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GRADUATE COLLEGE

AN INVESTIGATION OF FINANCIAL RESOURCE ALLOCATION IN SELECTED UNIVERSITIES IN TEXAS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

BARNEY ALAN SUGG

Norman, Oklahoma

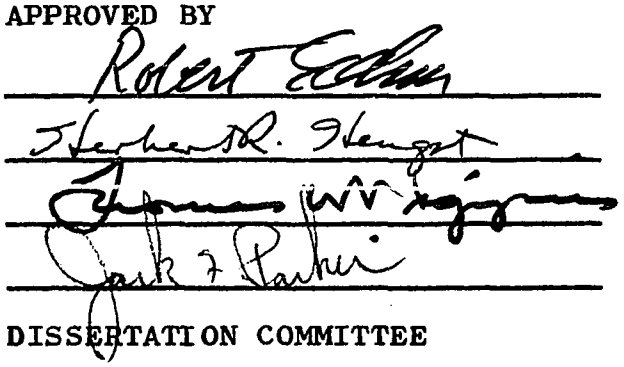
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AN INVESTIGATION OF FINANCIAL RESOURCE

ALLOCATION IN SELECTED UNIVERSITIES

IN TEXAS

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TABLE OF CONTENTS

		Page
ACKNOWLEDGEMENTS.		iii
LIST OF TABLES.		vi
CHAPTER		
I.	INTRODUCTION	1
	Statement of the Problem	1
	Population Used.	2
	Definition of Terms.	2
	Design of the Study.	2
	Organization of the Study.	4
II.	REVIEW OF THE LITERATURE	6
	Allocation of Funds at the State Level	6
	Allocation of Funds at the Institutional Level.	11
III.	DESCRIPTION OF THE TEXAS FORMULA SYSTEM AND COMPARISON OF APPROPRIATED TO EXPENDED FUNDS FOR FACULTY SALARIES AND DEPARTMENTAL OPERATING FUNDS.	20
	Description of the Texas Formula System. . . .	20
	Comparison of Appropriated to Expended Funds for Faculty Salaries and Departmental Operating Funds	24
	Summary.	25
IV.	DESCRIPTION AND ANALYSES OF THE BUDGETARY PROCESSES BY WHICH RESOURCES ARE ALLOCATED FOR FACULTY SALARIES AND DEPARTMENTAL OPERATING FUNDS.	41

TABLE OF CONTENTS - Continued

CHAPTER Page

Descriptions of the Budgetary Processes. 42
University A 42
Faculty Salaries 42
New Faculty Positions. 42
Salary Increases for Existing Faculty. . . 43
Faculty Promotions 44
Departmental Operating Funds 46
University B 48
Faculty Salaries 48
Departmental Operating Funds 51
University C 52
Faculty Salaries 52
Departmental Operating Funds 57
University D 58
Faculty Salaries 58
Departmental Operating Funds 61
University E 62
Faculty Salaries 62
Departmental Operating Funds 67
University F 68
Faculty Salaries 68
Departmental Operating Funds 73
Summary Tables and Statements Regarding the Budgetary Processes. 75
Faculty Salaries 75
New Faculty Positions. 76
Faculty Promotions 78
Salary Increases 79
Departmental Operating Funds 83
Summary. 87

V. PROCEDURE FOR RECONCILIATION OF EXPENDED FUNDS FOR FACULTY SALARIES AND DEPARTMENTAL OPERATING FUNDS TO FORMULA PRODUCED FUNDS. 89

Reconciliation of the Dollar Differences Between Expended Dollars and Formula Produced Dollars for Faculty Salaries Within the Liberal Arts Program Area in University A 98
Summary. 102

VI. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS. . . . 103

Findings 104
Conclusions. 113
Recommendations. 114

BIBLIOGRAPHY. 116

LIST OF TABLES

Table		Page
1.	Formula for Faculty Salaries - Ratios, Average Salaries, and Rates, by Program and Level	22
2.	Formula for Departmental Operating Funds.	23
3.	University A - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	27
4.	University B - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	28
5.	University C - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	29
6.	University D - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	30
7.	University E - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	31
8.	University F - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	32
9.	Summary - Universities A, B, C, D, E, F, - The Percentage Differences between the Funds Appropriated and the Amounts Expended for Faculty Salaries by Program Area for the Fiscal Year 1970.	33

LIST OF TABLES - Continued

Table		Page
10.	University A - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	34
11.	University B - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	35
12.	University C - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	36
13.	University D - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	37
14.	University E - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	38
15.	University F - The Dollar and Percentage Differences between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	39
16.	Summary - Universities A, B, C, D, E, F, - The Percentage Differences Between the Funds Appropriated and the Amounts Expended for Departmental Operating Funds by Program Area for the Fiscal Year 1970	40
17.	Dominate Decision Making Role in the Authorization Process for New Faculty Positions.	77

LIST OF TABLES - Continued

Table		Page
18.	Criteria Utilized in the Determination of New Faculty Positions.	78
19.	Administrator or Administrative Group which Participate in the Decision Making Process for Faculty Promotions	80
20.	The Administrator or Administrative Group which Performs the Dominate Decision Making Role in the Awarding of Salary Increases for Faculty Promotions	81
21.	Administrator or Administrative Group which Functions in the Dominate Decision Making Role in the Development of the Budgetary Guidelines for Salary Increases.	82
22.	Administrator or Administrative Group which Functions in the Dominant Decision Making Role in the Implementation of the Budgetary Guidelines Regarding Faculty Salary Increases. . .	83
23.	Methodology by which Universities Award Salary Increases for Faculty Members.	84
24.	Dominant Decision Making Role in the Allocation of Departmental Operating Funds.	85
25.	Administrative Channels Through which the Departmental Operating Funds Flow.	86
26.	University A - A Listing of Variables Utilized in the Formula for Faculty Salaries.	92
27.	University B - A Listing of Variables Utilized in the Formula for Faculty Salaries.	93
28.	University C - A Listing of Variables Utilized in the Formula for Faculty Salaries.	94
29.	University D - A Listing of Variables Utilized in the Formula for Faculty Salaries.	95
30.	University E - A Listing of Variables Utilized in the Formula for Faculty Salaries.	96

LIST OF TABLES - Continued

Table		Page
31.	University F - A Listing of Variables Utilized in the Formula for Faculty Salaries.	97
32.	Flow Chart Indicating the Funding Process for Faculty Salaries and the Incremental Budgeting Model for Allocation of Faculty Salaries Within the Institution	108
33.	Formula for Reconciling the Faculty Salary Dollar Difference Between the Formula Produced Funds and the Actual Expenditure of Funds for Faculty Salaries for an Academic Area.	112

AN INVESTIGATION OF FINANCIAL RESOURCE ALLOCATION IN SELECTED UNIVERSITIES IN TEXAS

CHAPTER I

INTRODUCTION

Statement of the Problem

In the State of Texas a formula system is utilized at the state level for allocating funds to the state's institutions of higher education. There is, however, no requirement that this formula system be implemented at the institutional level for the allocation of resources within the state colleges and universities. Therefore, the purpose of this study is to investigate the budgetary processes by which financial resources are allocated to support the academic departments within six public universities in Texas. The two budgetary categories in the state appropriations bill that directly support the academic departments of the public universities in Texas are faculty salary monies and departmental operating funds.

Population Used

This study involves six public universities in Texas. These institutions were selected because they are similar in type with comparable budgets and enrollments. This number represents the entire population of such universities in Texas. The name of the universities are coded to protect their identities.

Definitions of Terms

"Faculty salaries" are salaries or wages of those engaged in the teaching function, including heads of teaching departments. Included also are laboratory assistants, teaching fellows and lecturers who are responsible for, or in charge of, a class or class section, or a quiz, drill or laboratory section.

"Departmental Operating Funds" include wages, supplies, travel, equipment expenditures, and incidental operating expenses for the operation of instructional departments, and other than faculty salaries.

Design of the Study

The budgetary period which this study covers is the academic year 1969-70. This period was selected because the state legislature fully funded the state formula system for faculty salaries and departmental operating funds for the state colleges and universities for this fiscal year. Therefore, highly systemitized formula developed funds at

the state level can be compared to the actual institutional operating budgets for this period of time.

The first part of this study involved the collection of data which compares both the dollar and percentage differences which the state formula produced for faculty salaries and departmental operating funds to the actual dollar expenditures for these categories. This information was gathered for each academic program area within the selected six universities. This data was secured from institutional operating budgets, institutional biennium budget requests, and the state appropriations bill for the 1970 fiscal year. Tables are developed which illustrate that in several academic program areas within these institutions the actual expenditure of funds for faculty salaries and/or departmental operating funds greatly differs from the formula produced funds for these program areas.

The second part of the study is designed to collect information regarding the actual allocation processes which are utilized by these six universities in the distribution of funds to support the academic departments of these institutions. Personal interviews with key administrators of these universities were conducted to secure information concerning the budget making procedures for faculty salaries and departmental operating funds. Descriptive accounts of the actual allocation processes by which resources are distributed to support the academic departments within these

selected institutions are provided in chapter four of this study.

The third part of this study involves the development of a mathematical process which reconciles the variance of dollar differences between the resources produced by the state formula and the actual expenditure of funds for faculty salaries. The two variables of the faculty salary state formula are "average faculty salary" and "full-time student/teacher ratios" by program areas. This process compares these variables as allowed by the state formula to the actual average faculty salaries and student/teacher ratios within a program area of an institution. This procedure emphasizes the interaction of these two variables and the effect that these components have on the actual allocation process. Actual data regarding average faculty salaries and student/teacher ratios were gathered for each program area within the six universities. This information was secured from institutional operating budgets and from credit hour production reports as submitted to the State Coordinating Board.

Organization of the Study

This study is organized into six chapters. Chapter I includes a statement of the problem and purpose of the study, the methodology utilized, a description of the population, and a definition of terms. Chapter II contains a detailed review of the literature which relates to this study with special emphasis regarding the allocation of funds

at the state level for higher education and the allocation of resources within colleges and universities. Chapter III contains a description of the Texas formula system and a comparative analysis of the dollar and percentage differences between the state formula produced resources for faculty salaries and departmental operating funds and the actual expenditures within these budgetary categories. Chapter IV provides descriptions and summary tables of how administrators within these six universities allocate resources for the support of the academic departments. Chapter V describes a mathematical process which reconciles the dollar differences found in the comparisons of the formula produced dollars for faculty salaries to the actual expenditures of these funds within these selected institutions. Chapter VI includes the summary of the study, the conclusions based on the findings, recommendations offered in view of the findings, and conclusions.

CHAPTER II

REVIEW OF THE LITERATURE

In public colleges and universities there are two major allocations of resources that are made for each budgetary period for these institutions. The first allocation of funds is made at the state level where some system is utilized to distribute state monies to the several colleges and universities. The second allocation is effected by each institution as it distributes available resources to its various program units.

In this chapter are reports of the literature that are associated with the work in this study. The sub-topics of this chapter are as follows:

1. Review of the literature regarding the allocation of funds at the state level to public colleges and universities.
2. Review of the literature regarding the allocation of resources within institution of higher education.

Allocation of Funds at the State Level

Martorana and Hollis developed a report for the U. S. Office of Education which described the organization and

operation of Governing Boards concerned with public higher education. One of the objectives of this report was to provide a factual description of arrangements now made by the states for governing and coordinating their higher education.[1]

Walton utilized this report as a basis for his study in analyzing how state-wide boards employed formulas for distributing funds to institutions of higher learning either under their control or for which they make funding recommendations to the legislators. He analyzed and provided verbal descriptions of the formula systems which were utilized by sixteen states in allocating funds for higher education within these states. In the area of Instructional Costs he found varying units of measurement employed as bases for computation. His summary regarding the Instructional Costs formulas is as follows:

> The most commonly used base was "student credit." "Student credits" may be translated into "full-time students" which may be translated into "teacher-pupil ratio." Florida and Mississippi translated "student credits" into "teacher production credits" which is just another type of "teacher-pupil ratio." California used "student units" which were based on subjects, methods of teaching, and levels of teaching. Indiana used "cost per student" as a base.
>
> The Kentucky, Indiana, Mississippi, Tennessee, and Texas formulas used some form

---

[1] S. V. Martorana and Ernest V. Hollis, State Boards Responsible for Higher Education (Washington, D.C.: United States Government Printing Office, 1960), p. 7.

> of "upper," "lower," and "graduate" divisions. Oklahoma divided instruction into three levels which are "junior college," "state college," and "state university." California used rates for courses at different levels and New Mexico considered the levels of teaching in their cost analysis approach.[2]

In a comprehensive study regarding the management of higher education, Rourke and Brooks found that there is an unmistakable trend toward more rationalized procedures in allocation of resources at the state level. In general the respondents in this study agreed that the use of formulas was beneficial in the distribution of academic resources to the colleges and universities within a state. From the institutional points of view the following opinions were expressed in regard to the use of formulas at the state level.

> 1. They reduce tension, bickering, and throat cutting among the institutions.
>
> 2. They have protected our appropriation base, and since our formula is geared to enrollments, we have some guarantees of continued increases as long as the formula is used.[3]

Legislative officials also agree that formula budgeting at the state level is beneficial for all concerns. Views from

---

[2]Joel P. Walton, "An Analysis of the Methods Utilized by State Boards Governing Multiple Institutions of Higher Education in the Distribution of Current Operating Funds Under Their Control" (Unpublished doctoral dissertation, University of Mississippi, 1967), p. 136.

