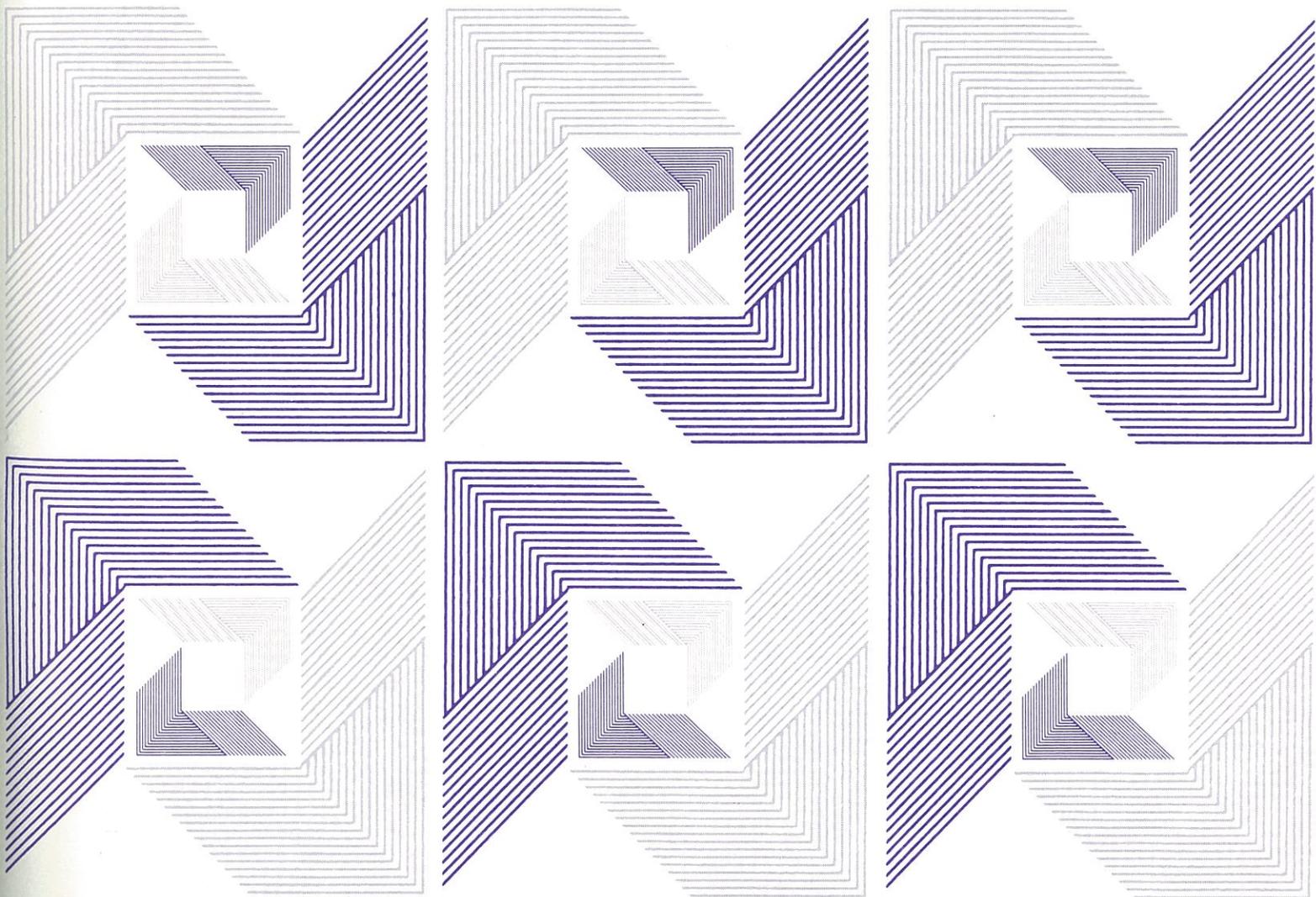


REPORT NO. 84-11
FEBRUARY 1984

STUDY OF THE HAWAII PROGRAM OF THE WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

A REPORT TO THE LEGISLATURE OF THE STATE OF HAWAII



SUBMITTED BY THE LEGISLATIVE AUDITOR OF THE STATE OF HAWAII

THE OFFICE OF THE LEGISLATIVE AUDITOR

The office of the legislative auditor is a public agency attached to the Hawaii State legislature. It is established by Article VII, Section 10, of the Constitution of the State of Hawaii. The expenses of the office are financed through appropriations made by the legislature.

The primary function of this office is to strengthen the legislature's capabilities in making rational decisions with respect to authorizing public programs, setting program levels, and establishing fiscal policies and in conducting an effective review and appraisal of the performance of public agencies.

The office of the legislative auditor endeavors to fulfill this responsibility by carrying on the following activities.

1. Conducting examinations and tests of state agencies' planning, programming, and budgeting processes to determine the quality of these processes and thus the pertinence of the actions requested of the legislature by these agencies.
2. Conducting examinations and tests of state agencies' implementation processes to determine whether the laws, policies, and programs of the State are being carried out in an effective, efficient, and economical manner.
3. Conducting systematic and periodic examinations of all financial statements prepared by and for all state and county agencies to attest to their substantial accuracy and reliability.
4. Conducting tests of all internal control systems of state and local agencies to ensure that such systems are properly designed to safeguard the agencies' assets against loss from waste, fraud, error, etc.; to ensure the legality, accuracy, and reliability of the agencies' financial transaction records and statements; to promote efficient operations; and to encourage adherence to prescribed management policies.

5. Conducting special studies and investigations as may be directed by the legislature.

Hawaii's laws provide the legislative auditor with broad powers to examine and inspect all books, records, statements, documents, and all financial affairs of every state and local agency. However, the office exercises no control functions and is restricted to reviewing, evaluating, and reporting its findings and recommendations to the legislature and the governor. The independent, objective, and impartial manner in which the legislative auditor is required to conduct his examinations provides the basis for placing reliance on his findings and recommendations.



LEGISLATIVE AUDITOR

LEGISLATIVE AUDITOR
KEKUANAO'A BUILDING, RM. 500
465 SOUTH KING STREET
HONOLULU, HAWAII 96813

STUDY OF THE HAWAII PROGRAM
OF THE
WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

A Report to the Legislature of the State of Hawaii

Submitted by the
Legislative Auditor of the State of Hawaii

Report No. 84—11
February 1984

FOREWORD

TABLE OF CONTENTS

Through adoption in the 1983 session of Senate Concurrent Resolution Number 92, the Hawaii State Legislature requested the Legislative Auditor to conduct a "comprehensive study and review" of Hawaii's participation in the Western Interstate Commission for Higher Education (WICHE), with particular reference to the Professional Student Exchange Program (PSEP). This study represents the response to this legislative request.

The study is divided into three parts. Part I contains an introduction and some background information on WICHE and PSEP and Hawaii's participation in them. Part II constitutes the bulk of the report and contains an examination of the operation of PSEP as it affects Hawaii. In this part, we focus upon various areas and aspects of PSEP where the Legislature expressed interest and concern in its resolution requesting the study. Part III reviews policy considerations relating to PSEP and WICHE. It is in this part that we set forth our general findings and recommendations concerning PSEP and WICHE.

We wish to express our sincere appreciation for the cooperation and assistance extended to our staff by WICHE headquarters in Boulder, Colorado, present and past Hawaii WICHE commissioners, various officials and staff personnel of the University of Hawaii, representatives of various professional groups to the Hawaii WICHE commission, professional schools or programs participating in PSEP which responded to our survey, Hawaii PSEP students who provided us with information on their financial situation, and WICHE personnel from other states to whom we directed inquiries and requests for information.

Original Role of PSEP	Clinton T. Tanimura	19
Subsequent Development	Legislative Auditor	21
Present Role of PSEP	State of Hawaii	23

February 1984

TABLE OF CONTENTS

<i>Chapter</i>		<i>Page</i>
PART I		
INTRODUCTION AND BACKGROUND		
1	INTRODUCTION	3
	Objectives of the Study	3
	Scope of the Study	4
	Organization of the Report	5
2	BACKGROUND	7
	Establishment of WICHE	7
	A Description of WICHE	9
	A Description of the Professional Student Exchange Program (PSEP)	12
PART II		
AN EXAMINATION OF THE OPERATION OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM AS IT AFFECTS HAWAII		
3	INTRODUCTION	17
4	THE ROLE OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM WITHIN HAWAII'S OVERALL PROGRAM OF HIGHER EDUCATION	19
	Original Role of PSEP	19
	Subsequent Developments Affecting PSEP	21
	Present Role of PSEP	23

<i>Chapter</i>	<i>TABLE OF CONTENTS</i>	<i>Page</i>
5	FINANCING OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM	29
	Placement of PSEP in the State Budget	29
	The Three Major Variables Affecting the Cost of PSEP	31
	Source of Funding for PSEP Support Fees	39
	Fiscal Impact of PSEP on WICHE Member States	41
6	PROGRAM ELIGIBILITY AND ACCESSIBILITY UNDER THE PROFESSIONAL STUDENT EXCHANGE PROGRAM	43
	Determination of Program Eligibility	43
	The Role of PSEP in Assuring Program Accessibility	51
7	RELATIONSHIP OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM TO EMPLOYMENT OPPORTUNITIES AND MANPOWER NEEDS IN HAWAII	63
	Interaction Between Academic Programs and Concerns About Employment	63
	Assessment of Present Situation	68
8	COSTS AND FINANCING OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM FROM THE PERSPECTIVE OF PROGRAM PARTICIPANTS	79
	Benefits and Costs for Program Participants	79
	Comparison with Benefits and Costs to Students in Professional Education Programs at the University of Hawaii	86
	Implications of Proposed Changes to Require the Payback of PSEP Support Fees or to Discontinue PSEP	89

PART III

POLICY CONSIDERATIONS
RELATING TO HAWAII'S PARTICIPATION IN THE
PROFESSIONAL STUDENT EXCHANGE PROGRAM
AND IN THE
WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

9	INTRODUCTION TO POLICY CONSIDERATIONS	101
10	POLICY CONSIDERATIONS RELATING TO THE PROFESSIONAL STUDENT EXCHANGE PROGRAM	103
	Summary of Findings	103
	Major Issue Areas Requiring Consideration Relative to the Future of PSEP	104
	PSEP Viewed in the Light of Policy Considerations	113
	Recommendations	114
11	POLICY CONSIDERATIONS RELATING TO HAWAII'S PARTICIPATION IN THE WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION	117
	Summary of Findings	117
	Review of WICHE Services and Activities and Their Effect Upon Hawaii	117
	Recommendation	121

LIST OF TABLES

<i>Table</i>		<i>Page</i>
2.1	Summary of WICHE Revenues, Expenses, and Fund Balances	11
2.2	Fields of Study and Support Fees for Hawaii Students, 1983–84 Academic Year	13
4.1	Comparison of PSEP Support Fees and Per Capita Costs for Six Selected Professional Programs at the University of Hawaii at Manoa, 1981–82 Academic Year	27
5.1	Support by States of PSEP Students for 1983–84 Academic Year	32
5.2	Support Fee Rates for Three Academic Years	35
5.3	The History of Support Fees in the Student Exchange Program	37
5.4	Professional Student Exchange Program, Student and Fee Totals, All Fields, 1983–84 Academic Year	42
6.1	Admissions to PSEP Schools of Optometry, 1983–84 Academic Year	56
6.2	Tuitions and Fees in PSEP Optometric Schools, 1981–82 Academic Year	56
6.3	Admissions to PSEP Schools of Veterinary Medicine, 1983–84 Academic Year	58
6.4	Admission Quotas for State Supported PSEP Programs in Physical Therapy	60
6.5	Admissions to PSEP Physical Therapy Programs, 1983–84 Academic Year	61

<i>Table</i>	<i>Page</i>
7.1 Ratio of Dentists to Population in Hawaii September 1983	70
7.2 Dentist to Population Ratios 1970 and 1980, United States, Nine Regions, and Western States	72
7.3 Changes in Population/Practitioner Ratios in the Fields of Medicine and Law	76
7.4 Hawaii PSEP Graduates Licensed and Practicing in Hawaii as of November 1983	78
8.1 Tuition and Fee Savings to PSEP Students from Hawaii Under 1982–83 Rates at Eight PSEP Dental Programs	81
8.2 Full Tuition Versus PSEP Tuition in Five Fields, 1982–83 Academic Year	82
8.3 Representative Annual Costs to Hawaii Students in Five Professional Student Exchange Fields for 1982–83	83
8.4 1983–84 Expenses Estimated by Hawaii PSEP Students	85
8.5 Benefits Received by Resident Students, University of Hawaii at Manoa, 1983–84 Academic Year	87
8.6 Normative Student Budgets, University of Hawaii at Manoa, 1983–84 Academic Year	88
8.7 Indebtedness of Dental Students Nationwide	91
8.8 Monthly Repayment Amounts Required Under Alternative Conditions Based on PSEP Support Fees for 1979–80 Through 1982–83	93

INTRODUCTION

This report is the result of our examination of the Hawaii program of the inter-state Commission on Higher Education (WICHE). It was conducted pursuant to Senate Concurrent Resolution No. 10, adopted in the 1983 session of the Hawaii State Legislature, which directed the Legislative Auditor to conduct a comprehensive study and review of Hawaii's participation in the WICHE program.

PART I

INTRODUCTION AND BACKGROUND

Objectives of the Study

The study included the following:

1. The specific study components required by the concurrent resolution are as follows:

Identification of the past, present, and future contribution of the Hawaii WICHE program to the State's higher education program;

Comparative analysis of how the WICHE program is funded by each state;

Assessment of the criteria used by the Hawaii WICHE program for WICHE student certification, including priority consideration based on financial need.

1. The member states of WICHE are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, New Mexico, Oregon, Utah, Washington, and Wyoming.

Chapter 1

INTRODUCTION

This report is the result of our examination of the Hawaii program of the Western Interstate Commission on Higher Education (WICHE). It was conducted pursuant to Senate Concurrent Resolution Number 92, adopted in the 1983 session of the Hawaii State Legislature, which directed the Legislative Auditor to conduct a “comprehensive study and review” of Hawaii’s participation in the WICHE program.

WICHE is the administrative agency for the Western Regional Education Compact which has been entered into by 13 states, including Hawaii, which joined in 1959. The purpose of the compact is to expand higher education opportunities for students of the member states.¹

Objectives of the Study

This study examined the following:

1. The specific study components requested by the concurrent resolution, which are as follows:

- Identification of the past, present, and future contribution of the Hawaii WICHE program to the State’s higher education program;

- Comparative analysis of how the WICHE program is funded by each state;

- Assessment of the criteria used by the Hawaii WICHE program for WICHE student certification, including priority consideration based on financial need;

1. The member states of WICHE are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

- . Assessment of the employment opportunities in Hawaii for WICHE students whose support fees to other WICHE receiver schools are funded by the State; and
 - . Assessment of the impact and feasibility of implementing a repayment program for Hawaii WICHE students participating in the Professional Student Exchange Program.
2. The present validity of the public policy objectives and conditions which led Hawaii to join the Western Regional Education Compact and participate in the Professional Student Exchange Program.
 3. The feasibility of various possible changes to the exchange program and Hawaii's participation in WICHE and the policy considerations thereof.

Scope of the Study

The emphasis of the study was on the Professional Student Exchange Program (PSEP), which appeared to be the focus of legislative interest, as indicated by the concurrent resolution. *First*, the study examined the role of PSEP within the State's overall program of higher education. *Second*, it determined the financial and programmatic aspects of PSEP, with special attention being given to the certification process. In this connection, the feasibility of making participation in the program contingent on financial need was also considered. *Third*, the study assessed the relationship of the program to manpower needs and employment opportunities in Hawaii. *Fourth*, it appraised financing from the perspective of the program participants and considered the ramifications of a pay-back requirement. *Fifth* and finally, it explored the feasibility of making various possible changes in PSEP and in Hawaii's participation in WICHE and the policy considerations involved in making these changes. In this context, the present validity of public policy objectives and the conditions which led Hawaii to join the compact and participate in PSEP were also examined.

