creating an unreliable outcome for any given cause.

The legislature, students, faculty and staff.

Only state availability of funds and our ability to convince legislators to use available funds for community colleges prevent reliability.

As stated earlier, there is often extreme competition for limited resources.

The economy as a whole is the single biggest factor. When the economy is down, so are the revenues. Then there are the unexpected costs of health insurance. There are too many variables that contribute to the unreliability of the state appropriated funds.

10. Why are local revenues sources (taxes set by a local community college board) not considered a reliable source of funding?

These funds are for the most part pretty reliable. It would take a catastrophic event to alter the evaluations. The amounts collected are very reliable from year to year.

I have discussed this in an answer above. Rural colleges as a rule have a disadvantage.

In my view, they are reliable, just not enough.

They are a reliable revenue source due to local control.

Changes in property values cause unreliability. In districts where 1 cent raises \$12 million, local property taxes are reliable. In other districts where 1 cent raises \$20 thousand, the local property revenue is unreliable. Increases more than 8% are subject to tax rollbacks.

Vary widely among districts, and can be "recalled" if increase is too great.

Politics. The board members realize that they also are elected by the people and do not desire to alienate their constituents because re-election is always just around the corner. Also the mind set of individuals today is "no more taxes". To increase the taxes more than 3% you must hold public hearings and to increase them over 8% makes it subject to rollback. This means that it is always a

gamble when setting tax rates as to whether or not you are alienating the voting public. Also, the appraised value of properties is variable, usually going up during strong economies, but down during tough economic times. All of these factors make taxes and unreliable source of funding.

I think they are relatively reliable unless local assessed value declines as it did in the late 1980s and early 1990s. Recently, the same local tax rate has yielded more income as assessed values have increased in our area.

Economic conditions, logistics and politics.

I believe they are a reliable source.

Politics of the local community. If employment is high and the public schools (K-12) are competing for similar resources (tax increase), you may not receive the outcome that you seek.

These are more reliable than the state however, the local board is charged with building and maintaining the facilities that are needed to conduct the program. The state and local board (tax base) have different functions.

11. Why do community colleges fail to receive substantial amounts of funding from the federal government?

Some do and some don't. We are receiving close to \$8 million this year. The grants are very competitive. Some colleges cannot afford grant writers. It is possible that as community colleges we have not convinced the feds of our importance.

When don't engage in meaningless research projects or department of defense projects.

We need funds for regular operations. The federal government wants to fund something other than regular operations.

Not sure, but my feeling is that perhaps we have not made a strong case at the federal level.

It is not the role of the federal government to provide funding to community colleges- other than for special projects.

The Federal government has no authority to provide a college education to anyone; therefore, community colleges should not be receiving substantial amounts from them.

Most community colleges have had to become grant specialists. Very few fund are on an entitlement basis. Community colleges have to apply in a very competitive environment. Grant writers tend to be housed in large cities and community colleges by definition are in many smaller communities.

Community colleges receive significant federal support. Financial aid for students is probably the largest amount received by community colleges. Many colleges apply and receive funds for special programs.

The same societal arguments occur on the federal level that occurs on the state level. Community Colleges as a whole are still considered second class and do not have and do not have the popular appeal that a major university does.

Federal funding is generally given through grants for which we must apply or as special item congressional funding. In Dallas, we do fairly well in grants funding but get very little special item appropriations. To get grants, you must have good grant writers.

Community colleges do in fact receive substantial funds from the federal government.

Community colleges have traditionally been the stepchild of the education system with K-12 and universities receiving the bulk of the federal dollar while community colleges perform an internal part of the education process.

It is not their role. This is not a direct responsibility of the federal government.

12. How reliable of a revenue source are student contributions (tuition and fees)?

Very reliable and a very important resource.

Very reliable due to upward trends in enrollment.

Fairly reliable. Our tuition and fees are still low compared to Pell Grants and universities.

Student tuition and fees are funds that are approved by the local Board of Trustees. Students are becoming more costs savvy. The student of today, if possible, shops around like an athlete seeking scholarships. The student is smarter about the costs to attend. Tuition and fees are driven by enrollment. The crystal ball when forecasting can become cloudy.