[3]Francis E. Rourke and Glenn E. Brooks, The Managerial Revolution in Higher Education (Baltimore: The John Hopkins Press, 1966), p. 79.

legislators involved in this study express the following concerning the use of formulas:

> 1. Formulas reduce the complex issue of financing higher education to manageable dimensions.
>
> 2. Standard budgeting formulas provide legislators with a certain amount of political protection from constituents.
>
> 3. When carefully employed, budget formulas tend to reduce conflict among legislators over the allocation of funds to individual institutions.[4]

Miller has traced the development in state-wide budgeting for higher education. His study has indicated that in spite of the initial reluctance on the part of educators to employ such budgetary devices, there has been a general agreement that the overall support for higher education has been improved in those states which have adopted such procedures.[5]

Yardsticks and Formulas in University Budgeting is a report of a seminar sponsored by the Western Interstate Commission for Higher Education. This report describes the formula systems which are utilized in several states.

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[4] Ibid., p. 80.

[5] James L. Miller, "State Budgeting for Higher Education: The Use of Formulas and Cost Analysis" (Unpublished doctoral dissertation, University of Michigan, January, 1963), p. 188.

The summary report deals with the objectives, issues, and problems in the use of formulas.[6]

In a study by Moos and Rourke they examine the relationship between state governments and higher education. An entire chapter is devoted to a historical analysis of the evolution process of state budgeting to state budgeting to state colleges and universities.[7]

Glenny indicates that state coordinating agencies for higher education seeks the following goals in budgeting at the state level:

> 1. To provide budgets equitable and resonably satisfactory to all institutions according to relative needs.
>
> 2. To provide for legislators and state executive officers uniform and comparable fiscal information for the state institutions, including appropriate statements on over-all fiscal needs.
>
> 3. To eliminate competition among the institutions for operating funds, especially to keep it out of the halls of the legislature so that here, at least, a united front is presented.
>
> 4. To effect economy and efficiency where possible.[8]

---

[6] Yardsticks and Formulas in University Budgeting (Boulder, Colorado: Western Interstate Commission for Higher Education, 1959), 68 pp.

[7] Malcom Moos and Francis E. Rourke, The Campus and the State (Baltimore: The John Hopkins Press, 1959), 414 pp.

[8] Lyman C. Glenny, Atonomy of Public Colleges: The Challenge of Coordination (New York: McGraw-Hill Book Company, 1959), 325 pp.

Allocation of Funds at the Institutional Level

Recent definitions of the term "budget" reflect current thinking as to the comprehensive nature of the budgetary process in colleges and universities. The American Council on Education recently published a revised edition of College and University Administration. In this book budgets were defined as follows:

> Budgets for colleges and universities are determined by the educational program, the need for supporting services, and the limits of resources. They should be expressed in terms of estimates of support required for approved programs and in terms of resources available for such support.[9]

Williams in his book, Planning for Effective Resource Allocation in Universities, expresses the following definition:

> A budget is undeniably a primary instrument of fiscal control, but it is more than that. A budget should also lay bare the efficiency, or lack thereof, with which a university is combining its available resources to achieve results that promote the goals and objectives of that university. A university budget should not only reflect fiduciary responsibilities, but should reflect, in a manner of speaking, the economic responsibilities of that university.[10]

In a recent study Kendrick developed a set of principles of budget preparation which were sanctioned by an

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[9] College and University Administration (Washington, D.C.: American Council on Education, 1968), p. 155.

[10] Harry Williams, Planning for Effective Resource Allocation in Universities (Washington, D.C.: American Council on Education, 1966), p. 14.

expert jury. He then evaluated the budget making processes of selected private colleges by these principles. These seven principles are as follows:

> 1. The chief executive officer of a college or university should be ultimately responsible for the preparation of the budget and should direct and guide its entire formulation.
>
> 2. All persons concerned with the educational needs of college or university students should share in the formulation of the budget since they have intimate knowledge of these needs and responsibility for administering segments of the program of the institution.
>
> 3. Each college and university should have a long-range budget with all interim budgets being developed, reviewed, and evaluated with due concerns for their future implications.
>
> 4. A definite time-table should be established at each institution for the formulation of the budget.
>
> 5. Realistic estimates of income should be prepared in advance of the projected expenditures.
>
> 6. The program of expenditures must bear a satisfactory relationship to the estimated income of the institution.
>
> 7. The expenditure proposed should be for purposes that will implement and further previously made aims and objectives of the college or university.[11]

As these definitions emphasize a budget reflects a decision making process which indicates a priority system

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[11]Solomon J. Kendrick, "An Investigation of Practices and Procedures Employed in the Preparation of the Annual Budget in Selected Private Colleges and Universities in the United States." (Unpublished doctoral dissertation, The American University, 1966), p. 17.

as to the goals and objectives of a university or college based on available resources. A budget analyst could pose the question as stated by Lewis: "On what basis was it decided to allocate X dollars to activity A instead of allocating them to activity B?"[12]

The most common criticism that is lodged against budget making processes in colleges and universities is that budgets too often represent a perpetuation of programs and activities geared to the needs of the past. The typical operating budget normally reflects a large number and variety of decisions of the past which have ongoing implications for the future. Dodds states the following in regard to university budgets:

> The freshman president soon realizes that the hand of history is heavy on him; he does not write his budget on a clear slate. Basic operations must go on and be paid for against rising cost. So innocent a document as the catalogue listing of curricular offerings embodies continuing commitments, as do research programs that must be allowed to continue even though current support has failed them, and the guarantee of tenure to large elements of the faculty.[13]

Harris expresses the following view in regard to the attitude that past budgets are usually unquestioned:

---

[12]Williams, op. cit., p. 1.

[13]Harold W. Dodds, The Academic President --- Educator or Caretaker? (New York: McGraw-Hill Book Company, Inc., 1962), p. 182.

> Neither trustees nor faculty, nor administration, tend to examine the allocation of funds in the existing budget. Once $250,000 is allocated to paleontology or $1 million to intercollegiate athletics, these outlays are sacred, and no cut is likely except in the midst of a great depression. Even budget officers of state governments tend to accept past budgets and only raise questions concerning additional funds requested.[14]

On the brighter side of budgeting in higher education the study of Rourke and Brooks indicates that the following has occurred in the budget making process in colleges and universities.

> 1. There is an unmistakable trend toward more rationalized procedures in the management of money and space, notably in the increasing use of formulas, cost analyses, and new methods of displaying fiscal data.
>
> 2. Three-fourths of American state colleges and universities now employ some form of program budget, while only a fourth still use a strict object budget.
>
> 3. Colleges and universities have begun to establish specialized budget offices with responsibility for the preparation and control of the academic budget.
>
> 4. Reforms and techniques of budgeting have brought a shift in the locus of budgetary decisions. What seems to have happened in many universities is a simultaneous centralization of the preparation of the budget and a decentralization of the administration of the budget once the funds are appropriated or allocated.[15]

The study by Rourke and Brooks revealed that at the higher levels of the administrative hierarchy of university

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[14]Seymour E. Harris, Higher Education: Resources and Finance (New York: McGraw-Hill Book Company, 1962), pp. 561-62.

[15]Rourke and Brooks, op. cit., pp. 68-84.

budget making, a more objective approach was utilized whereas in smaller units of operation such as individual departments resource allocation tends to remain highly subjective. While the use of budget formulas is a definite trend at the state level it is not used extensively for management inside the campus.

> For a good many years the University of Minnesota used rough formulas as a means of drawing up its legislative requests. Finally the administration also decided to use a formula as the basis for the actual division of new funds for faculty salaries within the institution. The outcry and backlash was so substantial that the administration abandoned internal formulas altogether but held on to the formula approach in dealing with the state legislature.[16]

Rourke and Brooks also provide an excellent description of how subjective and objective decision making processes are employed at different administration levels in regard to the development of a university budget. This description is referred to as the "Ladder of Objectivity."

> The pressures within a university from faculty and students militate in favor of subjective, personalized decision making in budgetary matters. The pressures outside the institution, from the legislature or the state co-ordinating board, militate in favor of rigorously quantified budgetary decisions. As a result, something resembling a ladder of objectivity has emerged in the budgeting process in higher education. At the bottom of the ladder, within academic departments and in small university agencies, budgeting is still carried on in a highly

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[16] Ibid., p. 80.

> subjective way. Primary consideration is still given to such factors as the pressures of the academic market place, and the idiosyncracies of individual faculty members. Further up the ladder, in the office of the dean, quantitative yardsticks are available, but the dean uses them with caution.
>
> Moving another rung up the ladder, in the offices of the financial vice-president, the provost, and the president, the subjectivity of the process on the lower levels collides with the quantifications demanded by the state legislature. Yet even at this level decisions are seldom made exclusively on the basis of quantitative formulas or straight cost analysis.
>
> Finally, in state co-ordinating boards and in the committees of the state legislature, policy makers work with vast aggregates of figures, and the tendency to make decisions in terms of quantitative yardsticks becomes considerably more pronounced. At this level the personal problems of the individual professor or department count relatively little, while the student-teacher ratio may be of central importance.[17]

A fairly recent concept which has put additional emphasis on the best utilization of recourses for colleges and universities is that of the Planning-Programming-Budgeting System (PPBS) which gained fame in the United States Department of Defense. Many university and non-university people feel that PPBS could provide valuable assistance to higher education in effecting better resource utilization. There are many critics of the present budget-building process which is found in most colleges and universities. They feel that the current budget instruments are primarily constructed as a

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[17] Ibid., p. 82.

constraint on receipts and expenditures of funds, thus being input oriented. While this is a necessary objective of any budget, a total budget must also be an output-oriented financial planning tool.

There are three major phases of PPBS: planning, programming, and budgeting. Planning is used here to mean that process whereby the college or university establishes its long-run purposes and objectives, which could extend as much as ten to twenty years into the future. Farsighted planning is an essential requisite for current decisions that may require permanent investments in personnel, plant, and educational programs. Before a financial plan is devised, the objectives and general purposes of the institution are to be identified, analyzed, and evaluated in relation to its desired educational role.[18]

The second phase of PPBS is the programming activity which encompasses a shorter span of time, probably one to five years. By PPBS definition, a program of a university is one of its major divisions such as a college or a school. Also by definition, a program element would be a separate department or equivalent within a college. Thus, the term programming is used to indicate an activity dealing with the programs and program elements within a university. These

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[18]Harry J. Hartley, Educational Planning-Programming-Budgeting (Englewood Cliffs, New Jersey: Prentice-Hall, 1968), p. 212.

programs can also be non-academic divisions such as auxilliary enterprises.

Following the planning and programming phases is the actual budgeting phase. This phase deals with the expression of the resource allocations to the various program elements and the major programs of the institution into dollar terms on an annual or biennial budget basis. Obviously, the budgeting process occurs after the planning and programming have been thoroughly analyzed. Budgeting, therefore, reflects rather than dictates the major programs and activities of the institution.[19]

From a review of the literature it is apparent that a definite trend of objective budgeting exists at the state level in the allocation of resources to state colleges and universities. It is also obvious that budgeting within colleges and universities is also developing in a more rational manner through methods such as cost analysis, program budgeting, and other techniques. While the use of objective budgeting rapidly diminishes at the lower levels of the administrative hierarchy within the institutions, new philosophies of budgeting will most likely have future implications for the subjective budgetary processes employed within these smaller administrative units. The necessity of

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[19]M. F. Severance, "Program Budgeting, A Case Study in Its Application." Research Paper presented at the Eighth Annual Forum on Institutional Research, San Francisco, California, May 6-9, 1968.

state colleges and universities responding to the legal requirements of state legislatures and state co-ordinating boards will probably continue the evolution of the budgetary processes now employed in colleges and universities.

CHAPTER III

DESCRIPTION OF TEXAS FORMULA SYSTEM AND COMPARISON OF APPROPRIATED TO EXPENDED FUNDS FOR FACULTY SALARIES AND DEPARTMENTAL OPERATING FUNDS

Description of Texas Formula System

In Texas the state legislature utilizes a formula system for distributing funds to public institutions of higher education. The state agency which is charged with the development of this system is the Coordinating Board, Texas College and University System. Section 16 of the "Higher Education Coordinating Act of 1965" states the following:

> The Board shall devise, establish, periodically review and revise formulas for the use of the Governor and the Legislative Budget Board in making appropriations recommendations to the Legislature.

The Texas Legislature has utilized this formula system beginning with the fiscal year 1960. It was first implemented by the Texas Commission on Higher Education, the state agency which preceded the Coordinating Board.

The particular formulas used to develop the appropriations for faculty salaries and departmental operating

funds are based on a unit cost rationale. The unit which is identified and to which a dollar figure is attached is a "credit hour." A credit hour is a quantitative measure of academic production for programs approved to be offered for academic credit by the State Coordinating Board. The formulas for faculty salaries were developed by calculating a credit hour unit cost utilizing the variables of an average faculty salary and a full-time student/teacher ratio for each academic program area. Table one outlines the average faculty salaries, the student/teacher ratios and the credit hour dollar amounts which were utilized in the development of the formulas for faculty salaries for the program areas which this study examines.

The formula for departmental operating funds provides dollar amounts for credit hours produced during the base period. This formula was developed by analyzing the level of funds which institutions had historically allocated for departmental operating funds. Based on this information and statements of the universities and colleges in regard to the inadequacy of such funds, a dollar amount per credit hour by academic program and level was determined by the Coordinating Board in 1960. Adjustments have been made to this formula for each subsequent biennium period. The formula rates for departmental operating funds for 1969-70 are contained in Table two.