- . Assessment of the employment opportunities in Hawaii for WICHE students whose support fees to other WICHE receiver schools are funded by the State; and
 - . Assessment of the impact and feasibility of implementing a repayment program for Hawaii WICHE students participating in the Professional Student Exchange Program.
2. The present validity of the public policy objectives and conditions which led Hawaii to join the Western Regional Education Compact and participate in the Professional Student Exchange Program.
 3. The feasibility of various possible changes to the exchange program and Hawaii's participation in WICHE and the policy considerations thereof.

Scope of the Study

The emphasis of the study was on the Professional Student Exchange Program (PSEP), which appeared to be the focus of legislative interest, as indicated by the concurrent resolution. *First*, the study examined the role of PSEP within the State's overall program of higher education. *Second*, it determined the financial and programmatic aspects of PSEP, with special attention being given to the certification process. In this connection, the feasibility of making participation in the program contingent on financial need was also considered. *Third*, the study assessed the relationship of the program to manpower needs and employment opportunities in Hawaii. *Fourth*, it appraised financing from the perspective of the program participants and considered the ramifications of a pay-back requirement. *Fifth* and finally, it explored the feasibility of making various possible changes in PSEP and in Hawaii's participation in WICHE and the policy considerations involved in making these changes. In this context, the present validity of public policy objectives and the conditions which led Hawaii to join the compact and participate in PSEP were also examined.

Organization of the Report

This report is presented in three parts.

Part I includes this introduction to the study and a summary description of WICHE and PSEP.

Part II presents the results of our detailed examination of the operation of PSEP.

Part III presents the policy considerations involved in making various possible changes to PSEP and to Hawaii's participation in WICHE. This part sets forth our general findings and recommendations concerning PSEP and WICHE.

Chapter 2

BACKGROUND

WICHE represents an example of interstate cooperation in the field of higher education which is now three decades old and in which Hawaii has been an active participant. In this chapter, we recount briefly the establishment of this enterprise. We then describe WICHE itself and the Professional Student Exchange Program (PSEP) which gave rise to the organization and which still remains its primary activity.

Establishment of WICHE

As American higher education expanded and proliferated in response to society's needs for better trained personnel in various fields, it soon became apparent that providing education in specialized professional fields—particularly those relating to the health sciences—was very expensive. In the most populous states, where demands for such services were quite great and where resources tended to be more plentiful, both state and private universities offered a wide range of specialized graduate and professional degrees. At the affected state institutions, residents of the states involved received preference both in the form of assured admissions and in the form of tuition rates that were lower than those charged to non-residents.

However, in states with small populations and more limited resources, the provision of a full range of professional education programs presented an extremely heavy, if not impossible, financial burden. For them, it was often a choice between only a limited number of programs or no such programs at all. This put such states and their residents at a serious disadvantage relative to their larger and economically stronger neighbors.

Thus it was at a time when the need to expand higher education opportunities was outstripping the ability of many of the Western states to meet this need that the idea of sharing graduate and professional schools on a regional basis began to take shape and become appealing.

The evolution of the concept which became WICHE has been described as follows:

“The suggestion of cooperation among western states in providing professional education in the health services fields was first advocated in public by Dr. Florence Sabin in a speech in Salt Lake City in the early 1940s. The first interstate compact for education did not take place in the West, however, for in 1948 the Southern Governors’ Conference initiated the agreement which led to the establishment of the Southern Regional Education Board. The following year the members of the Western Governors’ Conference, after hearing a report about the SREB approach and led by Governor Earl Warren of California, unanimously adopted a resolution endorsing a cooperative regional approach toward meeting the needs of students in the various states for ‘technical, professional, and graduate training.’”¹

The adoption of this resolution led rapidly to the creation of a Western compact. The compact was recommended by the Western Governors’ Conference in Denver on November 10, 1950.² The thrust of this action and the steps taken to implement it have been summarized as follows:

“The first section of the Western Regional Education Compact incorporated the first three paragraphs of the resolution passed by the governors in 1949 and spelled out the principal reasons for the formation of the compact. This preamble stated that ‘many of the western states individually’ lacked both ‘sufficient numbers of potential students’ and the ‘financial ability’ to establish high-standard ‘technical, professional, and graduate training’ in all of the essential fields. Therefore, the states agreed to work ‘cooperatively’ to provide ‘acceptable and efficient educational facilities to meet the needs of the Region and of the students thereof.’

The formal establishment of the regional organization took place in 1951 after the necessary five states had ratified the compact. However, the student contract program (later to be known as the student exchange program) did not effectively begin until September, 1953. During that year, forty-one students were involved in the exchange program in three fields—medicine, dentistry, and veterinary medicine. The legislatures of the sending states appropriated the funds ‘to defray educational costs beyond the in-state tuition payments’ for qualified students to attend professional schools in these three fields in other western states.”³

1. Don W. Driggs, “WICHE and Professional Education in Nevada.”
2. This event is noted in Section 310-1, HRS.
3. Don W. Driggs, “WICHE and Professional Education in Nevada.”

By the end of 1955, only two of the states and territories listed in the original compact had not joined. The Nevada Legislature approved the compact in 1959. The Territory of Hawaii formally joined WICHE three weeks after Nevada, thus completing the present membership of 13 states—i.e., Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, Oregon, Utah, Washington, and Wyoming, in addition to Hawaii and Nevada.

Hawaii's entry into the compact. Hawaii began participating in the student exchange program soon after entering the Western Regional Education Compact in 1959. With the realization that each state and university in the West could not be totally self-sufficient in all areas of knowledge and in terms of specialized educational facilities, the 1959 Legislature intended that the Western states “work together to pool their higher education resources [,] to avoid unnecessary duplication, to save money, and above all, to increase educational opportunity for Western youth.”⁴

By having Hawaii join the compact, it was further intended that the commissioners would be able to enter into contractual agreements with the governing authority of any educational institution in the Western region or with any compacting state in order that local students could attend graduate and professional schools in the region on the same basis as resident students.⁵ Thus, the Legislature appeared to view the student exchange program as an alternative means to meet the specialized educational needs of Hawaii's students without having to incur the costs of building and maintaining expensive graduate and professional programs at home.

A Description of WICHE

The Western Interstate Commission for Higher Education, which operates out of Boulder, Colorado, is the agency responsible for administering the Western Regional Education Compact. The purpose of the compact is to expand higher education opportunities for students from the member states. Accordingly, WICHE provides policy guidance and program oversight in line with organization goals and state needs.

4. Senate Committee on Ways and Means, Standing Committee Report No. 589, 1959 Regular Session.

5. *Ibid.*

Organization. WICHE is governed by a 39-member commission. The membership of the commission consists of three representatives from each compacting state, at least one of whom must be an educator in the higher education field. Members are appointed by the governors of their respective states and serve without compensation for terms of four years. While the state commissioners meet at least once every year, the full commission meets at least twice a year. Further, any business transacted at meetings of the commission requires an affirmative vote of a majority of the member states, with each state having one vote. The elected officers of the commission include a chairman, a chairman-elect, and a vice-chairman. The organization has a paid administrative staff which serves at the pleasure of the commission. The staff includes an executive director, a deputy director, various program directors, and their assistants.

Funding. Table 2.1 summarizes WICHE revenues, expenses, and fund balances. As shown by the table, WICHE's revenues are from several sources. They include both government and the private sector. The \$601,900 appropriation from states is derived from the \$50,000 in membership dues which each member state pays each year. In addition, participating member states each pay \$15,000 annually to support WICHE's special mental health program. Due to spending restrictions imposed on Hawaii state agencies in the current year, Hawaii is withholding its \$15,000 contribution to this program.

Program activities.⁶ WICHE activities are carried out primarily through seven programs which WICHE summarizes as follows:

1. **Student exchange program.** Facilitates interstate exchange of Western students, thereby helping the Western states to provide their residents with access to educational opportunities, respond to manpower needs, and avoid unnecessary program duplication.

2. **Graduate education project.** Works with Western states to examine the effectiveness and efficiency of graduate programs and to plan cooperative approaches to graduate education.

6. WICHE 1982 Annual Report, pp. 8-10.

Table 2.1

Summary of WICHE Revenues, Expenses, and Fund Balances

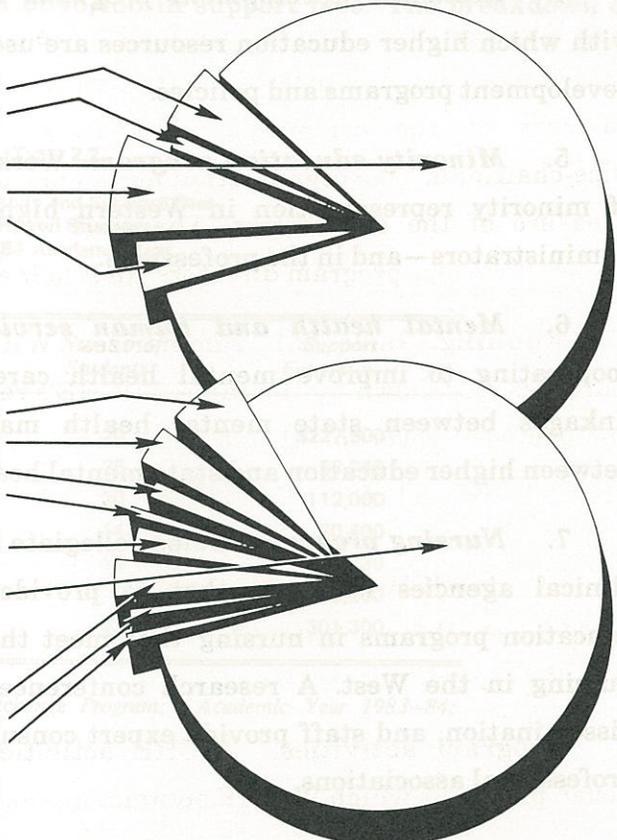
Fund Balance (July 1, 1981) \$ 419,432

Revenues (FY ended June 30, 1982)

Appropriation from States	\$ 601,900
State Mental Health Contributions	90,000
Student Exchange Program	
Support Fees from States ¹	10,474,273
Grants and Contracts	909,820
Fees, Interest, and Other Income	440,949
Total	\$12,516,942

Expenses²

Administration and Basic Operations ³	\$ 603,688
Nursing Program	347,472
Intern Program ⁴	185,960
Minority Education Program	67,381
Mental Health and Human Services Program	251,302
Student Exchange Support Payments to Schools ¹	10,474,273
Student Exchange Program Management, Information Clearinghouse, and Graduate Education Project	339,614
Economic Development Program	51,800
Health Resources Program ⁴	61,953
Total	\$12,383,443
Fund Balance (June 30, 1982) ⁵	\$ 552,931



1. Pass-through funds received from states and paid to schools in the Student Exchange Program.
2. Only direct cost expenditures are shown for program funds. Indirect costs are charged to programs in the internal accounting records, but they are not included in program expenditures on this statement because they are reflected in the WICHE administrative and basic operation expenditures.
3. Includes the expenses (net of payment received from NCHEMS for services provided under contract) of the Executive Director's Office, the Deputy Director's Of-

fce, Communications Office, WICHE publications and printing, Controller's Office, Personnel/Affirmative Action Office, Library Services, and meetings of the Commission.

4. This program was discontinued in Fiscal 1982.
5. This balance includes revolving accounts that are dedicated for specific purposes, a required minimum contingency reserve, book value of furniture and equipment, and a general fund carry-over.

Source: Western Interstate Commission for Higher Education, *Annual Report 1982*.

3. ***Information clearinghouse.*** Identifies critical policy issues in higher education and disseminates information and analyses relevant to those concerns; responds to inquiries on higher education issues; and continually develops a network of higher education and government experts to assist the states in their decisionmaking on education issues.

4. ***Economic development program.*** Strives to increase the effectiveness with which higher education resources are used to support state and local economic development programs and policies.

5. ***Minority education program.*** Works to reverse the disproportionate loss of minority representation in Western higher education—students, faculty, and administrators—and in the professions.

6. ***Mental health and human services program.*** Assists the states in cooperating to improve mental health care, especially by developing stronger linkages between state mental health manpower development programs and between higher education and state mental health agencies.

7. ***Nursing program.*** Helps collegiate schools of nursing and their affiliated clinical agencies work together to provide high quality, cost-effective higher education programs in nursing that meet the needs of the states and strengthen nursing in the West. A research conference is held annually to foster research dissemination, and staff provide expert consultation to the states, institutions, and professional associations.

A Description of the Professional Student Exchange Program (PSEP)

The principal program administered by WICHE is the Professional Student Exchange Program (PSEP). The program enables selected students from a member state to attend professional schools in other member states at reduced tuition when the field of study is not available in the home state. The reduction is made possible through payment of support fees by the home states to schools on behalf of each student the state supports through the WICHE program. WICHE students pay resident rather than non-resident tuition at public schools and approximately one-third the standard tuition at private schools.

Each state selects the professional fields for which it will provide support. In 1983-84, there are 1,377 students studying in 16 professional fields with the support of their home states. Hawaii supports students in six professional programs: dentistry, occupational therapy, optometry, pharmacy, physical therapy, and veterinary medicine. In 1983-84, Hawaii has 120 students studying in other WICHE states and has paid a total of \$846,485 in support fees. The breakdown by field is as follows:

Table 2.2
Fields of Study and Support Fees
for Hawaii Students
1983-84 Academic Year

<i>Professional Field</i>	<i>Number of Students</i>	<i>Support Fee Amount</i>
Dentistry	20	\$227,500
Occupational Therapy	26	58,749
Optometry	20	112,000
Pharmacy	14	70,400
Physical Therapy	16	70,336
Podiatry	1	6,200
Veterinary Medicine	23	301,300

Source: *The WICHE Student Exchange Program: Academic Year 1983-84;* December 1983.

It should be noted that a decision has been made to discontinue support in the field of podiatry due to a lack of interest. However, the State is maintaining its support for the one student studying in this field until that student graduates.

Hawaii is also a receiving state in the fields of architecture, public health, law, graduate library studies, medicine, and graduate nursing. In 1983-84, there are six students in public health, five in graduate library studies, and two in medicine being supported by their home states through PSEP while attending the University of Hawaii. Accordingly, the State has received a total of \$86,952 in PSEP support fees during the current year.



PART II

**AN EXAMINATION
OF THE OPERATION OF THE
PROFESSIONAL STUDENT EXCHANGE PROGRAM
AS IT AFFECTS HAWAII**

Then, in Chapter 5, we review the financing of PSEP from the point of view of the state government and compare Hawaii's experience in this regard with the experience of the other member states of WICHE. Hawaii's current approach to the

Chapter 3

INTRODUCTION

In this part, we examine the operation of the Professional Student Exchange Program (PSEP) as the program affects Hawaii. In this examination, we focus upon the various areas and aspects of the program where the Legislature expressed interest and concern in its resolution requesting this study. Accordingly, Part II is organized around major points of this interest and concern.

In Chapter 4, for example, we explore the role of PSEP within Hawaii's overall program of higher education, both as it was conceived when Hawaii joined WICHE in 1959 and as it appears to function at present. Despite many changes that have occurred over the years, the basic relationship between Hawaii and PSEP has remained much the same—PSEP continues to supplement the professional education programs which are offered through the University of Hawaii and to offer to Hawaii students educational opportunities in fields not available in Hawaii.

Then, in Chapter 5, we review the financing of PSEP from the point of view of the state government and compare Hawaii's experience in this regard with the experience of the other member states of WICHE. Hawaii's current approach to the financing of PSEP is consistent with the prevailing practice among WICHE members under which the state governments absorb all or most of the costs involved in providing support fees for students participating in the program. As one of the states which sends more students than it receives, Hawaii is among the nine states which are sending out more funds than they are receiving under PSEP. Only California, Colorado, Oregon, and Washington are receiving more funds than they are exporting.

In Chapter 6, we look at program eligibility and program accessibility under PSEP insofar as Hawaii students are concerned. Eligibility relates to the criteria upon which PSEP participants are selected. Accessibility deals with the question of the extent to which Hawaii students have access to professional education programs outside of Hawaii which are not available within the State.