Tuition and fees are a very reliable source because it is based on performance.

Somewhat reliable, but subject to increase or decrease depending on how many students attend college.

Tuition and fees revenue is a fairly stable source of revenue. If you raise the tuition and fee rates

too much you may reduce enrollment which may effect state-aid which is enrollment driven and if your enrollment increases substantially your cost inevitably also increases, so you are in a catch twenty-two to think of tuition and fees as a means of greatly increasing revenues. My experience has been that the tuition and fees fairly consistently account for the same percentage of overall revenue regardless of what you do.

Student tuition is relatively reliable funding, but obviously fluctuates as enrollments increase or decrease. Since local Boards can increase the tuition rate, this is a source of increased income, assuming that the college does not price itself out of a competitive position.

If you raise your fees too much, you may price yourself out of the market.

Very reliable.

Fairly reliable. If a student wants to go to college someone will pay the tuition unless exempted by the state.

Very reliable, because they have to pay to attend. The question is how much can you charge before your price community colleges out the reach of most students.

13. Given that the rate of tuition and fee charges are often left to community college boards, what factors prohibit a community college from levying more funding from this source?

Access and affordability are two factors that prohibit community colleges from increasing the rate too high.

College boards must always weigh the factor of staying competitive with other institutions of higher education.

Access and affordability are two factors that prohibit community colleges from increasing the rate too high.

Nothing. Some colleges complain about being desperately short on funds yet their tuition is less than one-half of the average rate for community colleges.

Most of our enrollments are students from lower socio-economic levels, or students who are currently employed. Increasing tuition could prevent students from attending.

Local community tolerance to higher taxes and higher tuition is the ultimate limitation. At some point the taxpayers will fight higher taxes. There is a point where marginal cost exceeds marginal utility.

Competition, community involvement (locally elected boards).

See answer 12 above.

The mission of community colleges is access. Most boards fear that increases in tuition and fees will have a negative impact on the ability of students to attend.

See the answer to questions 10 & 12.

As I said above, the Board has some flexibility. The limiting factors are our commitment to access for students and at some level, economic elasticity if we charge too much.

Boards are elected and will only support things that will get them elected.

14. Can "other sources" of revenue be considered a reliable funding source ("other sources" being foundational grants, donations, etc)?

I believe that in major metropolitan areas foundations can and do raise significant amounts of monies, but in the rural areas where there are few large businesses it is much more difficult to raise significant funds.

The interest form the endowments is a reliable source. The donations and foundational grants are not reliable.

No.

No. Giving to community colleges is not sexy for foundations or for individuals.

My experience is that such other sources are not at all reliable. They would never be relied upon to fund on-going operations.

No. Those sources are not consistent.

You can enhance with this revenue source, but never rely on it.

All donation and grants carry a two-edge sword. If you count on them for operations, they may not

materialize. Very good plans and planning can assist the college.
No, it is based upon the economy.
Other sources of revenue are not as reliable as tuition, local taxes and state appropriations but we may have to depend on them increasingly.
No.
These sources can help but they cannot make up for the state and local support.
15. Is there anything that you would like to add that has not already been asked?
We have a committee looking into ways to improve the formula. The problem is the predicted shortfall in state revenues.
No.
No.
There are two major problems with community colleges. 1) Much of the state is not in a taxing district
2) There is great inequity within community colleges over the wealth per student ratio.
No.
You covered it quite well.
I believe the primary hope for increasing revenues for community colleges is to cause a better understanding by the people of the value that community colleges have in today's world. We must do a better job of showing and proving our value.
None. No.
You have covered a lot of ground. I do not need to remain anonymous. Good luck on your study!

I have developed a formula that gives small, rural colleges slightly more state funds per contact hour. This would take away a little bit state money from giant urban colleges. The urban colleges could have made this slight loss in state funds by raising their tiny tax rates of 1/10 or _ of a cent. This variation in the funding formula or some other model to give a little more assistance to smaller, rural colleges will not be discussed until after the next legislative session.

No.	
16. In reporting results of this research, would you like to remain anonymous?	
No.	
Doesn't matter to me.	
No.	
No.	
Yes.	
No.	
No.	
Yes.	
No.	
No.	
No.	
Yes.	