TABLE 1

COORDINATING BOARD, TEXAS COLLEGE AND UNIVERSITY SYSTEM FORMULA
FOR FACULTY SALARIES RATIOS, AVERAGE SALARIES, AND RATES,
BY PROGRAM AND LEVEL
FISCAL YEAR 1970

PROGRAM AREA	UNDERGRADUATE LEVEL			MASTERS LEVEL			DOCTORAL LEVEL		
	Ratio	Salary	Rate	Ratio	Salary	Rate	Ratio	Salary	Rate
Liberal Arts	19:1	$9,120	$16.00	10:1	$10,226	$42.61	5:1	$14,547	$161.63
Science	19:1	9,947	17.45	6:1	11,094	77.04	4:1	16,705	232.02
Fine Arts	10:1	8,751	29.17	6:1	9,645	66.98	4:1	15,122	210.03
Teacher Education	19:1	8,111	14.23	10:1	8,681	36.17	5:1	12,593	139.92
Agriculture	16:1	9,586	19.97	8:1	10,800	56.25	4:1	13,968	194.00
Physical Training	19:1	8,071	14.16						
Business Administration	19:1	9,092	15.95	10:1	10,800	45.00	4:1	15,122	210.03

NOTE: The above rates were calculated using the following definitions of a full-time equivalent student for a nine month long session: (1) Undergraduate level, 30 semester credit hours; (2) Masters level, 24 semester credit hours; (3) Doctoral level, 18 semester credit hours.

TABLE 2

COORDINATING BOARD, TEXAS COLLEGE AND UNIVERSITY SYSTEM
FORMULA FOR DEPARTMENTAL OPERATING FUNDS
FISCAL YEAR 1970

PROGRAM	RATES PER BASE PERIOD SEMESTER CREDIT HOUR		
	UNDERGRADUATE LEVEL	MASTERS LEVEL	DOCTORAL LEVEL
Liberal Arts	$0.88	$ 5.85	$27.56
Science	6.62	22.05	99.23
Fine Arts	6.62	22.05	99.23
Teacher Education	2.76	5.51	22.05
Agriculture	4.97	22.05	99.23
Physical Training	2.76		
Business Administration	2.76	11.03	22.05

The level of funds which are generated by this system for faculty salaries and departmental operating funds are calculated by multiplying the appropriate formula by the number of credit hours that each institution produced during the "base period." The "base period" is the full fiscal year preceding the year for which the appropriations are calculated.

In the year 1969-70 the legislature fully funded the amounts which the formula system produced for faculty salaries and departmental operating funds for each of the public four year colleges and universities.

The appropriations bill for each college and university contain specific amounts of money which have been appropriated for faculty salaries and departmental operating funds. The appropriations bill specifically states that faculty salary monies can only be utilized to pay faculty members who are engaged directly in the teaching process. The appropriations bill, however, imposes no restrictions on the use of departmental operating funds.

Comparisons of Appropriated to Expended Funds for Faculty Salaries and Departmental Operating Funds

The data presented in this chapter compares the dollar amounts appropriated for faculty salaries and departmental operating funds to the actual amounts that were expended by each institution for the academic year 1969-70. The tables are organized by academic program areas to show the level

of funds that were generated by the various programs through the formula system in relation to actual allocation of these appropriations to programs within each institution. The appropriations for faculty salaries and departmental operating funds are lump sum figures, and there are no requirements in the appropriation bill that institutions utilize the Coordinating Board formula system to allocate the funds within the institution.

In order to protect the identities of the institutions involved in this study actual dollars appropriated and expended for faculty salaries and departmental operating funds are not indicated. A negative or positive dollar and percentage difference is shown for each program area for faculty salaries and departmental operating funds within each institution.

Summary

The State of Texas utilizes a formula system for allocating funds to support state colleges and universities. The formulas which develop resources for faculty salaries and departmental operating funds are based on the credit hour production by academic programs which the state colleges and universities have experienced during a common base period. This formula system provides dollar amounts for faculty salaries and departmental operating funds for the credit hours which were produced in the academic program areas of the institutions.

Even though the state appropriations for faculty salaries and departmental operating funds are developed by the number of credit hours produced in the various academic programs of the state's colleges and universities, there is no state requirement that these funds be expended in the program areas in which the credit hours were produced. The state colleges and universities have flexibility in allocating faculty salary and departmental operating funds with the exception that funds appropriated for faculty salaries must be expended for that purpose.

In comparison of the actual expenditures for faculty salaries and departmental operating funds by program area in each institution to the formula produced dollars by program areas indicates that significant differences occurred in several program areas in these six universities during the fiscal year 1970. Chapter three indicates the internal decision making processes within these six universities in regard to the allocation of resources for faculty salaries and departmental operating funds.

TABLE 3

UNIVERSITY A

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-168,877	-11.26%
Science	+ 53,522	+13.61%
Fine Arts	+ 14,393	+ 5.74%
Teacher Education	- 66,794	-11.45%
Agriculture	+ 18,243	+19.44%
Physical Training	+ 15,036	+27,94%
Business Administration	+ 45,286	+15.63%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 4

UNIVERSITY B

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-179,300	- 8.16%
Science	+ 12,661	+ 1.43%
Fine Arts	+ 49,920	+15.48%
Teacher Education	+ 66,694	+10.56%
Agriculture	+ 42,617	+21.57%
Physical Training	+ 18,422	+ 4.37%
Business Administration	- 44,922	-11.93%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 5

UNIVERSITY C

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-125,291	- 5.22%
Science	- 19,822	- 1.95%
Fine Arts	- 58,367	-11.21%
Teacher Education	+ 1,033	+ .90%
Agriculture	+ 10,431	+ 8,94%
Physical Training	+ 40,818	+44.54%
Business Administration	- 24,332	- 6.94%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 6

UNIVERSITY D

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-151,945	- 7.73%
Science	- 65,325	- 9.21%
Fine Arts	+ 58,422	+14.30%
Teacher Education	+108,438	+16.07%
Agriculture	+ 29,580	+17.25%
Physical Training	+ 49,956	+55.06%
Business Administration	- 42,733	-10.95%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 7

UNIVERSITY E

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-316,983	-21.65%
Science	+ 3,553	+ .94%
Fine Arts	- 12,667	- 3.86%
Teacher Education	+ 90,711	+20.81%
Agriculture	+ 10,750	+14.18%
Physical Training	+ 66,671	+54.52%
Business Administration	- 62,677	-11.92%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 8

UNIVERSITY F

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-152,222	- 7.45%
Science	- 3,494	- .60%
Fine Arts	- 48,321	- 9.44%
Teacher Education	+ 53,660	+ 8.07%
Agriculture	+ 11,447	+10.91%
Physical Training	+ 56,898	+48.72%
Business Administration	- 18,066	- 6.12%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 9

SUMMARY - UNIVERSITIES A, B, C, D, E, F

THE PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR FACULTY SALARIES BY PROGRAM AREA FOR THE FISCAL YEAR 1970

UNIVERSITIES	PROGRAM AREAS						
	LIBERAL ARTS	SCIENCE	FINE ARTS	TEACHER EDUCATION	AGRICULTURE	PHYSICAL TRAINING	BUSINESS ADMIN.
A	-11.26%	+13.61%	+ 5.74%	-11.45%	+19.44%	+27.94%	+15.63%
B	- 8.16%	+ 1.43%	+15.48%	+10.56%	+21.57%	+ 4.37%	-11.93%
C	- 5.22%	- 1.95%	-11.21%	+ .90%	+ 8.94%	+44.54%	- 6.94%
D	- 7.73%	- 9.21%	+14.30%	+16.07%	+17.25%	+55.06%	-10.95%
E	-21.65%	+ .94%	- 3.86%	-20.81%	-14.18%	+54.52%	-11.92%
F	- 7.45%	- .60%	- 9.44%	+ 8.07%	+10.91%	+48.72%	- 6.12%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 10

UNIVERSITY A

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-15,975	-16.48%
Science	-14,273	- 9.46%
Fine Arts	- 9,660	-15.80%
Teacher Education	-62,046	-63.20%
Agriculture	+ 3,769	+15.16%
Physical Training	+ 7,465	+67.36%
Business Administration	+22,624	+41.32%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 11

UNIVERSITY B

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-26,948	-18.80%
Science	-40,681	-13.70%
Fine Arts	-23,878	-29.41%
Teacher Education	+ 9,964	+ 8.93%
Agriculture	-14,840	-26.92%
Physical Training	+30,077	+269.85%
Business Administration	-18,433	-26.51%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 12

UNIVERSITY C

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts		-14.75%
Science	+ 6,905	+ 2.20%
Fine Arts	- 8,559	- 6.54%
Teacher Education	-14,587	- 7.72%
Agriculture	+ 5,937	+18,24%
Physical Training	+36,636	19.57%
Business Administration	- 4,776	- 6.97%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 13

UNIVERSITY D

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-31,302	-24.77%
Science	+61,695	+23.62%
Fine Arts	- 4,226	- 4,27%
Teacher Education	-13,407	-12.12%
Agriculture	- 9,148	-18.84%
Physical Training	+ 7,449	+41.23%
Business Administration	-35,997	-49.60%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 14

UNIVERSITY E

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	-31,031	-33.93%
Science	-60,140	-40.50%
Fine Arts	+ 7,183	+ 9.54%
Teacher Education	+17,774	+18.20%
Agriculture	+ 2,683	+13.51%
Physical Training	+ 5,672	+40.20%
Business Administration	-24,491	-24.40%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 15

UNIVERSITY F

THE DOLLAR AND PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

PROGRAM AREAS	DOLLAR DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS*	PERCENTAGE DIFFERENCE BETWEEN APPROPRIATED AMOUNTS AND EXPENDED AMOUNTS
Liberal Arts	- 6,275	- 4.95%
Science	+52,152	+22.98%
Fine Arts	-51,470	-42.20%
Teacher Education	+23,841	+21.53%
Agriculture	- 6,674	-24.12%
Physical Training	+ 7,758	+32.49%
Business Administration	-20,547	-37.83%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

TABLE 16

SUMMARY - UNIVERSITIES A, B, C, D, E, F

THE PERCENTAGE DIFFERENCES BETWEEN THE FUNDS APPROPRIATED AND THE AMOUNTS EXPENDED FOR DEPARTMENTAL OPERATING FUNDS BY PROGRAM AREA FOR THE FISCAL YEAR 1970

UNIVERSITIES	PROGRAM AREAS						
	LIBERAL ARTS	SCIENCE	FINE ARTS	TEACHER EDUCATION	AGRICULTURE	PHYSICAL TRAINING	BUSINESS ADMIN.
A	-16.48%	- 9.46%	-15.80%	-63.20%	+15.16%	+67.36%	+41.32%
B	-18.80%	-13.70%	-29.41%	+ 8.93%	-26.92%	+69.85%	-26.51%
C	-14.75%	+ 2.20%	- 6.54%	- 7.72%	-18.24%	+19.57%	- 6.97%
D	-24.77%	+23.62%	- 4.27%	-12.12%	-18.84%	+41.23%	-49.60%
E	-33.93%	-40.50%	+ 9.54%	+18.20%	+13.51%	+40.20%	-24.40%
F	- 4.95%	+22.98%	-42.98%	+21.20%	-24.12%	+32.49%	-37.83%

*Positive sign (+) indicates that more dollars were expended than appropriated.
Negative sign (-) indicates that less dollars were expended than appropriated.

CHAPTER IV

DESCRIPTION AND ANALYSES OF THE BUDGETARY PROCESSES BY WHICH RESOURCES ARE ALLOCATED FOR FACULTY SALARIES AND DEPARTMENTAL OPERATING FUNDS

Information in this chapter was secured by conducting on-campus interviews with key administrators of each of the six universities. A modified case study technique was utilized to examine the budgetary processes by which the administrators of these institutions allocated funds to support the academic departments of these six universities.

Each of the descriptions of the budgetary processes for these institutions is sub-divided into the categories of faculty salaries and departmental operating funds. Value judgments of the existing situations, or viewpoints expressed, are avoided by the writer.

This chapter is divided into two major sections. The first section contains narrative descriptions of the budgetary processes conducted within these six institutions in allocating resources for faculty salaries and departmental operating funds. The second section provides summary tables and statements of the operational and policy aspects of the

manner in which these universities allocate resources for faculty salaries and departmental operating funds.

Descriptions of the Budgetary Processes

University A

Faculty Salaries

Budgetary planning at University A is conducted well in advance of notification of the level of state appropriations for faculty salaries. This planning process involves the areas of new faculty positions, faculty promotions, and salary increases for the current faculty. The President of the University serves as the budget officer in the development of the faculty salary budget.

1. New Faculty Positions

In the area of new faculty positions the President requests Department Heads of additional positions to their appropriate College Deans. These recommendations must be accompanied by written explanations as to why a new faculty position(s) is needed for a particular department. Included in this recommendation must also be a five year analysis of fall semester credit hour production by the department as well as the current full-time student to full-time faculty ratio. A full-time student is defined to be a student enrolled for fifteen credit hours during a regular semester.

When these requests are received, the college deans recommend whether or not they should be approved. These

requests are then submitted to the Academic Vice-President who also reviews them and gives either a positive or negative recommendation regarding their approval. These requests are then passed on to the President.

After reviewing the requests by the Department Heads and the accompanying recommendations, the President develops a tentative list for new faculty positions. He then meets with the Academic Vice-Presidents and the College Deans to review this priority list for new positions. After this list has been reviewed by this group and any changes have been made, then this list is held until the University learns of the total monies available for faculty salaries.

2. Salary Increases for Existing Faculty

Faculty salary increases are based on a well-defined rating and ranking system. Under the rating system each faculty member receives a numerical rating from four individuals. The persons rating faculty members are the Department Heads, the Deans of the College, the Academic Vice-President, and the President. The highest rating that can be given to each faculty member by an individual rater is a one and the lowest rating is a five. Therefore, the accumulated rating of four is the highest quality rating which a faculty member could receive.

While this rating system is highly subjective each individual rater is requested to consider the categories

of effectiveness in classroom, research and contributions to the field, professional attitude, enthusiasm for position, cooperation, and services when assigning a numerical rating to faculty members.