With respect to determining eligibility to participate in PSEP, Hawaii follows the predominant practice among WICHE members of basing selection upon: (1) state residency, and (2) academic qualification as determined by the receiving schools and the WICHE staff in Boulder, Colorado. Only one state—Washington—uses financial need as a basic requirement, and that state sends students under PSEP only in the field of optometry. Some states, however, reserve to themselves the determination of academic qualification.

As for accessibility, this varies by field. In some fields, programs are accessible with or without PSEP. In other fields, PSEP seems to be the key to educational opportunity for Hawaii students. PSEP appears to be critically important in veterinary medicine and fairly important in optometry, physical therapy, and occupational therapy.

In Chapter 7, we turn to the matter of the relationship of PSEP to employment opportunities and manpower needs in Hawaii. Again, the situation varies by field. Generally, however, Hawaii is not suffering from any critical manpower shortages in the various professional fields, and in many fields employment opportunities here are limited. However, this general situation applies to professional education programs offered at the University of Hawaii as well as those provided through PSEP.

Finally, in Chapter 8, we look at the costs and financing of PSEP as seen from the perspective of the program's participants. In this area, the main thing we determined is that students—even under PSEP—are incurring heavy costs to themselves and their families to pursue professional education programs on the mainland. Generally, these costs are substantially higher than the costs incurred by students participating in professional education programs offered through the University of Hawaii. One result of this situation is that many of the PSEP students are already obligating themselves to pay off large debts in order to finance their education. Many of these students will also face large start-up costs if they want to go into practice for themselves after graduation.

Chapter 4

THE ROLE OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM WITHIN HAWAII'S OVERALL PROGRAM OF HIGHER EDUCATION

As called for in the legislative resolution requesting this study, one of the matters covered by our examination was the role of the Professional Student Exchange Program (PSEP) within Hawaii's overall program of higher education—both at the time Hawaii joined WICHE in 1959 and at the present time looking toward the future. This chapter summarizes this aspect of our study.

Original Role of PSEP

At the time Hawaii joined WICHE in 1959, PSEP was known as the Student Exchange Program (SEP) and was limited to the fields of medicine, dentistry, and veterinary medicine. In 1963-64, the scope of the program was expanded to include dental hygiene but still remained strongly oriented toward the health sciences.

During this period, the great growth of the University of Hawaii had not yet taken place, and professional education within the state was extremely limited compared to what is available today. However, the surge in college enrollments was already becoming apparent, and pressures on available professional programs outside of Hawaii were becoming more intense. Legislators and others in Hawaii became concerned that the graduates of Hawaii's schools and pre-professional programs were encountering increasing difficulties in gaining admission to professional programs on the mainland.¹

Recognizing the obstacles standing in the way of Hawaii becoming self-sufficient in terms of providing professional training in all fields, the 1959 Legislature adopted the basic concepts underlying the student exchange

1. House Committee on Finance, Standing Committee Report No. 708, 1959 Regular Session, Thirtieth Legislature, Territory of Hawaii.

program—namely, the pooling of higher education resources, the avoidance of unnecessary duplication of facilities and programs, the saving of money where possible, and the broadening of educational opportunities for young persons.²

The Legislature viewed the student exchange program as an alternative means of providing specialized professional education to Hawaii students in those fields where it would have been extremely expensive to build, operate, and maintain suitable educational programs in Hawaii. Implicit in the Legislature's action was the assumption that such educational opportunities should be open to Hawaii residents and that it was appropriate for government to utilize available resources to provide these opportunities to Hawaii's citizens.

The Legislature's action of that time, however, did not freeze or permanently fix Hawaii's approach to the provision of professional educational services. For one thing, the student exchange program was then limited to a few fields in the health sciences area and did not include a number of professional fields in which Hawaii residents would be expected to be interested. For another thing, the program was seen as a supplement to the State's primary efforts in the area of higher education as carried out through the University of Hawaii. As the University of Hawaii grew and developed, it was not automatically precluded from considering entry into fields covered by the exchange program. Rather, in looking at each professional field, the option was always left open of periodically reviewing whether it was more feasible or desirable to provide training through PSEP or through the establishment of a program at the University of Hawaii.

Hawaii started participating in the exchange program shortly after it joined WICHE. During the initial years of membership, however, the number of Hawaii residents entering the program was relatively small, and all qualified applicants were accommodated. This was, of course, before the costs of higher education and college tuitions began to skyrocket and before the demands for admission into many professional programs became so intense. Overall, then, it might be said that PSEP did not loom very large relative to Hawaii's total efforts in the area of higher

2. Senate Committee on Ways and Means, Standing Committee Report No. 589, 1959 Regular Session, Thirtieth Legislature, Territory of Hawaii.

education, but that it did provide an outlet for a limited number of students who wanted to pursue a restricted number of professional programs that were not offered by the University of Hawaii.

Subsequent Developments Affecting PSEP

In subsequent years, however, many developments have occurred which have affected not only PSEP but also the whole subject of higher education and Hawaii's involvement in this area of activity.

In the period following statehood, for instance, the University of Hawaii experienced rapid growth and change. Some of the most significant events and changes we noted in our 1981 management audit of the university. These include the following:

- . The Manoa campus experienced a four-fold increase in its undergraduate and graduate enrollments and became a major institution in the areas of research and graduate studies.
- . As a consequence of its academic expansion and growth in enrollments, the university underwent a tremendous increase in its staffing, both faculty and non-faculty.
- . Similarly, the university experienced a quantum jump in the number, variety, complexity, and geographical distribution of physical facilities.
- . Accompanying all of the foregoing was a massive increase in financial support for the university—both in state appropriations for operations and capital improvements and in gifts, grants, and contracts from outside sources (of which the federal government was, and continues to be, by far the most important).

A prolonged period of seemingly boundless growth and unlimited support was suddenly replaced by a period of slowed or no growth, restraint, and retrenchment. Still, during the 1970s, the university added new programs leading to graduate degrees. A two-year school of medicine had opened in 1967, and expansion to a full four-year MD degree-granting institution followed in 1973. In that same year, a school of law also began instruction.

Concomitantly, changes were also taking place relative to WICHE and its PSEP. In 1971, the Legislature further authorized WICHE to make arrangements for the placement of students in states that are not parties to the Western Regional Education Compact. This authorization was intended to provide greater options for students, especially those preferring to go into specialized fields where such programs within the region were either lacking or overcrowded.³

Also during this period, the fields of exchange were being expanded. In 1969-70 and 1970-71, the fields of physical therapy, occupational therapy, and optometry were added. From 1972-73 to 1980-81, nine more fields—podiatry, forestry, law, graduate library studies, pharmacy, graduate nursing education, public health, architecture, and maritime technology—were added. In 1982-83, dental hygiene was dropped and osteopathic medicine was added. Furthermore, the program came to be known as the Professional Student Exchange Program.

Hawaii's support of third- and fourth-year medical students was phased out when the four-year school of medicine became established in 1973.⁴ Today, students are supported in dentistry, veterinary medicine, physical therapy, occupational therapy, optometry, and pharmacy. Podiatry has been dropped in the current year due to lack of demand.

During this same period, the costs of higher education in Hawaii and throughout the United States escalated sharply. In most instances, these cost increases were accompanied by increases in college tuitions and related fees, although the University of Hawaii did keep its charges to Hawaii residents fairly constant and at a relatively low level. Under such pressures, it was inevitable that support payments made by states under PSEP also were forced to rise.

With more fields open to students under PSEP and with the support fees rising fairly rapidly, the point was reached in the latter half of the 1970s when Hawaii's total bill for sending students under PSEP became quite high and limits had to be set on the number of qualified applicants who would be supported. An informal agreement appears to have been made between Hawaii's WICHE commissioners and

3. House Committee on Higher Education, Standing Committee Report No. 534, 1971 Regular Session.

4. Testimony by Hiram K. Kamaka, Director, Department of Budget and Finance, to the Senate Committee on Ways and Means, January 25, 1974.

the Legislature in 1978 to hold the number of slots to be supported by the State in each field at the then current levels and to restrict any budget increases for WICHE to the amounts necessary to cover any increases in the support fees for those positions.

Thus it was that PSEP changed from a program open to all qualified Hawaii residents who could gain admission to receiving schools to a program where only a limited number of such residents can be accepted according to quotas established for the various fields receiving support from the State of Hawaii. Even so, the annual costs of the program to the State soon crept up to almost \$1 million.

Present Role of PSEP

From the foregoing description, it is quite apparent that significant changes have occurred over the past 20-plus years both with respect to PSEP and with respect to Hawaii's involvement in higher education activities. At the same time, however, PSEP's role relative to overall state efforts in the area of higher education remains basically the same as it was in 1959 when Hawaii joined WICHE. In effect, PSEP continues to supplement the educational services provided through the University of Hawaii by offering educational opportunities to qualified Hawaii residents in fields where it has been deemed unnecessary, unfeasible, or undesirable to try to provide services directly through the University of Hawaii. Both PSEP and the State of Hawaii have demonstrated an ability to adjust to changing circumstances without requiring any drastic change in interrelationships between them.

Recognition of PSEP in the State's draft higher education functional plan. The continuing role of PSEP in Hawaii's overall approach to higher education is recognized by the inclusion of PSEP in the State's draft higher education functional plan which has been awaiting legislative endorsement. As set forth in that document, a major goal of Hawaii's postsecondary education program is "to provide all qualified people of Hawaii an equal opportunity to quality postsecondary education through public and independent educational institutions."⁵

5. University of Hawaii, *Technical Reference Document of the State Higher Education Plan*, October 1982, p. 3.53.

To achieve this goal, the draft plan further establishes the following five objectives for its higher education program: (1) diversity, (2) quality, (3) access, (4) coordination, and (5) adequate financing. To meet the objective of diversity, the draft plan states that it is desirable to maintain “a number and variety of postsecondary education institutions sufficient to provide the diverse range of programs required to satisfy individual and societal needs and interests.”⁶

To this end, the draft plan calls upon the University of Hawaii to “exercise selectivity in developing new graduate and professional programs in order to respond to genuine State needs within limited resources.”⁷ Actions set forth in the draft plan to implement such a policy include the following:⁸

1. Continue offering graduate and post-baccalaureate programs at UH-Manoa only (medium priority).

2. Assess impact of establishing new master’s degree programs in public and independent institutions for financial, manpower, and academic implications (medium priority).

3. Emphasize State needs and commitment to State citizens in admissions policies of professional schools (medium priority).

4. Explore possibilities for regional exchange of students, such as through the WICHE Fellows Exchange Program,⁹ as an alternative to new graduate and professional programs (high priority).

5. Continue limits on graduate enrollment in public institutions (medium priority).

In short, the draft plan recognizes the desirability of providing a wide range of educational opportunities for Hawaii’s citizens, but also acknowledges that the State’s limited resources militate against trying to do everything through the University of Hawaii. Hence, PSEP and other similar student exchange programs

6. *Ibid.*, p. 4.2.

7. *Ibid.*, p. 4.6.

8. *Ibid.*, pp. 4.6-4.7.

9. The WICHE Fellows Exchange Program has been replaced by the Regional Exchange Program.

are offered as alternative means of meeting the specialized needs of Hawaii's students without having to incur the costs and obligations of building and maintaining expensive professional and graduate programs within the University of Hawaii.

Dual approach in perspective: some comparisons between PSEP and the University of Hawaii. In its commitment to provide qualified Hawaii residents with equal opportunity to obtain quality professional education, the State of Hawaii has basically adopted a two-pronged approach. For some fields of study, it provides educational services through its public system of higher education, or more specifically through the University of Hawaii at Manoa (UHM). Currently, UHM's professional offerings include the fields of architecture, business, education, engineering, law, library studies, medicine, nursing, public health, and social work. For seven¹⁰ other fields of study—dentistry, occupational therapy, optometry, pharmacy, physical therapy, podiatry, and veterinary medicine—educational services are provided through PSEP. Over the years, some programs have switched from one category to the other (e.g., medicine), while others have been or will be eliminated altogether from state support (e.g., forestry under PSEP).

To gain some perspective on these two alternative approaches, we made some comparisons between them to the extent this is possible based on available data. As a result, we found a number of similarities as well as some differences. Some of the more significant of these comparisons are highlighted below.

Large difference in numbers. We found, for example, that there are many more Hawaii students participating in professional programs offered by UHM than are participating in programs under PSEP. For instance, in 1982-83 the Hawaii students enrolled in all PSEP programs totaled only 131, while the enrollment in the UHM programs numbered several thousand, with a large proportion of them being Hawaii residents. Many of the individual fields of study at UHM separately have more students than are included in all fields under PSEP. In terms of student impact, therefore, the UHM programs are much more significant than the PSEP programs.

10. Soon to be reduced to six with podiatry being phased out for lack of interest on the part of Hawaii residents. Previously, forestry was eliminated for essentially the same reason.

Both involve heavy subsidization of students. Both the PSEP and UHM professional programs involve heavy subsidization by the State government. For the UHM programs, the tuition charged students covers only a small fraction of the costs of providing the programs and the balance is made up by legislative appropriations. Even where non-resident tuition charges are much higher than those for residents, the non-resident tuitions do not begin to cover actual costs.

Similarly, under PSEP, the tuitions paid by the students (resident tuition for public institutions and approximately one-third the regular tuition for private institutions) cover only a small portion of the total costs of the services involved. Hawaii, like other sending states, covers all or most of the remaining costs through payment of the support fees established by WICHE through negotiations between sending and receiving parties.

In the case of PSEP, the amount of state subsidy for each student is fairly clearcut. It amounts to the support fee set by WICHE, which varies according to the field of study and is adjusted periodically to reflect changing conditions. For UHM programs, however, the determination of subsidies is not quite so simple. In addition to the direct costs of the particular professional schools involved, overhead and other related costs have to be allocated to each program. To reflect more fully the true cost situation, capital costs should also be taken into account. Unfortunately, to date, only the first two categories of expenses have been included in the cost calculations that have been made, and capital expenses have not been taken into consideration.

One further complication in computing the subsidy for UHM programs is the fact that tuitions paid by the students should be deducted because such tuitions are a direct offset to the State's costs for the affected programs. However, in some instances the students receive tuition waivers. When this happens, there is no offset and a full subsidy is provided. It is not known how many students in professional programs are receiving such full subsidization.

With these data limitations in mind, it is of interest to see how the PSEP support payments compare with computed costs for professional programs offered at UHM. For this purpose, we selected six programs at UHM for closer examination and compared their costs with the list of support fees established for PSEP. Although our review covered a five-year period—1977-78 through 1981-82—the results for only 1981-82 are shown in Table 4.1. The 1981-82 data are generally representative of what the situation was during the five-year period.

Table 4.1

Comparison of PSEP Support Fees and Per Capita Costs
for Six Selected Professional Programs
at the University of Hawaii at Manoa
1981-82 Academic Year

<i>PSEP Support Fees¹</i>		<i>UH-Manoa Per Capita Cost²</i>	
<i>Professional Field</i>	<i>Per Capita Cost</i>	<i>Professional Field</i>	<i>Per Capita Cost</i>
Medicine	\$16,300	Medicine	\$15,556
Dentistry	9,600	Library Studies	5,282
Veterinary Medicine	12,300	Law	5,727
Dental Hygiene	5,400	Public Health	4,352
Physical Therapy	3,800	Social Work	4,202
Occupational Therapy	2,500	Business Administration	2,317
Optometry	5,200		
Podiatry	5,800		
Forestry	2,600		
Graduate Library Studies	3,700		
Law	3,300		
Pharmacy	3,600		
Graduate Nursing Education	5,400		
Public Health	4,300		
Architecture	3,000		
Maritime Technology	6,500		

¹As reported by the Western Interstate Commission for Higher Education.

²Includes direct and allocated costs for each field divided by the enrollment in each field as reported by the Office of Institutional Research and Analysis of the University of Hawaii. Does not include any capital costs.

It is not known, of course, how much the UHM costs would have to be increased to reflect capital expenditures for the affected programs. However, in terms of resident tuition charges for 1981-82, they were: \$700 for medicine, \$625 for law, and \$550 for the other four fields. For 1983-84, these resident tuitions have been increased to: \$1,860 for medicine, \$990 for law, and \$780 for the other four fields.