In addition to the rating system a ranking system is utilized within each academic department. Each Department Head is required to rank the members of his department in a numerical order with the top rank being one and the lowest rank corresponding to the total number of faculty members within the departments.

Each faculty member must have a different rank order. These ranking sheets accompany the rating sheets as they are submitted through the appropriate administrative channels as previously described. When the ranking and rating sheets are received by the President, he assigns a rating to each faculty member, and then totals these numerical ratings. When this entire process is completed no further action is taken until the level of appropriations for faculty salaries is known.

3. Faculty Promotions

University A has a faculty promotion policy which outlines the educational qualifications and experiences which a faculty member must attain before being eligible for a faculty promotion. Based on this policy the President's Office prepares a list of all faculty members who are eligible

for a faculty promotion. The President then examines the ratings and rankings for each faculty member. If an eligible faculty member does receive better than average rating and ranking scores the President tentatively approves a promotion for the individual. The President then communicates with the appropriate College Dean and Department Head to determine if there are any reasons why the faculty member should not be promoted. After this review process has been completed then the President prepares a final list of faculty members to be promoted. The level of salary increase that they receive is determined by the category within the new rank in which they are placed as a result of their rating and ranking scores.

When the University receives notice of the total dollars that have been appropriated for faculty salaries, then these monies are allocated in the following manner. The level of expenditures for the current faculty salary budget is deducted from the total amount appropriated for faculty salaries. The amount that remains is then utilized for funding new faculty positions and for increasing the salaries of currently employed faculty members.

A determination is made as to the number of new faculty positions that will be funded. The President stated that normally all of the new faculty positions that were authorized in the budget planning process are funded.

The amount allocated for new positions would be deducted from the monies available for increasing the current faculty salary budget. The remainder is then utilized for salary increases for current faculty members. When this amount is determined the President then organizes each academic rank into three divisions. The final rating score and the Department Chairman's ranking order basically determines the categories in which faculty members will be placed. The highest category within a rank will be awarded the largest salary increase for that particular rank. The categories within the rank of Professor receive the largest increase in salary increments than the corresponding categories within the other ranks. The categories within the rank of Associate Professor receive the second largest increase with the ranks of Assistant Professor and Instructor following in descending order. Faculty members who receive promotions are not given a separate salary increase, but they do receive the salary adjustments which are awarded to the new ranks to which they are promoted. When the final allocation of faculty salary monies is made then the President requests the Vice-President to prepare the faculty salary budget for submission to the Board of Regents.

Departmental Operating Funds

The Vice President for Finance serves as the Budget Officer for the preparation of the Departmental Operating

Fund Budget. When the Vice-President for Finance learns of the appropriation for Departmental Operating Funds he then issues written guidelines to the Department Heads informing them of the level of the appropriation and how this amount compares with the current departmental operating budget. He also suggests a percentage by which departmental operating funds might be increased.

The Department Heads then prepare written budget requests for departmental operating funds. The requests are divided into the categories of Travel, Maintenance and Operations, and Equipment. A written justification is required for each of the above categories. Detailed explanations must be submitted for any requests which recommends an increase in a department's operating funds over the current budget.

These requests are then submitted to the Vice-President for Finance for his review. The Vice-President for Finance stated that requests for departmental operating funds always exceeded the monies available. The Vice-President for Finance and the President then conduct a joint conference at which time these requests are considered. During this conference they agree on the level of departmental operating funds which will be authorized for each department. The Vice-President for Finance then prepares the final budget for Departmental Operating funds to be presented to the Board of Regents.

University B

Faculty Salaries

At University B the only source of monies for faculty salaries are from state appropriations. When the appropriated amounts are known, the Vice-President for Finance certifies to the Academic Vice-President the total amount of new money that will be available for faculty salaries for the new budget year. The level of new money is determined by deducting the then current funding of salaries from the total monies available for faculty salaries.

When the Academic Vice-President ascertains the amount of new monies available for increased expenditures for faculty salaries the budgetary process begins. This process is carried out in three phases.

1. The first phase in this process is to determine the number of new faculty members which will be added to the faculty. New positions are awarded to departments or full-time equivalent student/faculty ratio for undergraduate and graduate enrollment. The general rule is that departments are awarded a full-time faculty member for each full-time undergraduate student/faculty ratio of 25/1 and each full-time graduate student/faculty ratio of 16/1. A full-time student is defined as one who is enrolled for fifteen semester credit hours. New positions are added to those departments whose production in credit hours justify new positions.

After a careful review of the full-time equivalent graduate and undergraduate student/faculty ratios for each academic department, the Academic Vice-President recommends to the President new faculty positions which should be authorized. The President then gives a final approval for new faculty positions.

Those academic departments whose student/faculty ratio falls below an undergraduate student/faculty ratio of 25/1 and graduate/faculty ratio of 16/1 are carefully examined to see if a reduction of total faculty positions allocated to those departments can be reduced. A reduction of total faculty members in such departments is normally done as faculty members resign or retire.

A determination is then made as to the total amount of money that will be required to fund the new positions. From this total is deducted the total amount of eliminated positions which have been effected. This final figure represents a net figure which will be required to fund new faculty positions.

2. The second phase is involved in determining the salary increases which should be awarded for academic promotions. A fixed dollar amount of salary increase is awarded to each faculty member who is promoted regardless of the rank. The level of this increase is approximately equal to the average salary increase which is awarded to currently employed faculty members. The Vice-President for Academic

Affairs calculates this amount. The total amount allocated for this purpose is determined by simply multiplying the total number of faculty promotions by the fixed dollar amount which is to be paid for each promotion.

3. The third phase is to determine the salary increases which are to be made to existing faculty. After determination is made for new positions and promotions these monies are deducted from the total monies available. The remaining amount is available for faculty salary increases.

Based on the funds available, the Academic Vice-President develops a schedule which outlines a maximum salary increase which can be awarded to a faculty member holding a particular rank. The primary factor that is involved in determining the maximum level of increase for each rank is a comparative analysis of how the University ranks with other universities on both a state and national basis. The largest allowable maximum increase is given to the academic rank which has the lowest relative position when compared to other state and national colleges and universities. The maximum salary increase that could be awarded to faculty members for the academic year 1969-70 were as follows:

Professor - $1500
Associate Professor - $1000
Assistant Instructor - $750
Instructor - $500

Each Department Head was provided a schedule of maximum salary increase rates. The Department Head then

recommended to his college dean a schedule of salary increases for his department. If a department head wishes to award a faculty member the absolute maximum increase, then he must submit a written explanation of why this faculty member is deserving of such an increase. An adequate recommendation was considered one which listed the faculty member's contributions in the area of either teaching or research. These recommendations were reviewed by the College Deans, and they were forwarded to the Academic Vice-President who served as the final authority in the granting of faculty salary increases.

The Academic Vice-President stated that there had been only isolated cases when the recommendations of the academic department heads were not approved. At University B the Department Head occupies the dominant decision making role for effecting salary increase for faculty members.

Departmental Operating Funds

The Vice-President for Finance certifies to the Academic Vice-President the level of new monies available for departmental operating funds. If a Department Head wishes to request any increase for a Department's operating funds, a written statement indicating the additional money is needed must be submitted to the appropriate Dean, who in turn forwards it to the Academic Vice-President. The Academic Vice-President stated that all requested increases had been approved without exception because of the availability of money.

Because of the fact that the Department Heads had not requested all of the Departmental Operating Funds which were available, the Academic Vice-President utilized the remaining amount, approximately $40,000 to purchase equipment for a selective academic department. The Vice-President stated that he thought that this practice greatly assisted in the development of a department, and that it was more beneficial to the University than equitably distributing it to all of the departments.

University C

Faculty Salaries

When the appropriations for faculty salaries for University C are made known, the Vice-President for Finance has the responsibility for informing the President of the University as to the level of new monies that are available for increasing the faculty salary budget. The financial Vice-President arrives at a gross amount of available new monies by deducting the current faculty salaries budget from the total faculty salary appropriation. The Vice-President then informs the President of the University as to the amount of this figure.

The President then requests the Vice-President for Academic Affairs to submit to him recommendations as to new faculty positions, promotions, and a salary increase schedule.

The first step in this process is the determination of new faculty positions. The primary criterion for authorizing new faculty positions for an academic department is credit hour production. Any department head may request that a new faculty member be authorized for his department, but only those departments which have shown a substantial increase in credit hour production are considered.

Another criterion is the potential growth of credit hour production for the department. The Academic Vice-President must be convinced that the future credit hour production for the department is good. Historical trends, career opportunities for the discipline, general availability of the academic program within other colleges and universities, and a purely subjective judgment on the part of the Academic Vice-President are other factors which influence the decision on what new faculty positions should he recommend to the President for authorization.

The second recommendation that the Vice-President must make to the President concerns academic promotions. University C has a well-defined promotion policy outlining the academic qualification and experience required before a faculty member is eligible to be promoted to a higher academic rank. When a faculty member attains these requirements, then the Department Head may recommend to the Academic Dean that this faculty member be promoted. The Academic Dean then either concurs with this recommendation or advises

against the promotion. The recommendations of both the Department Head and the Academic Dean are forwarded to the Academic Vice-President for his recommendation. The Academic Vice-President stated that he did not recommend to the President any promotion unless there was agreement by both the Department Head and Dean. He further stated, however, that on occasion he has refused to recommend some faculty member's promotion even though both the Department Head and the Academic Dean had submitted positive recommendations. To date the President had approved only those promotions which had been recommended by all three administrative officials.

After the decision has been reached as to which faculty members are to be promoted, then a second decision as to level of salary increase for a promotion must be made. The policy at University C is that all faculty promotions are awarded an equal salary increase regardless of the rank to which promoted.

As to the amount of the salary increase for promotion this decision is made in conjunction with the amount of monies that are available for other salary increases. The level of increase for a promotion is approximately equal to the average salary increase for the entire faculty. Therefore, a faculty member who is promoted could receive a salary increase for a promotion plus an additional salary increase within the rank to which he is being promoted.

A third decision which the Academic Vice-President must make pertains to salary increases. After monies allocated for new positions and promotions have been deducted from the amount of new money which was available for faculty salary expenditures, then the remaining amount can be utilized for faculty salary increases.

The Academic Vice-President with the approval of the President allocates a sum of money to each academic department to be utilized for faculty salary increases within the department. The manner in which this sum is determined is that a fixed amount of money is allocated for each faculty member by rank. As an example if a department's faculty consisted of 3 professors, 2 associate professors, 1 assistant professor, 1 instructor, and if the allocation of funds by rank were $1000 for each professor, $800 for each associate professor, $600 for each assistant professor, and $400 for each instructor, then the department's calculation of funds for faculty salary increases would be as follows:

Professor 3 at $1000 each = $3000
Associate Professor 2 at $800 each = $1600
Assistant Professor 1 at $600 each = $600
Instructor 1 at $400 each = $400

In addition to the lump sum of money that is allocated to each department the following guidelines are provided to each Department Head:

1. The total salary increases for members of the Department may not exceed the lump sum allocated to the Department.

2. The following ranges of salary increases may be awarded by a Department Head without any written justification:

Professor	$800-$1200
Associate Professor	$600-$1000
Assistant Professor	$400-$800
Instructor	$200-$600

3. If the recommended salary increase exceeds or is less than the above schedule, then the Department Head must state in writing the rationale behind this recommendation.

The Department Head then prepares his recommended budget which he submits to the appropriate Academic Dean. The Academic Deans develop their recommendations as to the level of salary increase that each faculty member within his college should receive. Both these recommendations are submitted to the Academic Vice-President for his review.

The Academic Vice-President stated that if a variance did occur between the recommendations of the Department Head and the College Dean that he would follow the recommendation of the Dean. He further stated that there were extremely few instances in which the recommendations of the Department Head and the College Dean did not agree.

The Academic Vice-President then prepares recommendations to the President in the three areas which the President requested: new faculty positions, promotions, and new salary budget.

The President reviews these recommendations, but only on rare occasions does he alter any of the Academic

Vice-President's recommendations. The President then authorizes the budget to be put into final form to be submitted to the Board of Regents.

Departmental Operating Funds

When the University learns the level of appropriations for Departmental Operating Funds the Vice-President for Finance determines if any new monies will be available for increasing the budgets of the academic department for operating funds. He calculates this by deducting the current budget for departmental operating funds and any known new allocation of funds, i.e., the establishment of a new department, from the total appropriated amounts. If new monies are available then he informs the Academic Vice-President of the amount and requests his recommendation as to the budgeting of the new funds.

The Academic Vice-President then asks through the College Deans that the Department Heads submit any requests for increasing their departmental operating funds with a written explanation outlining the need for such increases. When the Academic Vice-President receives these requests he then makes a decision as to which departments will receive increases and at what level. The Academic Vice-President stated that requests for budgetary increases by departments which had not shown increases in credit hour production were not considered. After these requests were eliminated the Academic

Vice-President then tentatively granted increases to those departments which he felt merited the increases. The Academic Vice-President then met with the President and reviewed with him the recommended increases for departmental operating funds. After the President gave his approval the Academic Vice-President provided the Vice-President for Finance the information as to which departmental operating budgets should be increased. The Vice-President for Finance then prepared the Departmental Operating Budget for submission to the University's Board of Regents for their final approval.

University D

Faculty Salaries

When the level of state appropriations for faculty salaries is known the Vice-President for Finance certifies to the Academic Vice-President the total amount of monies available for faculty salary expenditures. The Academic Vice-President and the Academic Deans of the Colleges which comprise the Deans' Council develop a schedule which is to be utilized in the preparation of the faculty salary budget.

The first step is to determine what new faculty positions will be authorized. This University utilizes a formula when authorizing new position a required level of credit hour production per semester per faculty member must be attained. There is a performance level for each discipline.