From Table 4.1, it can be seen that costs and support payments vary widely among the many different fields, with medicine ranking at the top and forestry and business administration ranking at the bottom. The most expensive programs are five to six times more costly than the least expensive programs.

In the four fields where direct comparisons can be made, Table 4.1 shows that PSEP support fees and the UH per capita costs are fairly close to each other in the

fields of medicine and public health. However, in the fields of law and library studies, there are wider divergencies with the UHM per capita costs being higher than the PSEP support fees.

Generally, then, it can be said that on a per capita basis the support fees paid under PSEP by the State are not out of line with what it costs the State to subsidize programs at the University of Hawaii. Indeed, on a per student cost to the State basis, it may cost the State less in some cases to send a student under PSEP than to send the student to UHM. This is not to say, however, that programs with a higher per capita cost should not be offered at UHM. For instance, the costs to students and other factors may well justify offering programs close to home.

Different effects in terms of costs to students. Although both approaches involved heavy subsidization on the part of the State, the two alternatives have a somewhat different effect in terms of their costs to students and the extent to which the State is serving to lower financial obstacles standing in the way of gaining accessibility to professional education. This matter is dealt with more extensively in Chapter 8, but suffice it at this point to note some of the differences that exist.

First, PSEP students must incur a transportation expense that is not borne by most Hawaii residents attending UHM. Even at one round trip per year, this cost will range from \$500 to \$1,000, or more, depending upon the location of the school attended. *Second*, many UHM students can hold down living expenses by living at home while this option is not available to PSEP students. *Third*, PSEP students must all pay tuition and required fees in addition to what the State pays to schools in the form of support fees. Even at reduced rates, these charges can be substantial. In many cases, these payments are much higher than the resident fees charged at UHM. Moreover, PSEP students do not have access to the financial aid which the State provides to UHM students in the form of tuition waivers, student employment, and related means of assistance. Thus, even with PSEP, there can be significant financial barriers standing in the way of qualified, but needy, Hawaii residents who may want to pursue careers in professional fields where the required educational preparation is not available in Hawaii.

Chapter 5

FINANCING OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM

With PSEP now costing the State of Hawaii in the range of \$1 million a year, financing of the program is a matter of concern for those responsible for the deployment of the State's financial resources. Accordingly, we examine in this chapter the financial aspects of PSEP as viewed from the perspective of the state government. In a subsequent chapter, we look at the program from the financial perspective of the students participating in it.

Placement of PSEP in the State Budget

PSEP, as part of WICHE, is totally financed by the state government in Hawaii. Through the regular budgetary process, the Legislature appropriates funds to the WICHE program under the major program area of higher education. The Hawaii WICHE commissioners then authorize PSEP funds, in the form of support fees, to be sent to WICHE headquarters in Boulder, Colorado. WICHE headquarters, in turn, transmits the appropriate amounts of support fees to the various receiving schools.

Originally, the Hawaii WICHE commission was attached to the Office of the Governor and was budgeted through that office. In 1980, however, when several agencies were reassigned to various departments, the WICHE commission was transferred for administrative purposes to the Commission on Postsecondary Education, which is closely affiliated with the University of Hawaii. This transfer was made because it was felt that the expertise, functions, and responsibilities of the university were much more closely related to WICHE than were those of the Office of the Governor.¹

1. Conference Committee Report No. 58-80 on House Bill No. 1758, Regular Session of 1980.

Thus, at the present time, PSEP and WICHE are budgeted under the program known as “statewide planning and coordination of postsecondary education.” Of the \$1,303,648 appropriated to the program for FY 1983–84, \$1,116,898 is earmarked for WICHE, with most of this amount being for PSEP. This does not mean, however, that either the Commission on Postsecondary Education or the Board of Regents reviews or acts on the WICHE budget requests before they are transmitted to the Department of Budget and Finance (B&F) for inclusion in the executive budget. The former has virtually ceased to function with the drying up of federal funds which previously supported it, while the latter has no direct authority over the WICHE commission.² Instead, the WICHE budget (which includes PSEP) goes directly from the WICHE commission to B&F.

Somewhat incongruously, however, when budget cuts are ordered by the Governor or budget restrictions are imposed on departments by B&F, the university administration allocates such spending cuts or restrictions on a pro rata basis to WICHE. Accordingly, \$38,751 of the WICHE appropriation for 1983–84 has been restricted by B&F. Thus, in this respect at least, the WICHE budget is treated virtually as if it were part of the university’s budget.

Responsibility for and control over the WICHE budget, therefore, are left in a somewhat anomalous position. The WICHE commissioners are expected to prepare and defend the budget, but the university ends up deciding whether or not cuts will be made in the budget once the appropriation is made. This not only makes it difficult to fix accountability, but also detracts from taking a coordinated and integrated approach to the State’s activities in the area of higher education, or more specifically in the various fields of professional education.

There is probably no perfect solution to this problem, but perhaps one approach that might be taken would be that of reactivating the Commission on Postsecondary Education and making it responsible for reviewing budget proposals and actions affecting professional education for Hawaii’s citizens.

2. Although there is considerable overlapping of membership between the two bodies, the Board of Regents is separate from the Commission on Postsecondary Education.

The Three Major Variables Affecting the Cost of PSEP

Three major variables affect the cost of Hawaii's participation in PSEP. These are: (1) the fields of study receiving support, (2) the number of students supported in each field, and (3) the rate of the support fee for each field. The degree of influence and control which the State can exert over these factors varies quite a bit. The three factors are described and discussed more fully below.

Fields of study. Each state has complete discretion in choosing the fields of study in which it will provide support for its residents through PSEP. However, in making its choice, it is limited to those fields which are actually included under PSEP. In this regard, the choice has steadily become broader. When Hawaii joined WICHE in 1959, only three fields—medicine, dentistry, and veterinary medicine—were available. Now, however, the program's scope has increased to include the following 16 fields:³

- | | |
|-----------------------------|--------------------------------|
| 1. Medicine | 9. Forestry |
| 2. Dentistry | 10. Law |
| 3. Optometry | 11. Pharmacy |
| 4. Podiatry | 12. Architecture |
| 5. Veterinary Medicine | 13. Graduate Nursing Education |
| 6. Physical Therapy | 14. Public Health |
| 7. Occupational Therapy | 15. Maritime Technology |
| 8. Graduate Library Studies | 16. Osteopathic Medicine |

At present, Hawaii provides support in the seven fields of dentistry, veterinary medicine, physical therapy, occupational therapy, optometry, pharmacy, and podiatry. Podiatry, however, is being phased out due to a lack of interest on the part of Hawaii residents. Forestry was previously dropped from the program for much the same reason. Other fields are not now being supported through PSEP because they duplicate fields of study available at the University of Hawaii. These include medicine, library studies, law, architecture, and public health. Indeed, Hawaii is a receiving state in these fields, and has a number of out-of-state PSEP students enrolled in the fields at the University of Hawaii. For the newly added fields of maritime technology and osteopathic medicine, interest in Hawaii seems to be low and no movement has been evidenced to extend state support to these fields.

3. Dental hygiene was previously included, but now has been dropped from the program.

Present indications, then, are that there will not be any drastic changes in the fields of study for which Hawaii may choose to provide support through PSEP.

Numbers of students. Member states of WICHE also have fairly wide discretion over the number of students they may choose to support through PSEP. Some limits are set, however, by the capacities of receiving schools in particular fields of study. A number of programs accept only a few out-of-state students—even under PSEP—and it is not unusual for programs to set a quota of students they will accept from each PSEP sending state.

WICHE member states vary widely in the number of PSEP students they support. At one extreme is California which sends no students to out-of-state schools. At the other extreme is Alaska which sends all of its students studying in professional fields (totalling 293 in 1983-84) out-of-state to PSEP receiving schools. From Table 5.1, it can be seen that with 120 students sent out-of-state, Hawaii ranks at about the middle among WICHE members in the number of students which it supports:

Table 5.1
Support by States of PSEP Students
for 1983-84 Academic Year

<i>State</i>	<i>Number of Students</i>
Alaska	293
Arizona	165
California	0
Colorado	32
Hawaii	120
Idaho	59
Montana	139
Nevada	135
New Mexico	112
Oregon	81
Utah	79
Washington	27
Wyoming	135

Source: *The WICHE Student Exchange Program: Academic Year 1983-84*, December 1983.

Until 1975, conditions were such that all Hawaii students who were certifiable in the available PSEP fields could be and were supported by the State. However, beginning in the Fall of 1975, the acceptance of Hawaii students into Western institutions, particularly private institutions, increased dramatically.⁴ This increase in acceptances coincided with an increase in support fees. The resultant impact on the PSEP budget brought pressures to change the situation and put limits on the numbers of students to be supported.

The year 1978, then, became somewhat of a benchmark insofar as Hawaii's participation in PSEP is concerned. At that time, some sort of informal agreement was struck between the Hawaii WICHE commissioners and the Legislature under which PSEP was placed on a "current services basis"—that is, there would be no significant increases in the total number of students covered by the program or in the overall funding of the program. Consequently, every year since then, there have been more qualified applicants than the State has been willing to support.

Even so, due to the continuing escalation in the costs of higher education and in support fees, the PSEP program has been questioned more and more and has come under increased pressure to keep total costs down. The net effect has been to set a fairly fixed limit on the number of students which Hawaii will support under PSEP.

This overall limit has been carried one step further to include limits on each of the separate fields of study. Something of a rough balance has been established among several of the fields, and new acceptances into each field generally are limited to the number graduating from that field each year. There is no completely rigid formula, however, and some adjustments are made from year to year. In recent years, for example, the Hawaii WICHE commissioners indicate they have tried to provide more openings in the fields of physical therapy and occupational therapy to meet what seems to be a shortage of practitioners in these fields in Hawaii.

4. Testimony by Dr. Frederick Haehnen, Chairman, Hawaii WICHE Commission, to the House Committee on Finance, January 27, 1976.

Support fees.⁵ Support fees constitute the cost variable over which individual states are able to exert the least amount of direct control. They may influence the rates at which these fees are set, but the fees are determined and adjusted through WICHE. Once set, they are applicable to all participants until adjusted again by WICHE.

Support fees are the annual payments made by a sending state for its students participating in PSEP. Payments are sent to the receiving schools through WICHE-Boulder. A unique rate of fee for each exchange field is paid for each exchange student regardless of the home state involved, the institution attended, or the class level of the student. However, the annual rates set by the commission, which are stated in terms of the normal academic year, are adapted to the duration and calendar of the particular program in which the individual student is enrolled.

Increasingly, individual programs differ in their calendars and duration from the "traditional" program consisting of four, three, or two academic years, depending on the field. There are accelerated year-round programs lasting three calendar years instead of four academic years. There are programs which require one or more summer sessions of some or all students in addition to the traditional four academic years. Then, too, there are programs consisting of one academic year plus a summer session, two academic years and one summer session, or fifteen continuous months. The variations are numerous.

WICHE staff translate the academic-year rates established by the commission into annual support fee payments for programs differing from the calendar of a traditional program. Generally, the total support fees paid for an individual student may not exceed the total that would be paid for a student enrolled in a traditional program. Generally, too, the relationship between the months of attendance within the fiscal year and the nine months of a regular academic year is used in determining successive annual payments. The following are examples:

- (1) In an accelerated year-round program lasting three calendar years instead of four academic years, a support fee equal to four-thirds of the academic-year rate is paid in each of the three calendar years.

5. Most of this discussion of support fees is drawn from the *Professional Student Exchange Program Manual*, April 1981, pp. 32-37.

- (2) In a four-year program the regular academic year rate is paid for four years even though one or more summer sessions are required in addition to four academic years.
- (3) A single support fee payment equal to 15/9 or 1.67 of the regular rate is paid for a program lasting 15 continuous months.

The amount of support fee payment for each student, calculated by WICHE staff, is listed on the support agreement which is submitted to the certifying officer and the receiving program for concurrence.

Setting of support fees. In June of every even-numbered year, the commission adopts a schedule of support fee rates for each of the years of the biennium beginning approximately one year later (e.g., in June 1980, the schedule was adopted for 1981-82 and 1982-83). Prior to each occasion for adoption of a fee schedule, a cost-of-education survey instrument is submitted for each receiving program to the colleges, universities, and systems concerned for completion by their appropriate officers.

There is a trend toward the stabilization of fees since the 1982-83 academic year, as shown in Table 5.2.

Table 5.2
Support Fee Rates for Three Academic Years

Professional Field	1982-83	1983-84	1984-85
Medicine	\$18,700	\$20,000	\$21,000
Dentistry	10,500	10,500	10,500
Veterinary Medicine	13,100	13,100	13,600
Physical Therapy	4,100	4,100	4,200
Occupational Therapy	2,700	3,500	3,700
Optometry	5,600	5,600	5,700
Podiatry	6,200	6,200	6,500
Forestry	2,800	3,000	3,200
Graduate Library Studies	4,000	4,000	4,000
Law	3,500	3,800	4,000
Pharmacy	4,100	4,400	4,700
Graduate Nursing Education	5,800	5,800	5,800
Public Health	4,900	4,900	4,900
Architecture	3,200	3,200	3,200
Maritime Technology	7,000	7,300	7,700
Osteopathic Medicine	9,000	9,000	9,500

Source: *The WICHE Student Exchange Program: Academic Year 1983-84*, December 1983.

At its annual meeting on December 1 and 2, 1983, the commission adopted a motion which provides that (1) WICHE staff will submit recommendations on the support fees for the 1985-86 and 1986-87 academic years at the forthcoming semi-annual commission meeting; and (2) "in the interest of stabilizing fees, the 1984-85 support fee schedule [will] be used as the base, with such incremental adjustments as are deemed justified for individual fields." The intent of the motion was not to abandon the detailed analysis of the past to establish fees, but to raise fees only in those fields where costs are rising and there is need.⁶

*History of support fees.*⁷ Table 5.3 shows the history of support fees. When the exchange program was instituted, the support fee rates adopted for the three fields of study then included in the program—i.e., medicine, dentistry, and veterinary medicine—were based on information developed in studies leading to the establishment of the WICHE compact. They remained unchanged for nearly 15 years during which period the rate of inflation was small and pressure for admission to professional schools was less intense than it would be later. A 50 percent increase in the rates for the three original fields was adopted, effective in 1967-68, but applicable only to entering students in that and subsequent years on a phase-in basis.

During 1971, demand for increases in support fees from the receiving schools in the original three exchange fields was viewed as a crisis by WICHE staff and commissioners. The schools contended that their costs were rapidly increasing, that pressures for admission were leading their legislatures to press for limitation of enrollment to in-state residents, and that only with a substantial increase in support fees could they justify continuing to accept WICHE students. Representatives of the schools and commissioners from sending states were called together to address the problem and negotiate new rates to be recommended to the commission. A special committee of commissioners was appointed to make recommendations on this and other PSEP matters, after the full commission was unable to reach a decision during its 1971 annual meeting. Finally, the new rates for 1973-74 for these three fields were adopted as negotiated "prices."

6. Letter from Philip Sirotkin, Executive Director, WICHE, to Office of the Legislative Auditor, December 20, 1983.

7. *Examination of the Student Exchange Program in Light of the Changing Environment*, December 4, 1980, pp. 3-6.

Table 5.3

The History of Support Fees in the Student Exchange Program

<i>Professional Field</i>	1952	1967	1972-73	1973-74	1975-76*	1977-78	1979-80	1980-81	1981-82	1982-83
Medicine	2,000	3,000	3,000	5,000	6,000	12,000	13,000	14,200	16,300	18,700
Dentistry	1,600	2,400	2,400	4,000	6,000	9,000	9,700	10,300	9,600	10,500
Veterinary Medicine	1,200	1,800	1,800	4,000	6,000	9,000	10,250	11,200	12,300	13,100
Dental Hygiene		1,000	1,000	1,000	2,000	4,200	4,500	4,700	5,400	—
Physical Therapy		1,200	1,200	1,200	2,800	3,400	3,500	3,700	3,800	4,100
Occupational Therapy		1,200	1,200	1,200	2,800	3,400	3,500	3,700	2,500	2,700
Optometry		1,200	1,200	1,200	3,600	4,200	4,500	4,700	5,200	5,600
Podiatry			2,500	2,500	4,800	4,800	5,000	5,400	5,800	6,200
Forestry			1,500	1,500	1,500	2,600	2,700	2,900	2,600	2,800
Graduate Library Studies				2,500	2,500	3,400	3,500	3,700	3,700	4,000
Law				2,500	2,500	2,600	2,700	2,900	3,300	3,500
Pharmacy					2,500	2,600	2,900	3,100	3,600	4,100
Graduate Nursing Education					2,500	4,200	4,500	4,700	5,400	5,800
Public Health					2,500	3,400	3,500	3,700	4,300	4,900
Architecture						2,000	2,100	2,300	3,000	3,200
Maritime Technology								6,000	6,500	7,000
Osteopathic Medicine										9,000

*Phase-in whereby new rate applies only to new students entering in that and subsequent years. In the adjustments adopted in 1975-76, the phase-in operated only through 1976-77. In all other adjustments, the new rates applied to all students enrolled, regardless of their class level.

Sources: Testimony by Dr. Frederick Haehnlen, Chairman, Hawaii WICHE Commissioners, to the House Committee on Finance, February 13, 1975.

Testimony by John B. Connell, Chairman, Hawaii WICHE Commissioners, to the Senate Committee on Ways and Means, February 11, 1980.

WICHE, *Improving Education in the West, Examination of the Student Exchange Program in Light of the Changing Environment*, December 4, 1980.

WICHE, *Professional Student Exchange Program Manual*, April 1981.

During 1972 and 1973, the fields of dental hygiene, physical therapy, occupational therapy, optometry, and podiatry made cases for increases, and the commission adopted increases to become effective in 1975-76. However, in 1974, pressure for increases again became acute. This time, in addition to inflation and pressure for admission of in-state students, cut-backs in federal capitation funds in several fields were involved. A new schedule of fees for the above fields and for medicine, dentistry, and veterinary medicine was adopted in August 1974, effective in 1975-76, but applied only to entering students in that and subsequent years.

In order to implement these policies, a cost-of-education survey was submitted to all receiving programs and the results were analyzed. The resulting weighted average net per student cost for each field in 1974-75 was projected forward to 1977-79, using adjustments for inflation and changes in federal capitation funds in those fields receiving capitation. As another reference point, the results of the Institute of Medicine study of selected professional schools in six of the exchange fields, based on 1972-73 data, were projected forward to 1977-79. The support fees adopted for 1977-78 were based on these net per student cost results. In most fields a small allowance for facilities costs was made by rounding the calculated per student operating figure up to the next higher even hundred dollars. Greater allowance for facilities costs was made in veterinary medicine. As shown in Table 5.3, the change from a "price" basis to a cost basis resulted in large increases in the fees for a number of fields, especially medicine, dentistry, and veterinary medicine which enroll large numbers of students.

The fees for 1979-80 and 1980-81 were set in 1978, following the biennial schedule. The rates for 1978-79, which had remained constant from 1977-78, were projected forward through adjustments for inflation, for changes in tuition rates paid by exchange students, and for changes in federal capitation payments, where applicable. The commission based the 1979-80 and 1980-81 rates on these calculations but decided to establish for the first time a separate schedule for each of the two years of the biennium, thus fitting them more closely to the normal pattern of annual cost increases.

In preparation for setting the fees for 1981-82 and 1982-83, the cost-of-education survey was repeated in 1980, based on 1978-79 fiscal data. The process used to analyze the 1978-79 data and project the figures forward to 1981-82

and 1982-83 was similar to that used in setting the 1977-79 rates. This time a specific facilities use factor—a per student amount based on historical cost amortized over fifty years—was included in the cost calculation. The amount of this factor for different fields ranged from \$447 to \$20 per student, with most fields being under \$100 per student.

The support fees set by the commission in 1980 for 1981-82 and 1982-83 were based on these cost calculations, except for an arbitrary adjustment limiting the year-to-year increase in the support fee in any field to a maximum of 15 percent. Rates in five fields were affected by this limitation. Even after this limitation, the dollar amounts of the increases were large in many fields.

Thus, in setting the rates of support fees for the years 1977-78 through 1982-83, the intent of the commission was to establish the fee in each field at a level where it would approximate the weighted average net per student cost of the receiving programs in that field combined for educating the students participating in the exchange. Results of the cost-of-education surveys, projected forward to the years for which support fees were being established, were the chief basis for the setting of the rates.

Tuition charges. Students supported as exchange students are still charged tuition by the receiving schools. When enrolled in a state-supported school, exchange students are responsible for payment of an amount equal to resident tuition. When enrolled in a private school, exchange students are responsible for payment of an amount equal to one-third of the standard tuition charge, although the school may—at its discretion—charge a lesser amount for tuition. Moreover, if the sum of the support fee and the one-third of the regular tuition to be paid by the student is not at least as much as full regular tuition, then, the student may be charged the difference between the full regular tuition and the support fee. In addition to tuition charges, exchange students must pay all required fees.

Source of Funding for PSEP Support Fees

The general practice among WICHE member states—including Hawaii—is to fund PSEP support payments out of regular state revenues, with the support fees being considered a full obligation of the states.

There are, however, three exceptions to this general rule, but even in these three cases a major portion of the funds are supplied by the states involved. In two instances, the affected states—Arizona and Colorado—impose a service requirement on PSEP recipients, and require repayment of part or all of the state support provided to them in the event this service requirement is not met. Even in these cases, the state subsidy is treated as a loan to the student and repayment is allowed over a relatively long period of time.

In the third instance—Nevada—there is a requirement that all PSEP recipients must repay 25 percent of the amount of state support they receive under PSEP. In addition, if PSEP recipients do not fulfill the service requirements imposed upon them by the state, they must repay the remaining 75 percent of the support they have received. As in the other two states, repayment amounts in Nevada are treated like loans and may be paid over a period of time.

Although these three states impose a service requirement and mandate repayment of support fees in the event the requirement is not met, this practice raises serious questions of equity, legality, and constitutionality—especially where a similar requirement is not imposed upon students subsidized through professional training within a state. In short, is it fair, legal, and constitutionally permissible to impose such a requirement on one group of students receiving a benefit from the state and not impose it upon another group also benefitting from state support? While there are some who will answer yes to this question, there are others who will answer no. So far as we can determine, there have been no definitive judicial decisions on this issue.

In regard to this question, however, it is interesting to note that when Nevada initially tried to impose such a requirement on joining WICHE in 1959, that state's attorney general ruled the "indenture" requirement unenforceable. As a consequence, the Nevada legislature repealed the provision. Later on, however, the provision was reinserted into Nevada's statute relating to WICHE. With respect to this current provision, the attorney general of Nevada has indicated that it will be difficult to enforce—particularly regarding PSEP students no longer living or practicing in Nevada. We understand that for much the same reason, a similar requirement has never been implemented in Idaho.

Broadly speaking, then, Hawaii's approach of assuming full responsibility for funding PSEP payments is consistent with the prevailing practice among the majority of the WICHE member states.

Fiscal Impact of PSEP on WICHE Member States

The PSEP program and its system of support payments have a varying impact upon WICHE member states. For states which are primarily "sending" states, there is a negative balance of payments which in some cases can be quite significant. For example, in 1983-84 Alaska, Arizona, and Montana are all exporting over \$1.5 million, and Wyoming is not far behind them.

On the other hand, states which are primarily "receiving" states enjoy a very comfortable positive cash flow. With no outflow at all, California in 1983-84 is receiving more than \$3 million, while for the same year, Colorado is sending out less than \$200,000, but is receiving almost \$3.6 million. In states where private institutions participate in PSEP, the inflow of funds is split between the affected public and private institutions. In the case of California, about five-sixths of the PSEP payments go to private institutions.

In Hawaii's case, the outflow in 1983-84—\$846,485—is almost ten times greater than the inflow—\$86,952. Thus, Hawaii clearly falls into the "sending" category and ranks toward the middle of the two extremes among the 13 members of WICHE.

Table 5.4 set forth in more detail the flow of students and support fees among the 13 member states of WICHE.

Table 5.4

**Professional Student Exchange Program
Student and Fee Totals, All Fields
1983-84 Academic Year**

State	Number of Students Sent	Total Fees Paid	Number of Students Received		Total Fees Received	
			Public	Private	Public	Private
Alaska	293	\$ 1,612,936	—	—	\$ —	\$ —
Arizona	165	1,812,368	30	—	184,100	—
California	—	—	70	316	491,766	2,694,420
Colorado	32	179,200	295	23	3,521,791	66,796
Hawaii	120	846,485	13	—	86,952	—
Idaho	59	564,251	17	—	122,500	—
Montana	139	1,762,300	11	—	35,200	—
Nevada	135	1,141,800	5	—	100,000	—
New Mexico	112	993,045	17	—	275,874	—
Oregon	81	372,864	97	195	965,100	963,004
Utah	79	852,000	40	—	520,919	—
Washington	27	151,200	78	86	564,635	255,375
Wyoming	135	1,414,283	3	—	9,500	—
Out of Region	—	—	43	38	493,800	351,000
TOTAL NUMBER OF STUDENTS REPRESENTED						1,377
TOTAL FEES REPRESENTED						\$11,702,732

Source: *The Wiche Student Exchange Program: Academic Year 1983-84*, December 1983.

Chapter 6

PROGRAM ELIGIBILITY AND ACCESSIBILITY

UNDER THE PROFESSIONAL STUDENT EXCHANGE PROGRAM

One area of major legislative concern relative to the Professional Student Exchange Program (PSEP) is the basis upon which eligibility to participate in the program is determined. Closely associated with this question is the extent to which PSEP participation is required for Hawaii residents to gain accessibility to professional education programs not available in Hawaii. These two matters are considered in this chapter.

Determination of Program Eligibility

There are several bases upon which eligibility to participate in PSEP might be determined. These include: (1) state residency, (2) academic qualification, (3) financial need, (4) status as a member of a disadvantaged or minority group, (5) personal or political influence, (6) random selection, or (7) some combination of the foregoing. Generally speaking, Hawaii—like most other member states of the Western Interstate Commission on Higher Education (WICHE)—gives predominant weight to the first two of the factors listed above.

State residency is a universal requirement of WICHE members for individuals to receive support from them under PSEP. Verification of this requirement is left to each state to handle as it chooses. Academic qualification is another broadly applied requirement. For Hawaii and most other members of WICHE, this determination is made by the receiving schools. In Nevada, however, that state's WICHE officials predetermine which students will be supported by combining grade point averages and professional test scores. In Oregon, length of residence in the state and grade point averages are weighed to determine which students will be supported up to the level of the available appropriation.

Among the 13 members of WICHE, only Washington uses financial need as a determinant for participation in PSEP. Even here, the use of this criterion is quite

limited inasmuch as Washington is a “sending” state only in the field of optometry, which involves approximately 30 students annually. Relative need among such students is calculated to determine the order in which support will be given within available funds.

Developments leading up to present system. During the early period of Hawaii’s participation in PSEP, selection of PSEP recipients among qualified applicants presented no great problem—all qualified students who gained admission to receiving programs were provided with PSEP support by the State. However, by the mid-1970s, increases both in the support fees and in the number of Hawaii residents gaining acceptance into PSEP programs caused objections to be raised concerning the overall budget effect of Hawaii’s participation in PSEP. As a consequence, a lid was put on the number of applicants who would be supported and decisions had to be made as to which students would receive support and which would not.

In trying to cope with this changed situation, Hawaii’s WICHE commissioners tried to devise a system for ranking applicants, and even considered going to a lottery method of choosing those to be supported. However, many difficulties were encountered, and no fully satisfactory local solution appeared feasible. As a consequence, they turned to the central WICHE organization for an answer.

Other developments gave added impetus to the effort to come up with an orderly and equitable system for determining which students should receive PSEP support. These centered around the question of keeping open and broadening the opportunities for Hawaii residents to pursue education in the field of dentistry. During the 1976 legislative session, several efforts were pushed to promote professional dental education opportunities for Hawaii residents.

The Hawaii Dental Association, for example, supported and won passage of Senate Bill Number 1187, which became Act 132 and established the Hawaii Dental Education Plan. Under this legislation, the State, through the Department of Budget and Finance, is authorized to enter into agreements with dental schools accredited by the American Dental Association but outside of the jurisdiction of WICHE to reserve spaces for Hawaii students in exchange for the payment of a support fee similar to the one paid under PSEP. Due to a lack of adequate funding, however, this legislation has never been implemented.

However, other members of the Hawaii dental community, apart from both the Hawaii Dental Association and WICHE, were concurrently pursuing another approach to this problem. They obtained a commitment from the University of the Pacific (UOP) to accept ten Hawaii dental students in exchange for \$80,000 in support fees. These ten openings were in addition to the number of dental slots already funded under the WICHE appropriation for the 1975-77 biennium. Moreover, this funding request was submitted to the Legislature separately from WICHE's \$76,500 budget request contained in the executive supplemental budget for 1976.

WICHE officials were not happy with this arrangement because they felt it constituted a bilateral agreement between a WICHE state and a professional school within the WICHE region. Such agreements go against WICHE's general policy of keeping programs in the Western region open to all qualified students from sending states on a more or less equal basis. However, after the \$80,000 was included in the appropriations act for that year and the ten students were notified of their acceptance by UOP, WICHE was requested, and agreed, to administer the appropriation. Eight of the ten affected students enrolled at UOP in the fall of 1976, and were graduated in June 1979. Funding for their second and third years was included in WICHE's regular budget. After their graduation, funding for the field of dentistry under PSEP dropped back to the number of slots presently being supported.

The net result of developments during this period was the establishment of the present certification process which basically leaves to the receiving schools and the WICHE staff in Boulder, Colorado, the tasks of handling and determining the ranking of applicants so as to decide which applicants will receive support under PSEP. This certification process is described in more detail below.

The certification process. Eligibility to participate in PSEP is determined through a certification process which is set forth in WICHE's *Professional Student Exchange Program Manual*, dated April 1981. The following description is drawn from this document.

Students must be certified as eligible by their sending states in order to participate in PSEP. However, the term certification is used somewhat differently in Hawaii than in most of the other member states of WICHE. Here, the term "screening" is used up to the final step in the process when applicants have actually

been admitted to the professional education programs at receiving schools under the system of field-by-field quotas set by Hawaii's WICHE commissioners. In this way, the commissioners avoid being put in the position where they may say a student is certified, but may also be forced to say that support for the student cannot be provided because he or she falls below the quota of positions for which funding is available. In other states, this apparently is not considered to be a serious problem.

Determination of residency eligibility. The first step in the process is for Hawaii's certifying officer to screen applications and to determine each student's initial eligibility in terms of residency in Hawaii. This is done by checking either the student's voting residence or the residency of the student's parents. At present, the Director of Admissions and Records at the University of Hawaii serves as Hawaii's PSEP certifying officer. By mutual consent between him, the University of Hawaii, and the Hawaii WICHE commissioners, he has served in this role for the past six or seven years.

The deadline for Hawaii students to submit an application to the State certifying officer is October 15 of the year preceding admission. In turn, the State certifying officer's deadline for submitting lists of eligible applicants (by fields) to WICHE-Boulder is November 15, or as close to that date as possible. These lists are usually accompanied by information on the number of entering students that can expect to be supported in each field. Once WICHE-Boulder has obtained the lists of eligible students from all of the sending states, its staff forwards the appropriate lists to all receiving programs in each particular field, together with information on state limits.

The WICHE staff receives reports from receiving programs on the admissions of *all* students from sending states as they occur. The names and special circumstances of those who are accepted for admissions are forwarded to the state certifying officers. Conversely, the certifying officers notify WICHE if they have information from students regarding admissions offers and the students' enrollment intentions. At the same time, the WICHE staff is monitoring developments in the states regarding the limits on the numbers of entering students to be supported, and admissions are checked against these limits. Reports on the status of admissions versus limits are sent to certifying officers and receiving programs as developments require.