As an example, in the program area of humanities a credit hour production of 420 per faculty member per semester is required. This average must be exceeded before a department in the humanities can add an additional faculty member. The one exception to this policy is when an academic department is required to have a faculty member with a particular skill even though the credit hour production does not justify it. A second exception is when a new program area is established. In this case new faculty members are employed even though the credit hour production is not high enough to authorize additional faculty members as per the formula. However, it is anticipated that any new program will soon justify itself in terms of credit hour production.

When a final determination is made as to new faculty positions, this total amount required is deducted from the total appropriation for faculty salaries. The remaining amount is utilized to develop a salary schedule for existing faculty members. A well-defined formula for distributing the major categories of this schedule provide a base salary variable, an experience variable, and a merit increase variable for each academic rank.

The base salary variable and the experience variable are common for all faculty members within an academic rank with the exception of professors and associate professors who do not hold the earned doctorate. These persons' base salary is lower than those persons holding the earned

doctorate within the same rank of either professor or associate professor.

The merit salary variable is the element which is flexible and which causes a differentiation of salary within academic ranks. While there is no minimum merit increase, there is established a maximum merit salary increase which can be awarded to an academic rank.

Since the variables of base salary and experience are defined and predetermined, the merit salary variable is the one for which a decision must be made for each individual faculty member. The merit salary schedule is divided into three equal increments of fixed dollar amounts. The academic department heads recommend to the College Deans how many increments of merit salary each faculty member should receive. The Department Heads are requested to consider the two variables of outstanding teaching and service to the institution when deciding which level of merit increase an individual faculty member should receive.

These recommendations regarding merit increases are then submitted to the appropriate College Dean. The Dean also makes recommendations as to the level of merit increase that each faculty member within his college should receive. Both recommendations are then forwarded to the Academic Vice-President for final action. If the recommendations of the Department Head and the College Dean are in concurrence in terms of the level merit increase for an individual faculty

member, the Academic Vice-President approves the recommended increase. If, however, these recommendations do not concur, then the Academic Vice-President submits this case to the Deans' Council for arbitration. Both the Department Head and the College Dean involved have opportunity to state to the Deans' Council the basis of his recommendations. The Deans' Council then determines which recommendation should be approved. The Academic Vice-President stated that out of 460 faculty members only about 4% of the merit increase recommendations have to be submitted to the Deans' Council.

The decisions of the Department Head, assuming concurrence by the College Deans, and the Deans' Council are final as far as University administrative personnel are concerned. Neither the Academic Vice-President nor the President alters any merit increase recommendations prior to submitting the total University to the Board of Regents.

Departmental Operating Funds

The Vice-President for Finance is the university officer who administers the departmental operating fund budget. He works directly with department heads during the allocation process for these funds.

There is no formula utilized in distributing departmental operating funds to the financial Vice-President. The format of this request is divided into two categories consisting of operating and maintenance funds and capital outlay

funds. Operating and maintenance funds include estimated expenditures for departmental supplies, travel, and small items of equipment, (less than $100 per item cost). Capital outlay funds include those items of equipment which exceed $100 in cost. When the Financial Vice-President receives these requests then he totals their amounts. If the total exceeds the amount available then the amounts which the Department Heads had requested must be reduced. Before any requested amounts are reduced the Vice-President for Finance meets with the Department Heads whose budgets are obviously inflated and requests that the budgets be trimmed to a more realistic amount. When this has been completed, and if the total budget has still been exceeded, then the Vice-President trims those budgets which still appear to be relatively large. This decision making process is largely subjective even though it is based somewhat on previous expenditures.

The Vice-President for Finance then submits his recommendations for the departmental operating funds to the President of the University.

University E

Faculty Salaries

The Vice-President for Finance certifies to the Academic Vice-President the total amount of money that is available to be expended for faculty salaries. The Academic Vice-President then provides this information to the Deans'

Council which is composed of the several Deans of the Colleges and the Academic Vice-President who serves as the Chairman. This Council is charged with the responsibility for developing faculty salary and departmental operating budgets for submission to the University's Board of Regents. While the President of the University reviews the recommendations of the Deans' Council, he has never altered any of their recommendations before they are presented to the Board of Regents for their final action.

The Deans' Council follows a deliberate pattern when developing the faculty salary budget. This process is carried out in the following sequence:

1. The current faculty salary budget is deducted from the total amount of money that is available for faculty salaries. The Council assumes that all existing academic programs and faculty positions will be continued.

2. The Council agrees on a sum of money that is to be awarded to each faculty member who will have completed the Doctorate prior to the beginning of the new budget year. The rationale for such a salary increase is that this Council considers that the completion of the Doctorate is a major accomplishment on behalf of a faculty member, and that this person should be properly rewarded. It also serves as an effective incentive for faculty members to complete the Doctorate.

3. The third step in this process is to determine the amount of money that is to be awarded to those faculty members who are promoted in rank. The University has an established policy which outlines the eligibility requirements that a faculty member must attain before being considered for promotion. Once a faculty member fulfills these requirements then a Department Head may recommend to the appropriate Academic Dean that this individual should be promoted. The Academic Dean is the final authority for approving faculty promotions to the ranks of Instructor, Assistant Professor, and Associate Professor. In order to be promoted to the rank of professor a faculty member's name must be presented to the Deans' Council by the Academic Dean. The Deans' Council must give its unanimous approval before any faculty member may be promoted to the rank of Professor.

After a determination has been made as to which faculty members will be approved for promotion, then the Deans' Council must agree on a dollar increase regardless of the rank.

4. A fourth step is to determine which new faculty positions will be established. Department Heads are invited to submit their recommendations for new faculty positions to their respective College Deans. The Deans then have to make decisions as to which of these recommendations they will support when they present their requests for new positions to the Deans' Council. The major criteria that the Deans'

Council utilized in developing their recommendations for new positions to the President are credit hour production and program needs.

While no precise formula for credit hour production is utilized, a department for which a new position is requested must exhibit an obvious trend in the increase of its credit hour production. The Departments in which credit hour production is the greatest in relation to its faculty is given the highest priority for the establishment of new faculty positions. A second criteria which the Deans' Council considers when it is making a determination as to which new faculty positions will be authorized is that of program needs. It may be documented that a particular new faculty position is needed within a department in order to strengthen a program which may be seeking accreditation or may be orienting itself in a new direction. If the Deans' Council is convinced that this is a wise investment of faculty resources then it may recommend that a new position be established whether or not the credit hour production justifies such a position. The Deans' Council must give its unanimous approval in order for a new position to be established.

5. A fifth step that the Deans' Council takes is to determine the amount of money that will be allocated to each College Dean to be utilized for faculty salary increases within the respective colleges. The level of money that is available for salary increases for existing faculty is

determined by deducting the amount of monies allocated for faculty members completing the doctorate, faculty promotions, and new faculty positions from the total amount of new monies available for the faculty salary budget. When this amount is calculated the Council then divides this amount of money among the colleges by a formula system which utilizes the number of faculty by rank as the basic formula item. The Deans' Council determines the amount of money that will be allocated for each academic rank. It is assumed that the rank of Professor will be allocated the most dollars with the rank of Associate Professor, Assistant Professor, and Instructors receiving lesser amounts in descending order. After the levels are determined then it is a simple arithmetic process of multiplying the total number of faculty positions by rank times the amount of money allocated for particular ranks.

The Deans' Council additionally decides on a maximum percentage increase that may be awarded to an individual faculty member. The reason that this is done is so that the salary ranges for the academic ranks will not have a large variance among the colleges.

With the simple guideline of a maximum percentage salary increase the formula provided monies to be utilized for faculty salary increases in each College. The respective College Deans become the final authorities for awarding salary increases to faculty members within the colleges.

When the decisions are made for monies to be allocated for faculty members completing the doctorate, the level of funding for faculty promotions, the number of new faculty positions, and the salary increases to be awarded for faculty members, the President then instructs the Vice-President for Finance to prepare the faculty salary budget for submission to the University Board of Regents.

Departmental Operating Funds

When the appropriations for departmental operating funds are known, the Vice-President for Finance determines if any new funds are available for departmental operating budgets. Written requests are submitted to the Council through the appropriate college dean if a department head wishes to request an increase. The Deans' Council considers all of these requests, and recommends to the Financial Vice-President which budgets should be increased. The Council does not utilize any formula for making this decision. The decisions are subjective and primarily based on the written requests which outline in detail the reasons why a Department Head is seeking an increase. In some instances the Council recommends that a sum of money be allocated to a department on a one year basis in order to purchase special equipment items.

When the Vice-President for Finance receives the recommendations from the Deans' Council he prepares the

budget for Departmental Operating Funds for submission to the Board of Regents.

University F

Faculty Salaries

When the appropriated amount for faculty salaries is known by the University, the Financial Vice-President determines the amount of new monies that will be available for increased expenditures for faculty salaries over the current budget. He arrives at this figure by deducting the existing budget for faculty salaries from the appropriated amount for faculty salaries. This new money figure is then relayed to the Vice-President for Academic Affairs who is charged with the preparation of the new faculty salary budget.

There are four separate, but related, procedures which the Academic Vice-President follows when preparing the faculty salary budget.

The first step is to determine which new faculty positions will be authorized for the new budget year. The Deans' Council which is composed of the Deans of the Colleges with the Academic Vice-President serving as its chairman is the decision making body for preparing the recommendation for new faculty positions to the President.

In order to assist the Deans' Council in this decision making process the Academic Vice-President gathers

quantitative data for each academic department. This information is as follows:

1. Enrollment - Data is collected which shows the number of students enrolled for courses for each department for the fall semester. A comparison is made as to the percentage increase or decrease for each department's enrollment to the previous fall semester.

2. Average class size - A comparison of the current fall semester average class size to the previous fall semester average class size.

3. A full-time equivalent student to full-time equivalent faculty ratio is developed for each department.

Utilizing the above data the Deans' Council then develops a list of new faculty positions which it recommends to the President. This recommendation is a unanimous one by the Council.

The second step that is taken is related to faculty promotions. The University has developed specific eligibility requirements for faculty promotions. If faculty members fulfill these requirements then they may be recommended by the Department Head for promotions. In addition to the recommendation of the Department Head, each faculty member who is being recommended for promotion must be voted on by the tenured professors and associate professors within the department. The actual vote count and any negative or positive faculty recommendations must be forwarded to the

appropriate Dean. The Dean of the College then recommends for or against each faculty promotion. His recommendation plus those of the Departments are forwarded to the Academic Vice-President.

The Academic Vice-President then submits these promotion recommendations to the Executive Council of the University. This Council is composed of the President and the three Vice-Presidents of the University. The Council then votes on which promotions will be authorized. No promotion is awarded unless there is unanimous approval by the Executive Council. The Executive Council then decides on the amount of salary increase that will be given for the promotions. This decision is made in conjunction with the decision regarding the level of salary increases that will be given to the total faculty. A faculty member who is being promoted would receive approximately twice the amount of salary increase as compared to other faculty members who are being promoted within a rank receive the same level of increase although more money is allocated for the rank of professor with the other ranks receiving lesser amounts in the order of associate professor, assistant professor, and instructor.

The third stage of the budget making process for the allocation of faculty salary monies is to determine the levels of salary increases which will be awarded to the general faculty. The policy for faculty salary increases is that all faculty members within the same rank will receive the

same amount of salary increase or that they will receive no increase of any amount. The only exception to this policy is for special merit increases which will be described later in this paper.

The Executive Council with the consent of the College Deans and the Academic Department Heads is the group which makes the decision as to the levels of salary increases that will be awarded to each academic rank. The amount of money that is available for salary increases for the existing faculty is determined by deducting the monies allocated for new faculty positions and promotions from the total level of funds that is alloted for increasing the faculty budget over the existing level.

The Academic Vice-President then compares the average faculty salary for each rank with the national average for Universities similar to University F. For the academic year 1968-69 it was discovered that the average university salary for instructor compared most favorable with the national average while the ranks of Assistant Professor, and Associate Professor, and Professor correspondingly compared less favorably with the national average. The Academic Vice-President presented this information to the Executive Council who in turn developed a salary increase schedule which provided the largest increase to the rank of Professor with correspondly less increases to the ranks of Associate Professor, Assistant Professor and Instructor. The President of the

University then presents this schedule to a joint meeting of the College Deans and the Department Heads outlining the rationale and objectives of the schedule. The President answers questions regarding the salary schedule and requests suggested changes. If there are any suggested modifications of the schedule then this group votes to determine if they wish to alter the schedule. To date there have been no modifications of the salary schedule as developed by the Executive Committee. After this meeting with the College Deans and Department Heads the President then instructs the Academic Vice-Presidents to implement the schedule.

The fourth and final step in the development of the faculty salary budget is to determine the faculty members who will receive merit increases. Merit increases are awarded to a limited number of faculty members, approximately three or four for each rank, who have made outstanding contributions in academic endeavors and as well as general university activities and in community involvement. Any administrator can initiate a recommendation that a particular faculty member be given a merit increase. However, similar recommendations must be secured from the faculty member's Department Head and College Dean. These recommendations must state the contributions made in the areas mentioned above. The Executive Council then considers the recommendations of those faculty who have received positive recommendations from administrators involved in this rating procedure. The Executive

Council then ranks these faculty members in a priority order on the basis of the information provided as well as their own personal judgments. The Council then makes the final decision as to the faculty members who will receive merit increases. The dollar amount is approximately equal to the amount of general salary increases that is awarded to each rank.

After a determination has been made as to the number of new faculty positions to be created, the faculty promotions to be awarded, the salary increases schedule to be implemented, and the merit salary increases to be given, then the President instructs the Vice-President for Finance to construct the faculty salary budget. This budget is then presented to the University Board of Regents for approval before final implementation.

Departmental Operating Funds

The Vice-President for Finance works directly with Academic Department Heads in the preparation of the departmental operating budgets. When the Vice-President for Finance learns of the level of appropriations for departmental operating funds he then prepares written guidelines to assist the Department Heads in the preparation of the departmental operating budgets. These guidelines state the percentage increase in the appropriations as well as other information such as the minimum wage which must be paid to any part time

help which the Department Head may want to pay out of departmental operating funds. Each Department Head is also provided a budget sheet with current budget figures for departmental operating funds. These budgets are broken down into three categories of supplies, travel and capital outlay. The Department Heads are requested to submit their recommended amounts for these categories for the new budget year. Any request for increases must be accompanied by a detailed explanation of why the increase is requested.

These budget requests are then submitted to the appropriate College Dean for their recommendations as to the level of funding for departmental operating funds for the departments within their colleges. After the Deans have recorded their recommendation, then the budget requests are forwarded to the Vice-President for Finance.

When the Vice-President for Finance receives these budget requests he totals the requested funds and compares this amount to available funds. The amount of funds requested always exceeds the monies available. The Vice-President for Finance and the President confer and decide which requests for increases in departmental operating funds will be approved. After this decision has been made the Vice-President for Finance prepares the departmental operating budget for submission to the Board of Regents.

Summary Tables and Statements Regarding the Budgetary Processes

Data obtained from the six universities are grouped and tabulated for easy comprehension and meaningful comparisons in this analysis. The following tables augment the case studies by offering compilations and summaries of operational and policy aspects of the manner in which these universities allocate resources for faculty salaries and departmental operating funds.

Faculty Salaries

All six universities involved in the study followed a similar format in developing faculty salary budgets. With differences in timing and methodologies in each of the phases, the general outline for the development of the faculty salary budgets is as follows:

Determine the total legislative appropriation for faculty salaries
Deduct the current faculty salary budget

Equals monies available for increasing the current faculty salary budget

Deduct monies allocated for new positions
Deduct monies allocated for faculty promotions

Equals monies available for increasing salaries for existing faculty

As outlined in the above format the initial phase of the budget making process is to determine the level of monies which will be available for increasing the current faculty

salary budget. In all cases the administrations of the Universities participating in the study made the general assumption that the current faculty salary budget is the basic building block for the new budget. In all cases the current faculty salary budgets were deducted from the total appropriations for faculty salaries. The amounts remaining were considered as being available for increasing the faculty salary budgets for the ensuing year. The Vice-President for Finance had the responsibility for determining the amounts of monies available for increasing the current faculty salary budgets.

When the amounts of new monies which were available for increasing the current faculty salary budgets were known then administrative officials of the Universities took actions to allocate these funds. The case studies indicate that there were three distinct but related phases which were followed in the allocation process of the new available funds. As indicated earlier these phases involved the allocation of resources for new faculty positions, faculty promotions, and salary increases for existing faculty.

New Faculty Positions

All of the Universities involved in the study have experienced rapidly growing student enrollments. This growth has required that additional faculty positions be established thus making the allocation of monies for new faculty positions an integral part of the annual budget making process for each of the universities.

The following table indicates the university administrator or administrative group which plays the dominant role in the decision making process for establishing new faculty positions.

TABLE 17

DOMINANT DECISION MAKING ROLE IN THE AUTHORIZATION PROCESS FOR NEW FACULTY POSITIONS

University	President	Vice-President for Academic Affairs	Deans' Council[a]
A	x		
B		x	
C		x	
D			x
E			x
F			x

[a]Composed of Academic Vice-President and the Deans of the College

The next table outlines the basic criteria which is utilized in determining which departments will be allocated new faculty positions.

The following table indicates that some system of quantitative analysis is being utilized in all universities as a part of the decision making process for establishing new positions. While the university administrators who were interviewed all denied utilizing the Coordinating Board

formula for allocating resources for faculty salaries, it was apparent that these same administrators were utilizing credit hour production and student/faculty ratios as the two main criteria in the establishment of new faculty positions.

TABLE 18

CRITERIA UTILIZED IN THE DETERMINATIONS OF NEW FACULTY POSITIONS

University	Growth of Credit Hour Production	Full-time Equivalent Student to Full-time Equivalent Ratio	Special Program Needs
A	x		x
B		x	x
C	x		x
D		x	x
E	x		x
F	x	x	x

Faculty Promotions

A second major function in the development of the faculty budget is in the determination of which faculty members will be awarded promotions. All of the Universities involved in the study have promotion policies which outline the educational and experience requirements which a faculty member must possess before being eligible for a faculty promotion.

Table number nineteen indicates the administrators or administrative groups which participate in the decision making process for faculty promotions. In all cases the higher administrative level may exercise veto power over any lower administrative level.

Table number twenty outlines the administrator or the administrative group which plays the dominant role in the determination of the level of salary increase that will be awarded for a promotion. It also indicates whether or not a fixed or a variable amount of money is allocated for a faculty promotion.

Salary Increases

The third major process which is involved in the development of the faculty salary budget is in the determination of the level of salary increases which will be awarded to faculty members currently employed by the Universities participating in this study. There are two basic decision making processes which occur in this phase of building the faculty budget. The first decision is involved with developing the budgetary guidelines for implementing faculty salary increases. These guidelines outline ranges of dollar increases for specific ranks, dictate salary increases which will be awarded for each rank, and/or suggest the parameters which will be allowed in the awarding of faculty salary increases.

TABLE 19

ADMINISTRATOR OR ADMINISTRATIVE GROUPS WHICH PARTICIPATE IN THE DECISION MAKING PROCESS FOR FACULTY PROMOTIONS

UNIVERSITY	PRESIDENT	VICE PRESIDENT'S COUNCIL	VICE PRESIDENT FOR ACADEMIC AFFAIRS	DEANS' COUNCIL	COLLEGE DEAN	DEPARTMENT HEAD
A	x	x			x	x
B			x		x	x
C			x			
D					x	x
E				x[1]	x	x
F		x	x		x	x

[1]Only participates in regard to the rank of Professor.

TABLE 20

THE ADMINISTRATOR OR ADMINISTRATIVE GROUP WHICH PERFORMS THE DOMINATE DECISION MAKING ROLE IN THE AWARDING OF SALARY INCREASES FOR FACULTY PROMOTIONS

UNIVERSITY	PRESIDENT	VICE PRESIDENT'S COUNCIL	VICE PRESIDENT FOR ACADEMIC AFFAIRS	DEANS' COUNCIL	COLLEGE DEAN	DEPARTMENT HEAD
A	x[1]					
B			x[2]			
C			x[2]			
D				x[1]		
E				x[2]		
F		x[2]				

[1]Indicates a variable dollar amount awarded for promotion.

[2]Indicates a fixed dollar amount awarded for promotion.

Table number twenty-one indicates the administrator or administrative group which has the dominant decision making role in the development of budgetary guidelines for faculty salary increases.

TABLE 21

ADMINISTRATOR OR ADMINISTRATIVE GROUP WHICH FUNCTIONS IN THE DOMINANT DECISION MAKING ROLE IN THE DEVELOPMENT OF THE BUDGETARY GUIDELINES FOR FACULTY SALARY INCREASES

University	President	Vice-President Council	Academic Vice-President	Deans' Council
A	x			
B			x	
C			x	
D				x
E				x
F		x		

Table number twenty-two outlines the administrator or the administrative group which plays the dominant decision making role in the implementation of the budgetary guidelines for increasing faculty salaries. University A was omitted from the table since the dominant role cannot be identified because Department Heads, College Deans, Academic Vice-President, and President all posseses equal rating status for a particular faculty member.

TABLE 22

ADMINISTRATOR OR ADMINISTRATIVE GROUP WHICH FUNCTIONS IN THE DOMINANT DECISION MAKING ROLE IN THE IMPLEMENTATION OF THE BUDGETARY GUIDELINES REGARDING FACULTY SALARY INCREASES

University	Vice-President's Council	Department Heads
B		x
C		x
D		x
E		x
F	x	

Table number twenty-three outlines the nature of the budgetary policies for increasing faculty salaries. While the table indicates that University E employees a fixed salary increase by rank, it should be noted that a small percentage of faculty members within each academic rank are awarded merit salary increases as indicated in the Case Study.

Departmental Operating Funds

The administrators of the universities involved in the study all indicated that the general assumption was made that the current departmental budgets for departmental operating funds would provide the base figures for the development of the new departmental operating fund budgets.

Therefore, the academic department heads could assume that for the new budget year their departments would

TABLE 23

METHODOLOGY BY WHICH UNIVERSITIES AWARD SALARY INCREASES FOR FACULTY MEMBERS

UNIVERSITY	FIXED DOLLAR AMOUNT FOR EACH RANK	INCREMENTAL INCREASES WHICH VARY WITHIN RANKS AND BY RANKS	MAXIMUM SALARY INCREASE RANGE FOR EACH RANK	MAXIMUM AND MINIMUM SALARY INCREASE RANGE FOR EACH RANK
A		x		
B			x	
C				x
D		x		
E		x		
F	x			

receive at least the present level of funding for departmental operating funds. The only exceptions to this assumption were in the cases where one-time budget items were approved for specific purchases of special equipment. The decision making process in regard to departmental operating fund budgets is then centered around the manner in which the level of new monies for departmental operating funds is allocated for each university.

Table twenty-four indicates the administrator or administrative group within each university which has the dominant role in the decision making process for the allocation of the departmental operating funds.

TABLE 24

DOMINANT DECISION MAKING ROLE IN THE ALLOCATION OF DEPARTMENTAL OPERATING FUNDS

University	Vice-President for Academic Affairs	Vice-President for Finance	Deans' Council
A		x	
B	x		
C	x		
D		x	
E			x
F		x	

TABLE 25

ADMINISTRATIVE CHANNELS THROUGH WHICH THE DEPARTMENTAL OPERATING FUNDS FLOW

UNIVERSITY				
A	Vice-President for Finance	Academic Vice-President	College Dean	Department Head
B		Academic Vice-President	College Dean	Department Head
C		Academic Vice-President	College Dean	Department Head
D			Vice-President for Finance	Department Head
E		Deans' Council	College Dean	Department Head
F		Vice-President for Finance	College Dean	Department Head

In all six universities the academic department heads were the originators of the requests for the departmental operating budgets. These requests were then submitted through channels to the individual who had the final decision making authority for the development of the departmental operating funds budget as indicated in Table twenty-two. Table number twenty-three outlines the administrative channels which the departmental operating fund budgets are submitted.

The case studies reveal that in five of the Universities the department heads were required to submit written justifications for any requested increases in departmental operating funds for the new budget year. In all cases these justifications were subjective in nature. In no case was any type of formula utilized in the allocation process for departmental operating funds.

Summary

This chapter presents descriptions of the budgetary processes by which the six universities involved in this study internally allocate monies for faculty salaries and departmental operating funds. All of the institutions followed a similar format in the distribution of funds to support academic departments.

In all institutions the general assumption was made that the current patterns of expenditures for faculty salaries and departmental operating funds would provide the base figures for the development of the subsequent budget for

these budgetary categories. Therefore, the major budgetary decision making processes were involved in allocating new monies which the state appropriations provided for the support of the academic departments within these institutions.

Allocation of funds for faculty salaries were involved in three areas: new faculty positions, faculty promotions, and salary increase for existing faculty. This study indicates that there were differences between institutions in the decision making processes and budgetary policies for determining the level of new monies that would be allocated within the areas of faculty salaries.

The study revealed that the major differences between institutions in the distribution of new monies for departmental operating funds were where the locus of decision making for the distribution of such funds was located. In all cases the allocation of new resources for departmental operating funds was based on subjective judgments. No institutions utilized any type of formula for the distributing of departmental operating funds.

CHAPTER V

PROCEDURE FOR RECONCILIATION OF EXPENDED FUNDS FOR FACULTY SALARIES AND DEPARTMENTAL OPERATING FUNDS TO FORMULA PRODUCED FUNDS

The purpose of this chapter is to account for the dollar differences between the formula produced funds and the actual expenditure of the funds by program area within each of the six institutions. Tables three through sixteen in Chapter III indicate these dollar differences for each university.

The explanation of the Texas formula system in Chapter III pointed out that the two variables of the formula for faculty salaries are average faculty salaries and full-time student/teacher ratios by program areas. By multiplying the student/teacher ratio by the number of credit hours which the formula defines as a full-time student, one can determine the number of credit hours that a full-time faculty member is required to produce.

In order to examine the differences between formula produced funds and expenditures for faculty salaries it was

necessary to gather actual data which could be compared to the variables in the faculty salary formula. Therefore, the following information for the year 1969-70 was collected for each university involved in the study.

1. The number of full-time faculty members and average faculty salary by program area was secured from institutional operating budgets.

2. The average credit hour production figures per faculty member by program area were collected. The total credit hour production figures were obtained from credit hour production reports which were submitted to the Coordinating Board, Texas College and University System. The number of full-time faculty members by program area were divided into these credit hour totals.

3. A single average faculty salary figure for all academic levels by program area was determined for each institution. This weighted average figure was calculated by multiplying the number of full-time faculty members allowed by the formula for each academic program and level times the formula average faculty salary. This product was then divided by the total number of faculty members which the formula allowed for the number of credit hours produced during the base period.

4. A full-time faculty credit hour production figure as per the state formula was calculated for each academic area. This weighted average figure was developed by

multiplying the number of full-time faculty members within each academic area times the full-time faculty credit hour production for each academic level as specified in the state formula. This product was then divided by the total full-time faculty members within each academic program that the credit hour production in the base period allowed.

Tables twenty-six through thirty-one provide the information described above for each institution involved in this study. By utilizing the information provided in these tables it is possible to reconcile the dollar differences between the amount of resources that were expended for faculty salaries and the funds that were produced by the state formula within the program areas for these six universities.