Ranking of students. In Hawaii's case, more students are qualified for admissions than can be supported; therefore, they are ranked by the schools. In dentistry, the professional schools rank the students based on the schools' criteria (grade point averages, test scores, interviews, recommendations, and the like) and convey that ranking to WICHE. Then, WICHE compiles composite rankings of the eligible students based on reports from all schools to which they have applied and establishes a final list of Hawaii students who will be supported up to the appropriation amount.

The procedure in veterinary medicine is much the same as in dentistry, except that Colorado State University and Washington State University have agreed by letter to accept a total of six entering students from Hawaii each year. In both dentistry and veterinary medicine, all cooperating programs have agreed on a common offer date for admissions.

In physical therapy, occupational therapy, optometry, and pharmacy, the professional schools have agreed in principle to accept the most qualified students first, based on their evaluations. The schools notify WICHE of the offers made. Support is awarded on a first-come, first-served basis until all available slots are filled. As there is no common admissions offer date in these fields, the admissions cycle is extended up to eight months each year.

As noted earlier, Nevada, Oregon and Washington each have their own separate variation of the way eligibility and ranking are determined.

Preparation of support agreements. Once the limit on the number of entering students has been reached, the WICHE staff—after consulting with the state certifying officer—firms up the list of individuals to be supported and prepares a support agreement listing the exchange students to be supported by a particular state in a particular receiving program for the upcoming school year, together with the dollar amount of the support fee to be paid for each of the students on the list. These support agreements are sent to state certifying officers for their concurrence and signature on behalf of the sending state around August 15. Certifying officers return the forms to WICHE but retain a copy for reference.

About September 1, the support agreements are sent to the receiving programs for the programs to confirm the enrollments of students according to the list. Once

any necessary corrections are reported to WICHE, the support agreements are signed on behalf of the receiving programs and returned to WICHE. For the receiving programs in fields where students are eligible for federal scholarships carrying a service obligation, the receiving programs certify the names of those exchange students receiving such scholarships on another form, which is submitted along with the signed support agreements. This form serves as one basis for the adjustment of the support fee, as discussed in the previous chapter.

Payment of support fees. Shortly after it receives all the signed support agreements from the receiving programs, the WICHE staff prepares invoices for the payment of support fees for students enrolled in each receiving program and submits a consolidated billing to each sending state in early November. States send payments as soon as they can be processed.

Subsequent actions. In the event of a change in an exchange student's status occurring anytime in the school year, whatever corresponding actions are required are pursued by the WICHE staff. Moreover, in May the WICHE staff sends academic progress report forms for each exchange student to the appropriate receiving programs. The forms are then returned to WICHE as soon as they can be completed. The information on the forms determines whether a continuing student will receive support in the following year.

Comparison between PSEP certification process and admission into professional education programs at the University of Hawaii. In judging PSEP's eligibility process, one way to look at it is to see how it compares with the way admissions into professional education programs at the University of Hawaii are handled. This is complicated, however, by the fact that there is no single process at the University of Hawaii and by the further fact that demand-supply situations vary quite widely among the professional education programs at the university. Eligibility requirements and standards take on crucial importance in those fields where available openings are far less than the numbers of applicants seeking to fill those openings.

Generally speaking, however, the process of determining eligibility for PSEP support closely resembles the broad manner in which admissions into professional education programs at the University of Hawaii are handled. In both cases, clear preference is given to residents of Hawaii. Also in both cases, the general principle

seems to be that academic qualification should be the prime consideration and that the academic staff in each field is probably the best group to weigh quantitative (objective) and qualitative (subjective) factors in determining minimum qualifications and relative qualifications for and among applicants.

However, even within this type of framework, the possibility of inconsistent and inequitable treatment exists. This is particularly true where qualitative (subjective) factors are included among the criteria being considered. It was in recognition of this problem that the Chancellor of the University of Hawaii at Manoa (UHM) recently commissioned a special committee to examine admission policies, procedures, and practices relating to the various professional education programs at UHM.

Due to the special situations present in the law and medical schools where demands for admission far exceed the supply of available openings, this committee concentrated its attention on these two programs. In its report, the committee laid out what it considered to be the basic requirements of a good admissions program—e.g., that policies be clear, detailed, comprehensive, and readily accessible and that various procedural safeguards be provided. It also noted that considerable variation existed among the different programs at UHM in the area of admissions. While the committee found many commendable points in the admissions programs at the law and medical schools, it also found some weaknesses that should be corrected.

Among other things, the committee suggested that it would probably be desirable to bring about more consistency among admissions programs at UHM. It recognized the necessity of keeping subjective factors among the criteria that should be considered, but also pointed to the need to set limits on and provide safeguards regarding the use of such factors. It also found some discriminatory features that should be eliminated.

The committee also implicitly endorsed the overall concept that academic qualification should be the prime consideration in determining admissions to the affected programs. In this regard, it commended the programs of both the law and medical schools for bringing in individuals from ethnically underrepresented groups, but it also recommended that minimum standards be set for every field and it cautioned against letting unqualified individuals obtain diplomas.

No such evaluation has been made of the admissions policies, procedures, and practices among the numerous professional education programs participating in PSEP. Thus, it is not known to what extent they may suffer from many of the same weaknesses that have been detected at UHM. In all likelihood, there is probably considerable variation among them, with some being better than others. Probably the best safeguard is the fact that they all have professional reputations which they will want to protect as much as possible. Hence, chances are probably quite slim that flagrant abuses will occur. Nevertheless, this is an area where the WICHE commission may want to reassure itself that admissions policies, procedures, and practices at participating schools do adhere to reasonable standards for assessing qualifications and maintaining fair play.

This comparison between PSEP and professional education programs at UHM brings to light one major difference between the two. As noted, the law and medical schools at UHM both have programs designed to bring ethnically underrepresented groups into their programs. Generally, this takes the form of special or decelerated pre-professional training. However, no comparable effort is being made at the present time by Hawaii officials to enhance the representation of underrepresented groups in the professional fields where training is provided through PSEP.

In like manner, the University of Hawaii has the ability to lower the financial barriers for qualified, but needy, students which it admits by granting tuition waivers and by making other financial assistance available, such as student employment. However, the Hawaii WICHE commissioners do not have the ability to provide similar assistance to PSEP participants, even though the costs to PSEP students in most instances may be higher than the costs to students attending UHM.

Thus, while financial need is not an initial consideration in the admission of Hawaii students either to PSEP or to professional education programs at UHM, it can serve to prevent qualified students from seeking admission to the programs in the first place or from actually accepting admission after it may be granted. In the case of students entering UHM programs, the State provides means by which this obstacle can be removed or made less burdensome. In the case of prospective PSEP students, however, they must look elsewhere if they hope to overcome this hurdle. In this sense, then, it may be said that PSEP discriminates against those qualified students who are in the greatest financial need. Even so, indications are that

Hawaii's participants in PSEP are drawn from a fairly wide spectrum of Hawaii's society.

The Role of PSEP in Assuring Program Accessibility

When looking at eligibility to participate in PSEP, program accessibility is an important consideration. By accessibility, we mean the extent to which educational opportunities in any field are available to the general public or to all qualified applicants on a reasonably open and equitable basis. A program is readily accessible if all or most persons interested in the program who are able to meet minimum qualification requirements can reasonably expect to gain entry into the program without severe penalty or hardship. A program is not very accessible if no, or only a few, Hawaii residents can ever expect to enter the program even though many may be qualified and may want to do so.

Accessibility is blocked or limited in a number of ways. For many years, discriminatory practices and prejudices of tradition served to keep minority groups out of various fields and to restrict some fields to one gender or the other. The civil rights movement of recent years has done much to remove these barriers. State residency is another restriction which is frequently imposed upon programs in state supported institutions of higher education. Such limitations reflect the widely held point of view that preference should be given to the taxpayers who bear a large part of the costs involved in providing particular educational services.

A barrier which is becoming increasingly serious is the economic barrier to many programs of higher education. This barrier takes on special significance in a number of professional fields. This is due to two closely interrelated factors. One is that the delivery of educational services in some professional fields is extremely expensive with the result that available services are relatively scarce. The other is that careers in these same fields are often seen as being very rewarding financially so that demand to enter them is quite great. This unbalanced demand-supply situation, combined with escalating costs in higher education generally, has caused the price of the affected programs at private institutions to zoom out of reach of most persons and has caused tight residency requirements to be imposed upon such programs at state supported institutions.

A major argument made on behalf of WICHE and its PSEP program is that they provide access to various professional education programs to residents of Western states which would not otherwise be accessible to them because such programs are not provided within each and every one of the Western states. In the case of Hawaii, this means that PSEP would be a key element in Hawaii residents gaining access to programs in the fields of dentistry, optometry, veterinary medicine, pharmacy, podiatry, occupational therapy, and physical therapy. As part of our study, we tried to determine the extent to which this is true.

In our examination of this matter, we found that there are wide differences among the different fields of study and with regard to the availability of relevant information concerning each of the affected fields. For example, there is a great deal of information on this subject as it relates to dentistry due to the active educational information program sponsored by the American Dental Association and to a study of dental education which has been made by WICHE. On the other hand, information concerning such fields as podiatry, occupational therapy, and physical therapy is quite skimpy.

Besides reviewing available literature on the subject, we surveyed by questionnaire the 45 PSEP receiving programs in the seven fields in which Hawaii is a sending state. Thirty-seven—or 82 percent—of the programs responded. In the fields of dentistry, optometry, and veterinary medicine, the responses were 100 percent. The one podiatry program, however, did not respond. We also interviewed local representatives to the Hawaii WICHE commission practicing in each of the affected fields. Again, however, we were unable to establish contact with the local representative to the Hawaii WICHE commission in the field of podiatry.

Results of accessibility study. The results of our study of accessibility of Hawaii residents to professional education in the fields of dentistry, optometry, veterinary medicine, pharmacy, occupational therapy, and physical therapy are set forth below. Due to significant differences among these several fields, each is treated separately.

Dentistry. Dentistry is a field which has been undergoing significant technological change in recent years. It is also a field where educational costs and tuitions have been escalating fairly rapidly. Tuitions, in particular, have been impacted by the drastic decline in federal financial support for dental educational

programs which has occurred since the mid-1970s. For programs at private institutions, for example, tuition income rose from 30 percent of total revenues in 1974-75 to 42 percent in 1979-80. Programs at state supported institutions have also been affected by the loss of federal dollars, but tuitions have not risen as sharply because state funds have been absorbing a larger share of the costs.

Tuitions at dental schools range widely throughout the United States depending upon the amount of subsidies received from state governments. In 1982-83, tuitions at a number of private schools exceeded \$10,000 per year, with the University of the Pacific being at the top with a charge of \$15,900. Some state supported institutions reported no tuition charges for resident students, but in each of these instances there were required fees ranging from \$1,226 to \$2,772. In 1982-83, the mean resident tuition for 60 dental schools was \$5,343, the mean non-resident tuition was \$7,657, and the mean required fee was \$259.¹

Although there are 60 dental schools in the United States and Puerto Rico, only eight are located in the Western region. Nine of the 13 member states of WICHE do not have dental schools. Five of the eight Western schools are state supported and three are private. All eight schools participate in WICHE, but the school at the University of Colorado only began to receive PSEP students in 1983-84.

Of the four state supported programs which have been in PSEP for some time, all have restrictions on the numbers of non-residents they will accept. With a non-resident tuition of \$25,066, the University of Colorado fairly effectively excludes non-residents from its program unless they are received under PSEP. In the other state supported programs, PSEP students receive a strong preference among non-residents who apply.

At the three private schools participating in PSEP—all in California—tuitions constitute a formidable barrier to most students: \$15,900 at the University of the Pacific, \$11,502 at the University of Southern California, and \$11,550 at Loma Linda University. Thus, a two-thirds reduction in tuition charges available to PSEP students can make quite a difference for Hawaii residents wishing to enter one of these programs.

1. American Dental Association, *1982-83 Annual Report: Dental Education*. Other dental tuition and enrollment data contained in succeeding paragraphs are also drawn from this same source.

How important, then, is PSEP in providing educational opportunities to Hawaii residents in the field of dentistry? As an indication of an answer to this question, it should be noted that 131 Hawaii students were reported as being enrolled in 24 dental schools during the 1982-83 academic year. Twenty-two, or approximately 17 percent, of these students were PSEP participants. (In 1983-84, Hawaii has 20 students in dentistry under PSEP.)

Of the five dental schools with the most Hawaii students in 1982-83—accounting for 69 students or 53 percent of the total—only one was in the Western region (the University of the Pacific with 14 Hawaii students). Of the nine dental schools most attended by Hawaii students in 1982-83—accounting for 98 students or 75 percent of the total—four are PSEP participating schools. However, only 19 of the 36 Hawaii students attending those four schools were under PSEP.

Generally speaking, then, PSEP is not a make or break proposition for many Hawaii residents insofar as determining whether or not they will go to dental school. Large numbers go even without PSEP support. For some, however, PSEP probably makes a significant difference. This situation may change, of course, if tuitions and other costs of going to dental school continue to escalate rapidly.

In this regard, the following conclusions drawn by WICHE in its *Study of Dental Manpower/Dental Education in the Thirteen Western States* should be noted:

- . Individuals adequately qualified for dental education and able to finance it will be able to secure entrance to some school.
- . Those who, because of their state of residence and their competitive qualifications, have access to public dental schools at resident tuition rates or to private dental schools at subsidized tuition rates will be more readily able to finance a dental education than those otherwise similarly situated who do not have such access. The level of qualifications required to be competitive for such access will vary greatly by state of residence because the number of dental school places available on these terms in relation to the number of residents seeking dental education varies greatly.
- . Access for low-income individuals and members of underrepresented minority groups will be especially restricted unless need-based financial aid and special mechanisms for minority access are provided.

Many students from middle income and even upper income families, though interested in dental education, may reject it as infeasible unless new flexible sources of capital and more attractive repayment terms for loans are developed.

Optometry. Altogether there are 16 schools or colleges of optometry in the United States and Puerto Rico. The three schools or colleges which are located in the Western region participate in the PSEP. They are the Southern California College of Optometry; the School of Optometry at the University of California, Berkeley; and the College of Optometry at Pacific University.

Southern California College of Optometry has a limit on the number of non-residents to be admitted. Moreover, the college gives admissions preference to qualified students who come from states which provide contract or PSEP support. The School of Optometry at UC, Berkeley, has "no specific limit for non-Californians" but "would be very reluctant to have more than 25 [percent] of a class" from out of state. However, applicants from WICHE states are accepted on the same basis as California residents.² While it also has no specific limits or quotas on non-residents, Pacific University College of Optometry also gives PSEP and other contract students first preference in much the same way as "a state resident provision might operate." Its policy is "to first fill the class with qualified students who are sponsored by WICHE and State programs" and then to fill the remaining slots.

In terms of admissions to these programs, competition appears to be keen. As shown in Table 6.1, a fraction more than one-third of all qualified applicants were admitted to two of the optometric schools in the Western region in the 1983-84 academic year.

Tuitions and fees are increasing annually. Table 6.2 shows tuitions and fees for the three programs in the 1981-82 academic year.³ It should be noted that only UC, Berkeley, is a state supported institution.

2. American Optometric Association and the Association of Schools and Colleges of Optometry, *Information for Applicants to Schools and Colleges of Optometry*, Fall 1983, p. 22.

3. *Ibid.*, p. 16.

Table 6.1
Admissions to PSEP Schools of Optometry
1983-84 Academic Year

<i>Institution</i>	<i>Number Admitted</i>	<i>Number Qualified Not Admitted</i>	<i>Percentage of Qualified Admitted</i>
Southern California College of Optometry	97	160	37.7
University of California, Berkeley, School of Optometry	68	129	34.5
Pacific University College of Optometry	88	—	—

Source: Survey of schools participating in the Professional Student Exchange Program.