The following explanation and calculations utilizing the data contained in Tables twenty-six through thirty-one outline in detail the circumstances which caused the dollar differences to occur between expended dollars and formula produced dollars for faculty salaries within program areas. The Liberal Arts program area in University A is utilized as an example for these calculations. The same data treatment can be applied for any of the program areas involved in this study.

TABLE 26

UNIVERSITY A

A LISTING OF VARIABLES UTILIZED IN FORMULA FOR FACULTY SALARIES

PROGRAM AREAS	NUMBER OF FULL-TIME FACULTY MEMBERS	AVERAGE FACULTY CREDIT HOUR PRODUCTION (ACTUAL)	AVERAGE FACULTY CREDIT HOUR PRODUCTION (FORMULA)	AVERAGE FACULTY SALARY (ACTUAL)	AVERAGE FACULTY SALARY (FORMULA)
Liberal Arts	114.07	696	542	$10,337	$ 9,180
Science	26.17	548	535	$12,287	$10,020
Fine Arts	22.67	330	288	$10,737	$ 8,810
Teacher Ed.	39.41	652	438	$11,072	$ 8,485
Agriculture	9.00	472	448	$11,971	$ 9,705
Physical Training	6.33	546	570	$ 9,784	$ 8,071
Business	28.00	570	545	$11,136	$ 9,205

TABLE 27

UNIVERSITY B

A LISTING OF VARIABLES UTILIZED IN FORMULA FOR FACULTY SALARIES

PROGRAM AREAS	NUMBER OF FULL-TIME FACULTY MEMBERS	AVERAGE FACULTY CREDIT HOUR PRODUCTION (ACTUAL)	AVERAGE FACULTY CREDIT HOUR PRODUCTION (FORMULA)	AVERAGE FACULTY SALARY (ACTUAL)	AVERAGE FACULTY SALARY (FORMULA)
Liberal Arts	186.24	644	540	$10 318	$ 9,190
Science	48.65	575	532	$11,138	$10,025
Fine Arts	29.50	295	285	$10,818	$ 8,815
Teacher Ed.	45.75	510	440	$11,351	$ 8,475
Agriculture	16.66	450	445	$12,108	$ 9,710
Physical Training	10.25	536	570	$ 9,681	$ 8,071
Business	32.50	670	551	$ 9,797	$ 9,190

TABLE 28

UNIVERSITY C

A LISTING OF VARIABLES UTILIZED IN FORMULA FOR FACULTY SALARIES

PROGRAM AREAS	NUMBER OF FULL-TIME FACULTY MEMBERS	AVERAGE FACULTY CREDIT HOUR PRODUCTION (ACTUAL)	AVERAGE FACULTY CREDIT HOUR PRODUCTION (FORMULA)	AVERAGE FACULTY SALARY (ACTUAL)	AVERAGE FACULTY SALARY (FORMULA)
Liberal Arts	187.12	640	531	$10,720	$ 9,263
Science	52.22	575	496	$11,381	$10,146
Fine Arts	40.13	382	288	$10,117	$ 8,814
Teacher Ed.	83.55	417	343	$11,522	$ 9,304
Agriculture	8.25	494	446	$12,336	$ 9,727
Physical Training	10.53	480	570	$10,490	$ 8,071
Business	36.18	570	543	$10,288	$ 9,265

TABLE 29

UNIVERSITY D

A LISTING OF VARIABLES UTILIZED IN FORMULA FOR FACULTY SALARIES

PROGRAM AREAS	NUMBER OF FULL-TIME FACULTY MEMBERS	AVERAGE FACULTY CREDIT HOUR PRODUCTION (ACTUAL)	AVERAGE FACULTY CREDIT HOUR PRODUCTION (FORMULA)	AVERAGE FACULTY SALARY (ACTUAL)	AVERAGE FACULTY SALARY (FORMULA)
Liberal Arts	140.00	750	541	$11 088	$ 9,240
Science	44.45	650	528	$10,836	$10,059
Fine Arts	42.13	305	291	$10,287	$ 8,799
Teacher Ed.	44.69	481	432	$11,715	$ 8,496
Agriculture	13.66	453	438	$11,956	$ 9,760
Physical Training	11.82	504	470	$10,803	$ 8,071
Business	33.86	689	547	$10,462	$ 9,208

TABLE 30

UNIVERSITY E

A LISTING OF VARIABLES UTILIZED IN FORMULA FOR FACULTY SALARIES

PROGRAM AREAS	NUMBER OF FULL-TIME FACULTY MEMBERS	AVERAGE FACULTY CREDIT HOUR PRODUCTION (ACTUAL)	AVERAGE FACULTY CREDIT HOUR PRODUCTION (FORMULA)	AVERAGE FACULTY SALARY (ACTUAL)	AVERAGE FACULTY SALARY (FORMULA)
Liberal Arts	101.65	775	538	$10,219	$ 9,220
Science	29.38	620	534	$11,881	$10,022
Fine Arts	25.40	345	285	$10,237	$ 8,820
Teacher Ed.	44.70	490	450	$11,202	$ 8,490
Agriculture	15.60	535	479	$11,460	$ 9,590
Physical Training	13.33	354	570	$ 9,790	$ 8,071
Business	41.95	653	525	$10,056	$ 9,326

TABLE 31

UNIVERSITY F

A LISTING OF VARIABLES UTILIZED IN FORMULA FOR FACULTY SALARIES

PROGRAM AREAS	NUMBER OF FULL-TIME FACULTY MEMBERS	AVERAGE FACULTY CREDIT HOUR PRODUCTION (ACTUAL)	AVERAGE FACULTY CREDIT HOUR PRODUCTION (FORMULA)	AVERAGE FACULTY SALARY (ACTUAL)	AVERAGE FACULTY SALARY (FORMULA)
Liberal Arts	161.65	680	555	$10,286	$ 9,155
Science	50.42	573	534	$10,688	$10,021
Fine Arts	31.68	410	298	$10,593	$ 8,770
Teacher Ed.	52.80	569	455	$11,631	$ 8 450
Agriculture	6.81	495	479	$11 423	$ 9,590
Physical Training	16.60	492	570	$10,116	$ 8,071
Business	19.90	672	552	$10,291	$ 9,189

Reconciliation of the Dollar Differences Between Expended Dollars and Formula Produced Dollars for Faculty Salaries Within the Liberal Arts Program Area in University A

The actual expenditures for faculty salaries within the Liberal Arts program area in University A in the year 1969-70 was $168,877 less than the amount of funds which the state formula produces for University A's Liberal Arts program area (Table three). Table twenty-six indicates the following information regarding the Liberal Arts program area for University A.

Number of Full-time Faculty Members.	114.07
Actual Average Faculty Credit Hour Production	696.00
Formula Average Faculty Credit Hour Production	542.00
Actual Average Faculty Salary	$10,337.00
Formula Average Faculty Salary	$ 9,180.00

It is apparent that the actual average credit hour production figure is higher than the credit hour production as allowed by the state formula. This indicates that within the Liberal Arts program area for University A that fewer faculty members were employed than the state formula allowed for the number of credit hours that were produced within this program. Less money was expended for faculty positions than would have been expended for faculty positions if University A had employed the state formula system in the

determination of the number of faculty position for the Liberal Arts program area. In order to determine how much money University A under-expended for faculty positions in relation to the state formula system the following calculations must be made.

1. Subtract the formula average faculty credit hour production figure from the actual average faculty credit hour production figure.

696-542 = 154

2. Multiply this difference times the total number of faculty members in the Liberal Arts program area in University A.

154 x 114.07 = 17,567

3. Divide this total number of credit hours that the Liberal Arts faculty members produced above the formula figure by the formula average faculty credit hour production figure.

17,567 ÷ 541 = 32.4

4. Multiply this total additional faculty position figure which would have been allowed by the state formula times the formula average faculty salary to determine the total amount of money that University A is under expending for faculty salaries within the Liberal Arts program area based on credit hour production.

32.4 x $9,180 = $297,523

In examining the data regarding the Liberal Arts program for University A it is obvious that the actual average faculty salary ($10,337) is higher than the state formula utilizes ($9,180). This indicates that more dollars were expended to increase the average faculty salary within the Liberal Arts program that the state formula would have allowed if this formula had been employed in the allocation of funds. In order to determine the extent of this over expenditure the following steps must be taken.

1. Subtract the formula average faculty salary from the actual average faculty.

$$\$10,337 - \$9,180 = \$1,157$$

2. Multiply this difference times the total number of faculty members which were employed within the Liberal Arts program area in order to determine the over expenditure of funds for average faculty salaries over the formula figure for average faculty salaries.

$$\$1,157 \times 114.07 = \$131,979$$

The next step in this reconciliation process is to examine the net dollar figures in the comparison of actual average faculty credit hour production to formula average faculty credit hour production and in the comparison of actual average faculty salary to formula average faculty salary.

The comparison of actual credit hour production to formula credit hour production indicated that University A has under-expended the following amount for faculty salaries based on the state formula criteria hour production criteria. . $ -297,523

The comparison of actual average faculty salary to the formula average faculty salary indicated that University A has over expended the following amount for faculty salaries based on the state formula criteria for average faculty salaries . . . . . $ +131,979

The net figure which University A under expended for faculty salaries for Liberal Arts when compared to the state formula system is as follows. . . . . $ -165,544

This figure of $ -165,544 compares to the figure of $ -168,877 which was taken from Table three.

This same process can be followed for each program area within these six institutions. This analysis indicates the effect of the two variables (faculty credit hour production and average faculty salary) on causing the actual allocation of resources to differ from the state formula system of resource allocation for faculty salaries.

There is no method for describing the dollar differences between funds expended for departmental operating costs and the amount of monies that were produced by the state formula for departmental operating funds. As described in Chapter III the formula for departmental operating funds was developed as a dollar amount per credit hour produced for each program area. There are no variables within the formula which can be analyzed. The case studies for all six universities indicate that the allocation processes for distributing

resources for departmental operating funds were all based on subjective judgments. No institutional formula systems were utilized.

Summary

In examining the dollar differences between actual expenditures for faculty salaries within academic program areas to the dollars which were produced by the state formula system it is necessary to compare the components of the state formula system to the actual data for each program area. The two variables of the faculty formula system are credit hour production per faculty member and average faculty salary.

Chapter V provides actual data regarding these two variables for each program area within these six universities. A process is described in this chapter which provides a method for reconciling the differences between the actual expenditure of funds for faculty salaries and the formula produced amounts. This process emphasizes the interaction of the two variables of credit hour production and average faculty salary and the effect that these components have on the allocation process.

There is no methodology for explaining the dollar differences between allocations for departmental operating funds and the amounts of monies that the state formula produces for departmental operating funds. The fact that this formula has no internal variables precludes any mathematical calculation to explain any differences.

CHAPTER VI

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

In public colleges and universities there are two major allocations of resources that are made for each budgetary period. The first allocation of funds is made at the state level where some system is utilized to distribute state monies to colleges and universities. The second allocation is effected by each institution as it distributes available resources to its various program units.

In the state of Texas a formula system is utilized at the state level for allocating funds to the state's institutions of higher education. There is, however, no requirement that this formula system be implemented at the institutional level for the allocation of resources within the state's colleges and universities. Therefore, the purpose of this study is to investigate the budgetary processes by which financial resources are allocated to support the academic departments within six public universities in Texas.

The two budgetary categories in the state appropriations bill that directly support the academic departments of the public universities in Texas are faculty salary monies

and departmental operating funds. This study involved these two categories of funds.

The budgetary period which this study covered was the academic year 1969-70. This period was selected because the appropriations bill provided full funding of the formula for faculty salaries and departmental operating funds for this budget year. Therefore, highly systemized formula developed funds which were fully appropriated could be compared to the actual operating budgets for this period of time.

Findings

The Texas state formula budgetary system for faculty salaries and departmental operating funds are based on a unit cost rationale. The unit which is identified and to which a dollar figure is attached is a "credit hour." The formula for faculty salaries utilize the variables of average faculty salary and full-time student/teacher ratio for each academic program area.

The state formula for departmental operating funds provides dollar amounts for credit hours produced during the base period. These dollar amounts were initially developed by analyzing the level of funds which institutions had historically allocated for departmental operating funds. Adjustments are made to this formula for each budgetary period.

The level of funds which are generated by the state formula system are calculated by multiplying the appropriate

formula figure by the number of credit hours that each institution produced during the "base period." The "base period" is the full fiscal year preceding the year for which the appropriations are calculated.

Tables were developed for each program area within the six universities which indicated the dollar and percentage differences between the amounts that were appropriated for faculty salaries and departmental operating funds and the actual amounts that were expended by each institution for the academic year 1969-70. Dollar differences of considerable magnitude did occur in several program areas for both faculty salaries and departmental operating funds.

Chapter IV presents descriptions of the budgetary processes by which resources are allocated for faculty salaries and departmental operating funds. This information was secured by this writer conducting on-campus interviews with key administrators of each of the six universities involved in this study.

All six universities utilized a common methodology for internally allocating resources for faculty salaries. These budgetary processes took the following steps:

1. Deduct the current faculty salary budget from the total amount of funds available for faculty salaries.
2. Determine the dollar amounts which will be allocated for new faculty positions.

3. Determine the dollar amounts which will be allocated for faculty promotions.
4. Determine the level of salary increases for the existing faculty.
5. The current budget plus the dollar amounts allocated for new faculty positions, faculty promotions and faculty salary increases comprise the faculty salary budget for the future year.

As outlined in the above format the initial phase of the budget building process is to determine the level of monies which will be available for increasing the current faculty salary budget. In all cases the administrators of the universities participating in the study made the general assumption that the current faculty salary budget is the basic building block for the new budget. In all cases the current faculty salary budgets were deducted from the total appropriations for faculty salaries. The amounts remaining were considered as being available for increasing the faculty salary budgets for the ensuing year.

This method of "incremental budgeting" which is employed by all six universities involved in this study would cause the allocation of resources for faculty salaries to be different from resource allocations had these institutions utilized the state formula system in distributing funds for faculty salaries. Since incremental budgeting assumes the current budget to be the starting point in the development

of the new budget, budgetary differences between formula produced funds and actual expenditures tend to be perpetuated with the exception of funds allocated for new faculty positions.

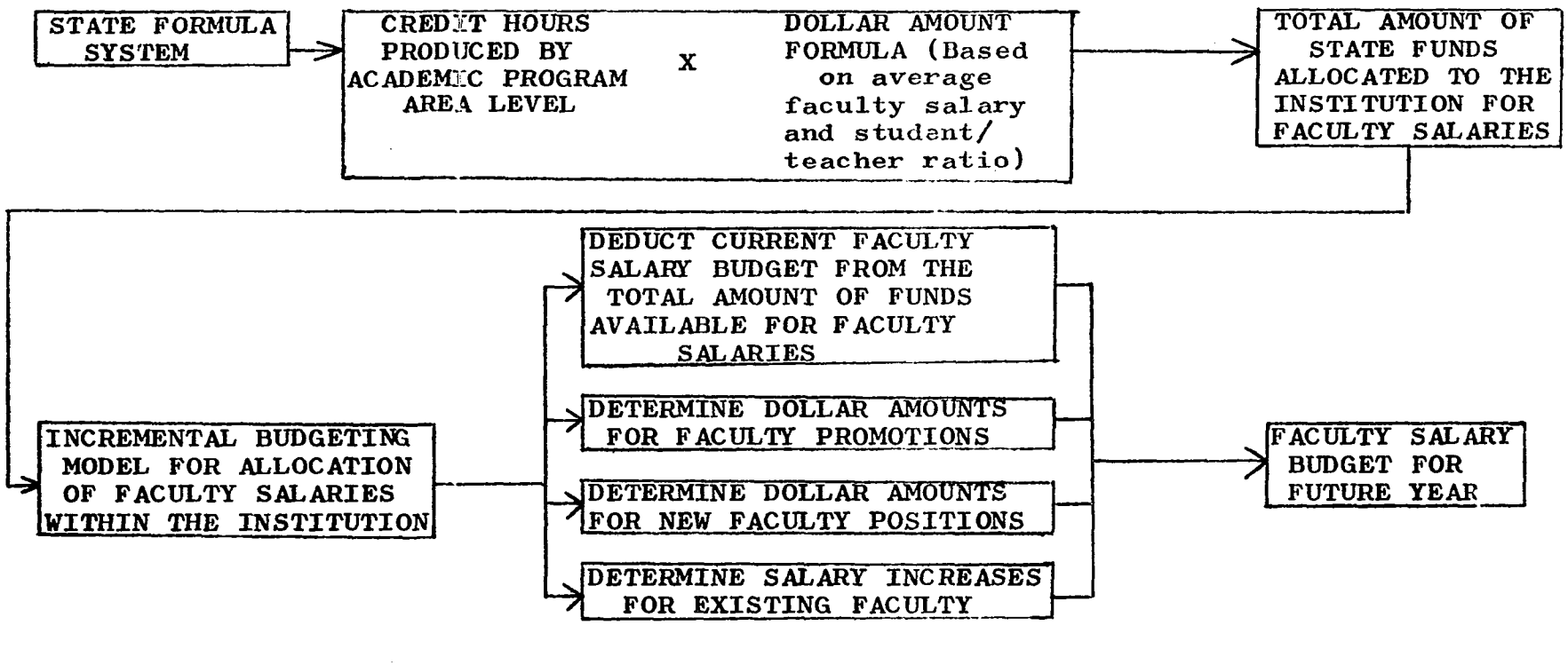
The flow chart in Table thirty-two indicates the relationship of the state formula system to the incremental budgeting system which is employed by these institutions. The descriptions of the budgetary processes by which funds are distributed for faculty salaries within these six universities provide information regarding the allocation of resources for new faculty positions, salary increases for faculty promotions, and salary increases for existing faculty.

1. New Faculty Positions - In all six universities some system of quantitative analysis is being utilized as a part of the decision making process for establishing new faculty positions. Credit hour production and student/faculty ratios of the academic departments were the two main criteria which administrators used in deciding in which departments justifications could be made for additional faculty positions. While the university administrators who were interviewed for this study all denied utilizing the Coordinating Board formula for allocating resources for faculty salaries it was apparent that a substantial amount of quantifiable data was being utilized in determining the departmental location for new faculty positions and that the data which was utilized was the same that is found in the state formula system.

Since there is a close similarity between the decision

TABLE 32

FLOW CHART INDICATING THE FUNDING PROCESS FOR FACULTY SALARIES AND THE INCREMENTAL BUDGETING MODEL FOR ALLOCATION OF FACULTY SALARIES WITHIN THE INSTITUTION



making process for establishing new faculty positions within these institutions and the manner by which the state formula develops funds for faculty salaries, funds which are allocated for new positions will help bring the total faculty salary allocation closer to the state formula levels. This will be particularly true over a span of several years.

2. Faculty Promotions - All of the universities involved in this study have promotion policies which outline the educational and experience requirements which a faculty member must possess before being eligible for a faculty promotion. These policies stipulate that faculty members must hold a particular degree, in most cases the earned doctorate, and be in rank for a fixed number of years before being eligible for promotion. The promotion policies of these institutions also stipulate that salary increases are tied to faculty promotions.

Resources allocated to a department for salary increases for faculty promotions are not related to the credit hour productivity of that department. This aspect of the institutions' budgeting processes could cause dollar differences to occur between the state formula system budgeting and the actual budgeting procedures which are employed in these universities. Resources could be allocated to an academic department for faculty salary increases even though the credit hour productivity of the department did not increase or that it decreased. This would not have been possible if

the state formula system had been utilized for the allocation of resources within the institution.

3. Salary Increases for Existing Faculty - In all of the universities greater salary increases were awarded to faculty members holding the rank of Professor with correspondingly lesser increases awarded to Associate Professors, Assistant Professors and Instructors. Salary increases were in no way tied to credit hour productivity. As in the case of faculty promotions these budgetary processes for awarding faculty salary increases may allocate funds to a department for faculty salary increases even though the department produced no additional credit hours. If the state formula system had been employed as a methodology of allocating faculty salary funds within an institution no additional resources could be allocated to a department if its credit hour productivity had not increased.

The budgeting processes which are utilized by these six universities for allocating resources for faculty salaries are different systems from the state formula system. While more quantifiable data such as credit hour production and student/teacher ratios are being utilized in awarding new faculty positions to academic departments, the incremental budgeting processes which are employed by these six universities are not tied to productivity. The administrators of the institutions all denied use of the state formula system as a means of allocating funds for faculty salaries. This study verifies this fact.

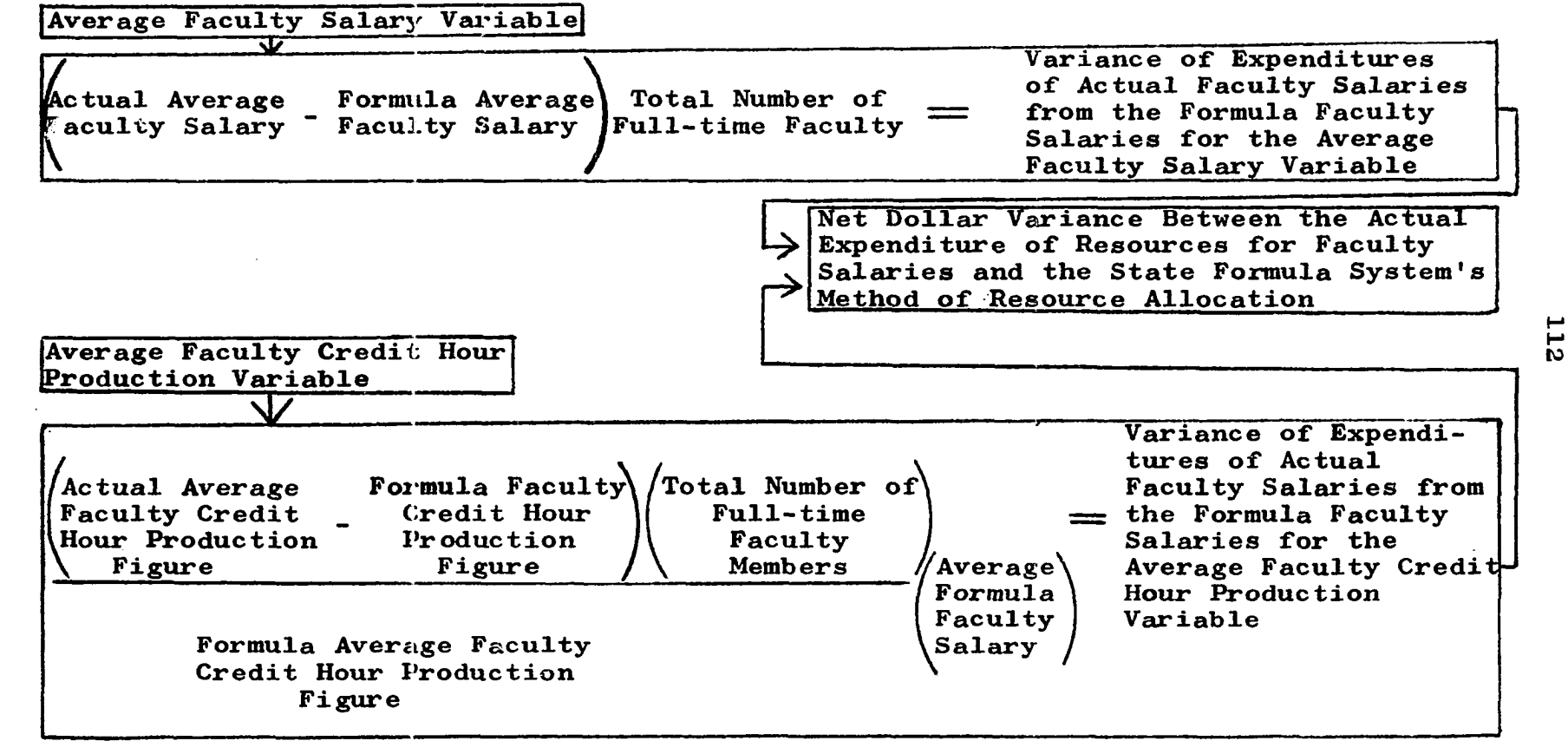
These six universities do not use the state formula system for distributing monies for departmental operating funds. In all cases the decision making processes for allocating resources for departmental operating funds are based on subjective judgments. No credit hour production information was utilized by any of the six universities in the allocation of resources for departmental operating funds.

Chapter V describes a methodology which reconciles the faculty salary dollar differences between the formula produced funds and the actual expenditure of the funds by program area within each of the six institutions. Table thirty-three provides the formula for reconciling these differences. The following institutional data for each academic program area was secured so that it could be compared to the variables within the state formula system; the number of full-time faculty members the average faculty salary and the average credit hour production per faculty member.

This data was utilized to compare the average faculty salary and the average faculty credit hour production figures for each academic program area to the corresponding variables in the state formula system. These comparisons indicated that the institutions average faculty salaries and the faculty credit hour production figures in several program areas did differ from these variables as allowed in the state formula system. These differences did cause the variances between

TABLE 33

FORMULA FOR RECONCILING THE FACULTY SALARY DOLLAR DIFFERENCE BETWEEN THE FORMULA PRODUCED FUNDS AND THE ACTUAL EXPENDITURE OF FUNDS FOR FACULTY SALARIES FOR AN ACADEMIC AREA



the actual allocation of resources for faculty salaries and the state formula system methodology of resource allocation.

Conclusions

This study has examined the budgetary processes by which administrators in six universities have allocated resources to support the academic departments within these institutions. A common pattern of incremental budgeting for faculty salaries and departmental operating funds has been identified which is utilized by all of the institutions involved in this study. Comparisons of the internal budgeting processes of these institutions to the methodology of the state formula system emphasize the fact that administrators feel that budgeting by function is a superior method of resource allocation than that of objective budgeting which is tied to credit hour productivity. Administrators of the universities all expressed the view that the state formula system is a rational and equitable system for distribution of resources at the state level, but that it is not applicable for use in the internal budgeting processes within the institutions.

It is apparent, however, that while the administrators of these institutions denied the use of the state formula system for internal budgeting, these same administrators are utilizing quantifiable data in their budgetary decision making processes. The most common data which is being used is credit hour production which is the major variable of the

state formula system. Therefore, it can be concluded that the internal budgeting procedures within these institutions are being influenced by the state formula system. Despite the fact that biennium budget requests follow a program budget design, incremental budgeting variables almost entirely influence the allocation process at the institutional level.

Recommendations

Findings of this study support the following recommendations:

1. Further research is needed in the development of more refined normative standards in the area of departmental operating expenses. The magnitude of such budget allocations for departmental operating funds warrant considerable study of the various expenditure classifications included in the budgetary categories of labor, supplies and services and equipment.

2. Research is needed in the area of faculty productivity other than a simple measure of credit hour production. This type of measurement excluded any evaluation of quality.

3. Additional research is needed regarding the budgetary decision making processes which are employed at the academic departmental level. Academic Department Heads play major roles in influencing the total budget for faculty salaries and departmental operating funds.

4. Additional research might also include investigation of the resource allocation patterns of departments which

are regarded as "centers of excellence" to determine the extent to which the budgets of such departments deviate from "equitable" levels suggested by objective budgetary procedures.

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