Table 6.2
Tuitions and Fees in PSEP Optometric Schools
1981-82 Academic Year

<i>Institution</i>	<i>Resident Tuition</i>	<i>Resident Fees</i>	<i>Non-Resident Tuition</i>	<i>Non-Resident Fees</i>
Southern California College of Optometry	\$5,925	\$ 60	\$5,925	\$ 60
University of California, Berkeley, School of Optometry	None	806	2,880	806
Pacific University, College of Optometry	6,270	100	6,270	100

Source: American Optometric Association and Association of Schools and Colleges of Optometry, *Information for Applicants to Schools and Colleges of Optometry: Fall 1983*.

During 1983-84, there are 20 Hawaii students enrolled in these three schools under PSEP. Data are not available concerning the number of Hawaii students who may be enrolled in optometric programs outside of PSEP, either at these three schools or at the other 13 optometry programs beyond the Western region. From our interviews, however, it appears that PSEP is the main channel for Hawaii residents who wish to pursue their education in the field of optometry.

In this respect, a recent editorial in the *Journal of the American Optometric Association* makes the following point:

"[O]nly the subsidization by the resident state and contracts from neighboring states have brought down the tuition required from the range of financial impossibility to some students into a range of financial hardship to others."⁴

From all indications, then, PSEP seems to be a key determinant as to whether or not and how many Hawaii residents go into the field of optometry.

Veterinary medicine. Of a total of 26 schools of veterinary medicine in the United States, only three are located in the Western region. They are the School of Veterinary Medicine at the University of California, Davis; the College of Veterinary Medicine and Biomedical Sciences at Colorado State University; and the College of Veterinary Medicine at Washington State University. Admissions to all three programs are limited to state residents and to residents of the eight WICHE states which have opted to support students in this field—i.e., Alaska, Arizona, Hawaii, Montana, Nevada, New Mexico, Utah, and Wyoming.

Each of the three schools sets aside a certain number of slots to be filled by first-year students from the eight states. However, while it projects non-resident admissions of up to five students per year, UC, Davis, has not been able to admit any non-residents since the 1979-80 academic year. Interestingly, in 1979-80, with 127 of 128 students being state residents, the only non-resident admitted was from Hawaii. CSU sets aside 62 slots, and WSU, 15. Four of the 62 slots set aside by CSU and two of the 15 slots set aside by WSU are reserved for students from Hawaii. In 1980, a decision was made by both CSU and WSU to set firm quotas for WICHE exchange students on a per state basis.

Competition for the available slots is intense, as revealed in Table 6.3.

4. Milton J. Eger, O.D., ed., "The Applicant Pool," *Journal of the American Optometric Association*, Vol. 53, No. 11, November 1982, pp. 867-869.

Table 6.3

Admissions to PSEP Schools of Veterinary Medicine
1983-84 Academic Year

<i>Institution</i>	<i>Number Admitted</i>	<i>Number Qualified Not Admitted</i>	<i>Percentage of Qualified Admitted</i>
University of California, Davis	122	438	21.8
Colorado State University	138	228	37.7
Washington State University	106	305	25.8

Source: Survey of schools participating in the Professional Student Exchange Program.

It should be noted that of the 438 qualified applicants to UC, Davis, who were not accepted, 435 were state residents.

The pre-veterinary program at the University of Hawaii was established in 1970. Up until the 1970s, there were only a few students from Hawaii in the veterinary schools on the mainland. Today there are more. According to the pre-professional advisor at the university, there were 12 applicants in the 1982-83 academic year. Six were admitted as WICHE students.

It would appear, therefore, that PSEP is of critical importance for Hawaii residents seeking to go into the field of veterinary medicine—especially if they want to study at a school in the Western region. Without PSEP, probably none of the three Western schools would be open to Hawaii students. Even with PSEP, the number of openings available to residents of Hawaii is extremely limited—six per year.

Pharmacy. Twelve schools of pharmacy in the Western region participate in the PSEP. Ten of these schools completed and returned our questionnaire. They are the schools or colleges of pharmacy at the University of the Pacific, the University of Colorado, Idaho State University, the University of Montana, the University of New Mexico, Oregon State University, the University of Utah, Washington State University, the University of Washington, and the University of Wyoming. Of the ten schools, only one is not state supported.

As evidenced by a steady decline in enrollment at nine of the ten schools in our sample over the past five years, demand is down. More than likely, a career in pharmacy has lost some of its appeal due to changes in the character of the

profession itself. Unlike the old days when pharmacists were more likely to go into business for themselves, pharmacists today are more apt to be salaried employees of drug stores, hospitals, or clinics—at least in Hawaii.

Moreover, it is quite apparent that all qualified applicants are generally being admitted to the schools. Only the University of Washington rejected six applicants for the 1983-84 academic year. Then, too, non-resident students are being admitted with or without WICHE support. For 1983-84, Hawaii has 14 students in the field of pharmacy under PSEP. With competition almost non-existent in this field, access does not seem so relevant an issue in pharmacy as in some other fields.

Occupational therapy. Although five of the six PSEP occupational therapy programs responded to our questionnaire, trends in this field are not readily discernible.

At the two private institutions—Loma Linda University and the University of Southern California—no distinction is made between resident and non-resident applicants. Colorado State University has no quota or limit on non-residents to be admitted, but it reports that the WICHE program has been the only means by which some of their students have been able to obtain a degree in occupational therapy.

San Jose State University has a quota; no more than two non-resident students can be admitted each admissions cycle. However, because PSEP prospects compete on an equal basis with resident applicants, “early confirmation of certification for WICHE support may facilitate consideration of applications.” The University of Washington also has a quota on non-residents. So far, few non-residents have been enrolled in its occupational therapy program.

The occupational therapy professional programs at both Colorado State University and San Jose State are at the undergraduate level.

In 1983-84, Hawaii has a total of 26 students in the field of occupational therapy under PSEP. The general experience has been that the number of openings which the Hawaii WICHE commissioners make available in this field exceeds the number of students who are actually accepted into participating programs. Either not enough students apply or not enough are able to meet qualification requirements. Thus, accessibility does not appear to be a major problem in this field.

Physical therapy. Nine of the 13 programs of physical therapy in the Western region which participate in the PSEP completed and returned our questionnaire. They are the programs at California State University, Fresno; Children's Hospital of Los Angeles; Loma Linda University; the University of California, San Francisco; the University of Southern California; the University of Colorado; the University of New Mexico; the University of Puget Sound; and the University of Washington. Five of the nine are state supported institutions.

At all five state supported institutions, there are limits or quotas on the number of non-residents to be admitted, as shown below in Table 6.4.

Table 6.4
Admission Quotas for State Supported PSEP Programs
in Physical Therapy

<i>Institution</i>	<i>Restriction on Non-Residents</i>
California State University, Fresno	32 residents only, but PSEP students are considered residents.
University of California, San Francisco	30 slots, with California residents to be considered first.
University of Colorado	30 Colorado residents in a class limited to 32.
University of New Mexico	20 slots, with PSEP applicants being given the same preference as state students <i>if</i> they are certified.
University of Washington*	32 slots, with state residents and PSEP students being given equal consideration.

*Undergraduate program which is not permanently funded as yet.

Source: Survey of programs participating in Professional Student Exchange Program.

The four private institutions do not distinguish between resident and non-resident applicants. However, one institution is inclined to admit non-transfer over transfer students.

Admissions to physical therapy schools is competitive, as indicated by Table 6.5.

Table 6.5

Admissions to PSEP Physical Therapy Programs
1983-84 Academic Year

<i>Institution</i>	<i>Number Admitted</i>	<i>Number Qualified Not Admitted</i>	<i>Percentage of Qualified Admitted</i>
California State University, Fresno	32	43	42.7
Children's Hospital of Los Angeles	24	372	6.1
University of Colorado	32	56	36.4
University of New Mexico	18	47	27.7
University of Puget Sound	30	130	18.8
University of Washington	33	100	24.8

Source: Survey of programs participating in the Professional Student Exchange Program.

Currently, there is a great deal of variation in physical therapy education. By 1990, however, all programs should be at the master's level. As the schools convert to a master's program, they will become more expensive and more difficult for Hawaii students to get into.

As it is, Hawaii students do not seem to fare well in terms of admissions to two of the state-supported schools in our sample. This is evidenced by the following comments:

1. "Few students have applied. Those who have were not successful in passing our screening exam."
2. "To date, Hawaii applicants have not competed favorably as regards academic performance or general subjective criteria with our applicant pool."

Because most schools require personal interviews as part of the applications process, it could well be that many Hawaii applicants cannot afford to fly to the mainland just for an interview. In any event, the Hawaii WICHE commissioners have never been able to fill all of the openings they have provided in the field of physical therapy under PSEP. In 1983-84, there are 16 Hawaii students in physical therapy under PSEP.

As in several other fields, then, accessibility does not appear to be a major problem for Hawaii residents wanting to go into physical therapy.

Accessibility to information about PSEP. A corollary to the overall issue of accessibility is the matter of accessibility to information about PSEP. If Hawaii residents are not fully aware of the opportunities available to them under PSEP, their accessibility to professional education programs not available in Hawaii might be reduced accordingly. For this reason, we tried to determine the extent to which information about PSEP might be readily available to Hawaii residents.

Based upon interviews, we found that Hawaii residents can learn about PSEP in a variety of ways—by word of mouth, through an informational brochure produced annually by WICHE-Boulder and made available at the admissions and graduate division offices at the University of Hawaii at Manoa (UHM), from the Hawaii WICHE commissioners and certifying officer who meet from time to time with pre-professional and other student groups, from pre-professional and other student advisors, from admissions offices and catalogs of participating PSEP programs to which Hawaii students may apply or direct inquiries, and by way of Career Kokua, the Hawaii Career Information Delivery System, which provides career information through hard copy and computer terminals in numerous locations throughout the state.

We did find, however, that students at UHM are more likely to be familiar with PSEP than students at the private institutions of higher education in Hawaii. Academic or admissions personnel at the private institutions were quite knowledgeable about PSEP, but they indicated their student advisors or counselors probably do not publicize the program as much as do personnel at UHM. A major complaint was that materials which could be distributed to all those who might be interested in the supported fields of study were not being made available in sufficient quantities. However, it was not clear whether this was the fault of the schools themselves or of a failure on the part of the Hawaii WICHE commissioners to fulfill requests for more copies.

Generally speaking, then, it appears that information about PSEP should be fairly readily available to any Hawaii residents who are seriously interested in entering any of the PSEP fields supported by the State of Hawaii and who take any initiative to learn about their areas of interest. Therefore, lack of information about PSEP should not be a factor limiting accessibility of Hawaii residents to professional education programs offered through PSEP.

Chapter 7

RELATIONSHIP OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM TO EMPLOYMENT OPPORTUNITIES AND MANPOWER NEEDS IN HAWAII

As another way of looking at the Professional Student Exchange Program (PSEP), the Legislature in its study request directed that attention be given to the relationship of PSEP to employment opportunities and manpower needs in Hawaii. This chapter describes and discusses this aspect of our study of PSEP.

Interaction Between Academic Programs and Concerns About Employment

For most professional fields today, academic training in the relevant field is a necessary prerequisite for entering practice in that field. Thus, when there is a shortage of personnel in a particular field, the natural urge is to look at the professional education programs in that field to produce more graduates. Conversely, when a surplus of personnel develops, the normal thing to do is to question why so many graduates are being turned out. This is especially true if the programs in question are being publicly financed, as is the case both with PSEP and with professional education programs offered at the University of Hawaii.

It is quite appropriate, then, to review interrelationships between PSEP and employment opportunities and manpower needs in Hawaii. In so doing, however, it is important to recognize that there are several conditioning factors which can significantly influence these interrelationships. These factors are identified and discussed below.

Differences in academic and economic perspectives. *First*, it should be recognized that persons involved in educational and academic activities quite often proceed from somewhat different premises than those used to guide the actions of persons whose primary concerns relate to economic and employment matters. While the two areas intersect and overlap, they also vary in outlook and objectives. In

making accommodation to each other, they should also respect one another's differences and unique characteristics.

In the case of educational institutions, their perspective tends to be broad and long range. They are interested in building up a body of knowledge and testing it over a long period of time. They are concerned with providing students with educational opportunities and educational choices. They see diversity and comprehensiveness as real values to promote and protect. They cherish stability and react only gradually to change.

At the same time, however, they are aware that they are social institutions which draw upon the public for support and which should be responsive to the needs of the society in which they function. As the prime source of training for many jobs that require careful preparation and skill in the use of intellectual resources, they recognize they must tailor their programs to some extent to meet society's demands for such personnel.

Those concerned with economic and employment matters should also be broad and long term in their perspective, but much of the time they must also deal with problems that are immediate and pressing. If there are manpower shortages affecting production, they must seek extra help to fill the gaps. If there are manpower surpluses creating displacement and unemployment, they must find ways of cutting down on the supply. Hence, they tend to be narrower and shorter range in their perspectives.

The net effect of this situation is that the two areas of activity will seldom, if ever, be truly synchronized. Institutions of higher education can never be appropriately viewed as production lines where output can be increased, decreased, or shifted at will to meet the vagaries of fluctuating circumstances. Neither professors nor students want the choices of classes and fields of study to be dictated solely by what happens to be needed at any particular time. Long lead times are required for making changes in the area of higher education. At the same time, however, changes keep taking place and the demands for particular types of specialized personnel will continue to fluctuate erratically.

Inherent difficulty of projecting future needs. Closely associated with this conflict between academic and economic perspectives is a second very influential

factor affecting the ability of the State to gear its academic programs to meet its economic requirements. This is the fact that it is extremely difficult to project needs and opportunities with sufficient certainty that a continuing balance can be maintained between graduates coming out of the schools in the various professional fields and job openings in those fields.

Due to the many variables involved, there is no sure-fire way of predicting the future. With careful review and analysis, this uncertainty can be brought into clearer focus, but it can never be fully eliminated. Thus, efforts at predicting and projecting should not be abandoned as completely useless, but neither should all decisions concerning what and how much should be taught at institutions of higher education be geared exclusively to what today's projections are concerning future job opportunities in each field.

Projections of what the manpower needs will be or what kinds of jobs will be available in the future are guesstimates at best. Oftentimes projections are not available, or if they are available, very often they are outdated. For example, in its *Study of Dental Manpower/Dental Education in the Thirteen Western States*, released in March 1983, WICHE noted that available projections of the number of dentists are out-of-date. While projections by the U.S. Department of Health and Human Services (DHHS), published in January 1982, assumed that first-year enrollments would be reduced evenly over a ten-year period from 6,030 in 1980-81 to 5,560 in 1990-91, they have already dropped to 5,498 in 1982 and are expected to drop further.¹

When one or more of a projection's assumptions do not hold up, little stock can be put into the projection itself. Then, too, when decisions have to be made based on projections, the results may not always be desirable. To illustrate, in the 1960s, there was tremendous pressure to increase professional school enrollments substantially because projections all seemed to indicate severe shortages of health care personnel. The Health Professional Educational Assistance Act of 1963 provided federal construction funds for the expansion of existing schools and the building of new ones. Later amendments to the act provided operating funds for various purposes, including student capitation support for regular instructional

1. *Study of Dental Manpower/Dental Education in the Thirteen Western States*, WICHE, March 1983, p. 11.

budgets. Professional schools, universities, and state governments all responded to these incentives, and capacity was expanded throughout the next 15 years.

The numbers of applicants grew more rapidly than enrollment capacity and the schools were able to be very selective in admitting students to their first-year classes. The increase in applicants was especially steep in the early 1970s when the number of female applicants grew very rapidly and the participation of minorities was increasing. About 1975, the trend in the numbers of applicants reversed. While the total number of persons receiving bachelor's degrees remained essentially constant, the numbers applying to health professional schools declined substantially.

The population growth on which the projections of the early 1960s were based proved to be significantly overstated and the expansion of schools was, if anything, greater than expected. Several studies made around 1980 projected that oversupply of professionals would develop in the 1980s. The January 1982 DHHS report on the status of health professionals in the United States projected supply exceeding requirements in 1990 among physicians, dentists, optometrists, pharmacists, and veterinarians.²

Just as population growth could be significantly overstated in the 1960s, oversupply of professionals may be significantly overstated in the 1980s. Thus, if action is taken to artificially decrease enrollments in professional schools based on the 1980 projections, the 1990s could very well experience another shortage of professionals.

Hawaii has at least one close to home example of what can happen when an academic program is adjusted significantly to meet a perceived problem in the marketplace. It was not too long ago that the Department of Education was having to recruit teachers on the mainland due to a teacher shortage and the inability of the College of Education at the University of Hawaii to provide enough graduates in education to meet the local demand. Accordingly, the College of Education was given additional resources and instructed to expand its capacity to turn out more teachers. It responded to this challenge, but almost immediately the situation shifted from a teacher shortage to a teacher surplus in Hawaii.

2. *Ibid.*, p. 7.

Shortly thereafter, the Department of Education reported it had several thousand more teacher applicants than it had openings for teachers in the schools. This gloomy job situation was soon reflected in a rapidly dropping enrollment at the College of Education. Yet, by then, the college was permanently geared up to handle the larger student load it had set out to meet. And so, a new question has been posed: Should the college scale back to meet the greatly reduced demand for teachers, or is it possible that there will again be another teacher shortage for which this capacity will be needed? When we last reviewed the matter at the University of Hawaii, no clear answer had yet been formulated.³

Generally, it should be noted that forecasts are based on regression analysis which takes into account historical trends. Although history may repeat itself, it is not always true that a set of conditions which existed at one time will all be present at another time. Hence, while history can give us some insight into why things are, they do not always tell us what they will be in the future.

Status of information systems. Another important factor affecting interrelationships between the areas of academic and employment activities is the actual availability of pertinent and reliable information. In our examination, we found that steps are being taken to deal with this problem, but that Hawaii is not yet in the position where information on this subject can readily be drawn together and used with confidence.

The Hawaii State Occupational Information Coordinating Committee (HSOICC) was established under Title II of the Educational Amendments of 1976, which called for states to participate with the federal government in the development and implementation of a formal and standardized system for the collection, analysis, and dissemination of occupational information. In addition, a major purpose of HSOICC is the development of an occupational information system which will meet the planning and operational needs of manpower and certain education programs.

3. In the budget review and analysis which we made of the higher education program in 1982-83, we found that the budget of the College of Education was continuing to increase in the face of a 22 percent decline of enrollment between 1977 and 1981.

The Hawaii Occupational Information System (HOIS), as developed by HSOICC, contains two major components, one on career information and one on occupational employment planning information. Career Kokua, otherwise known as the Hawaii Career Information Delivery System, contains occupational and educational information for the career planner and job seeker. The other major component, the Hawaii Occupational Employment Planning System (HOEPS), is a set of subsystems and data bases which provides data to education and training program planners. The intended use of these data is to base such program plans on knowledge of historic trends and projected needs in the workforce and economy in general.⁴

HOEPS should be operational in a matter of months. However, the technical-vocational occupations will be covered first. As far as the professions are concerned, HSOICC believes that by next summer it can begin projecting their demand. Until that time, no other projections are available with the exception of those contained in *Employment Outlook for Industries and Occupations 1978-1985*, which is an update of the State Department of Labor and Industrial Relations' past reports, *Hawaii's Job Outlook 1985* (published in March 1980) and *Honolulu SMSA's Job Outlook 1976-1985* (published in December 1981). The *Employment Outlook* report provides an occupational breakdown by industries in Hawaii based on staffing patterns from the occupational employment statistics survey, which was employer-based. HOEPS will build on information provided in the *Employment Outlook* report.

For now, information available from these sources is of limited value for purposes such as our study.

Assessment of Present Situation

Given that manpower needs and employment opportunities are difficult to project with any degree of certainty and that Hawaii's only integrated system for projecting occupational demand is not yet operational, we nonetheless attempted to assess what the general trends are in each of the professional fields supported by

4. *On Planning . . . HOEPS: Hawaii Occupational Employment Planning System*, Hawaii State Occupational Information Coordinating Committee, January 1983, p. iii.

Hawaii under PSEP. In this connection, past and/or present representatives of professional associations to the Hawaii WICHE program were consulted. While attempts were made to contact the professional representatives in all seven fields supported by Hawaii, we were unable to contact the professional representative in podiatry. Thus, in the discussion which follows, the fields of dentistry, veterinary medicine, physical therapy, occupational therapy, optometry, and pharmacy—but not podiatry—are included.

Furthermore, to determine whether manpower needs and employment opportunities in the professional fields are such that PSEP graduates generally return to Hawaii to begin their professional careers, we checked the names of the graduates against the Professional and Vocational Licensing Division's computerized lists of professionals licensed to practice in the State of Hawaii. The names of graduates in the fields of medicine, dentistry, veterinary medicine, optometry, podiatry, and pharmacy were checked this way. It should be noted that before Hawaii acquired its own medical school, Hawaii was a sending state in medicine. A total of 85 students successfully completed medical school with WICHE support from 1964 to the mid-1970s.

As the licensure of physical therapists is handled, not by the Professional and Vocational Licensing Division of the Department of Commerce and Consumer Affairs (DCCA), but by the Department of Health (DOH), the lists of PSEP graduates in physical therapy were transmitted to DOH personnel who checked the names on the lists against their files. The occupational therapy association was consulted because it certifies occupational therapists. In addition, the assistance of professional representatives was enlisted, primarily to locate the whereabouts of those graduates whose names did not readily appear on the lists of licensees for one reason or another.

For purposes of comparison, we surveyed four professional schools at the University of Hawaii to find out how many of their students remain in Hawaii upon graduation. The schools of law, medicine, public health, and social work were contacted.

Both the school of law and the school of medicine attempt to keep track of their graduates. The school of law maintains an employment profile of its graduates while the school of medicine records where its graduates are going for their

residency. The school of public health also keeps records of some sort on computer, but the data are not readily available. Finally, the school of social work does not know where its graduates go, for it does not routinely monitor their whereabouts.

Field by field review. Set forth below is a review of the present situation in each of the six affected fields. One word of caution needs to be injected with respect to the discussion that follows. Some professional associations are so well organized that they can produce reams of statistical data which are routinely collected. Others are not so organized and established in the islands. Therefore, detail in some fields is greater than in others. The degree of detail and sophistication in the discussion that follows should not be interpreted to reflect adversely upon any of the professions.

Dentistry. Very broadly, the manpower and employment situation in dentistry can be characterized by: (1) an apparent oversupply of practitioners; and (2) inordinately high start-up costs.

In 1979, 117,000 dentists actively practiced in the United States, and 14,000 or 12 percent of them were specialists.⁵ In comparison, according to the Hawaii Dental Association, as of September 1983, there were 600 active dentists in the State of Hawaii, a good many of whom were specialists. Moreover, based on 1980 census figures, Hawaii has one dentist per 1,503 population, with the breakdown by major island as shown in Table 7.1.

Table 7.1
Ratio of Dentists to Population in Hawaii
September 1983

<i>Location</i>	<i>Population Based on 1980 Census</i>	<i>Number of Active Dentists as of September 1, 1983</i>	<i>Dentist to Population Ratio</i>
Oahu	702,208	479	1:1,466
Hawaii	91,891	56	1:1,641
Maui	68,845	42	1:1,639
Kauai	38,918	23	1:1,692
STATEWIDE	901,862	600	1:1,503

Source: Hawaii Dental Association.

5. *Study of Dental Manpower/Dental Education in the Thirteen Western States*, WICHE, March 1983, p. 4.

The dentist to population ratio in Hawaii is better than the national ratio. Table 7.2⁶ shows ratios of active civilian dentists per 100,000 civilian population for 1970 and 1980, as estimated by the U.S. Department of Health and Human Services, for the United States, for each of nine regions, and for each of the 13 WICHE states. For each region and state, a percentage of the U.S. ratio is shown for 1970 and 1980, and the change in this percentage is indicated.

The WICHE states are listed in Table 7.2 according to their 1970 ratios from highest to lowest. The first three states showed significant decreases in percentage of the U.S. ratio, and all the remaining states showed increases. The increases for Washington and Utah, which already had high ratios in 1970, are surprising. Here, too, the range in percentage of the U.S. ratio was reduced substantially during the 1970s. In 1980, only Arizona and New Mexico remained well below the U.S. ratio and ranked among the lower half of the fifty states.

On the basis of the dentist to population ratio, then, it would appear that Hawaii has an oversupply of dentists. In its study of dental manpower and dental education in the 13 Western states, WICHE concludes that "the capacity for production of dental care, in relation to the demand for dental care, will be ample if not excessive until at least the mid-1990s and probably until the year 2000, resulting in a highly competitive environment in the dental care market."⁷

In terms of the oversupply in Hawaii, however, the professional representatives in dentistry all maintain that the oversupply does not come from within and that many dentists have migrated to Hawaii from the mainland, thus contributing to the oversupply here. In this sense, then, it might be said that the oversupply is more apparent than real. So long as dentists continue to relocate here under existing competitive conditions, it is hard to maintain that the oversupply situation is serious.

Rather than an oversupply of dentists, the professional representatives believe that the major problem facing all dentists has to do with obtaining the resources to finance a practice upon graduation. Start-up costs for a dentist to open an office in Hawaii today average from \$150,000 to \$200,000. A dental school graduate would

6. *Ibid.*, p. 23.

7. *Ibid.*, p. 17.

Table 7.2

Dentist to Population Ratios 1970 and 1980
United States, Nine Regions, and Western States

Entity	Number of Dentists Per 100,000 Population		Percent of Nationwide Ratio			Rank Among the 50 States in 1980
	1970	1980	1970	1980	Change	
United States	47.4	54.9	—	—	—	
Regions (Range)	(32.6–61.6)	(42.1–66.5)	(69–129)	(77–121)		
Mid-Atlantic	61.1	65.3	129	119	-10	
Pacific	57.9	66.5	122	121	-1	
New England	51.9	65.1	109	119	+10	
West North Central	47.4	54.0	100	98	-2	
East North Central	45.9	52.7	97	96	-1	
Mountain	45.5	56.0	96	102	+6	
South Atlantic	35.8	46.0	76	84	+8	
West South Central	36.2	43.3	76	79	+3	
East South Central	32.6	42.1	69	77	+8	
Western States (Range)	(28.1–65.2)	(45.1–74.2)	(59–138)	(82–135)		
Oregon	65.2	72.9	138	133	-5	3
Hawaii	63.8	67.7	135	123	-12	7
California	57.4	64.7	121	118	-3	9
Washington	57.0	74.2	120	135	+15	1
Utah	54.8	69.5	116	127	+11	5
Colorado	51.9	62.5	109	114	+5	11
Wyoming	46.2	55.8	97	102	+5	18
Idaho	44.9	53.5	95	97	+2	25
Montana	44.3	59.3	93	108	+15	15
Nevada	41.4	54.0	87	98	+11	24
Arizona	38.1	47.5	80	87	+7	34
New Mexico	36.4	45.1	77	82	+5	36
Alaska	28.1	54.9	59	100	+41	21

Source: Based on U.S. Department of Health and Human Services, *Supply and Characteristics of Selected Health Personnel*, June 1981, p. 40.

have a difficult time raising that sum of money, but if the new dentist has education loans to repay—which is not too unlikely since student indebtedness is on the rise—the difficulty increases. More and more, therefore, dental school graduates tend to become associates of more established dentists in the State or they become residents at local hospitals before they even attempt to go off on their own.

Veterinary medicine. The manpower situation in veterinary medicine is more difficult to assess, simply because no one knows the true size of the animal population in the islands. However, compared to the 1950s and 1960s when military doctors had to make their services available to the civilian community, Hawaii now has a small army of veterinarians, although many local veterinarians are those who got out of the service and set up practice in Hawaii. While some practitioners feel that Hawaii has an oversupply of veterinarians, there is general agreement that the services of veterinarians are more in demand nowadays than in the past. As their standard of living rises, people are more inclined to seek professional help for their ailing pets, whereas in the past veterinary services were in demand mostly for the care of valuable livestock.

In veterinary medicine as in dentistry, the problem faced by most graduates who return to Hawaii has to do with the relatively high cost of establishing a private practice here. For the most part, opening an office immediately upon returning to the islands would be highly unfeasible. Thus, most graduates go to work for other more established veterinarians, at veterinary clinics, or for government before some of them venture off on their own. Unfortunately, these jobs are not plentiful; hence, many students worry about finding jobs here.

Physical therapy. Physical therapists (PTs) are needed in Hawaii. According to the professional representative to the Hawaii WICHE program in this field, there are always ten to 15 jobs available here at any given time. The State Department of Health has designated PTs as a shortage category. However, the State seems to have a problem of attracting and retaining PTs because it does not pay as much as the private sector. While starting pay for PTs has generally been lower here than on the mainland, those entering the field in the private sector demand and sometimes get better pay than before.

The shortage of physical therapists is probably due in large measure to the expansion of the field itself. Home health care laws, which provide nursing home

care for the elderly; Public Law 92-142, which makes special education available to handicapped children in the regular schools; the rise of orthopedics and sports medicine; and the use of PTs in cardiopulmonary rehabilitation are some of the developments which have given rise to the need for more physical therapy services.

Physical therapy graduates can work in a variety of places: in hospitals, doctors' clinics, schools, private industry, or private practice. Generally, a private practice comes later, because start-up costs, which primarily include space and equipment costs, run approximately \$25,000 to \$30,000.

Occupational therapy. According to the occupational therapy association, as a rule there are not many job openings for occupational therapists (OTs) in Hawaii. Where there are openings, they are usually for certified occupational therapy assistants (COTAs) rather than registered occupational therapists (OTRs). The State Department of Health, which hires more COTAs than any other sector, has designated OTs as a shortage category, although the shortage of OTs is not as great as the shortage of PTs.

A training program for COTAs is available at the Diamond Head campus of Kapiolani Community College. It graduates about 60 students every two years. Many COTAs go on to become OTRs, but OTR training is only available on the mainland. When students go to the mainland for schooling, they tend not to return because the pay scale there is much higher than it is locally. Moreover, jobs are plentiful on the mainland, because the shortage of OTs is national.

Optometry. There appears to be a surplus of optometrists in Hawaii at the present time. However, according to the Hawaii Optometric Association, this surplus is an artificial one because there is a tremendous gap in the ages of present optometrists. Thus, when the older generation of optometrists is ready to retire, which will be soon, i.e., within the next five years, there will be a void for younger optometrists to fill.

Start-up costs for beginning optometrists run from \$60,000 to \$90,000. Hence, upon graduation most optometrists enter into associateships.

Pharmacy. The character of this profession has changed, particularly in Hawaii. It used to be that pharmacists were usually self-employed proprietors of independent drug stores, but in recent years they tend to be salaried employees of

hospitals, clinics, or drug stores. As a result, there are quite a few pharmacists for the jobs available locally, and the pharmacy field is extremely competitive. According to the Hawaii Pharmaceutical Association, there are about 300 positions on all the islands, with about eight to ten graduates seeking employment each year.

Summary. From the foregoing discussion, it is quite apparent that the manpower and/or employment situation differs among the fields. In dentistry and to varying degrees in veterinary medicine and optometry—three fields in which practitioners are thought to have high earning potential—the situation seems to be one of an overabundance of professional practitioners coupled with high start-up costs. In pharmacy the situation appears to be such that employment opportunities are limited because the number of job openings is relatively fixed. In physical therapy, it would seem that there are not enough practitioners at the present time. Finally, in occupational therapy the need is for certified occupational therapy assistants rather than registered occupational therapists.

Comparison with fields where programs are offered at the University of Hawaii. With many of the PSEP fields supported by Hawaii experiencing apparent oversupply in practitioners, the need or desirability of continuing state support of professional education in these fields is open to question. To put this matter into proper perspective, it would be appropriate to know what the comparable situation might be with respect to professional fields where educational programs are offered at the University of Hawaii. Due to limited time and resources and the unavailability of information in many instances, we were unable to make as detailed analyses of these fields as we did of the PSEP fields. However, based upon our brief review, there are indications that similar conditions prevail in many of the fields where the University of Hawaii offers programs.

We have already noted, for example, that there is a very large surplus of persons with education degrees in Hawaii compared to openings available in the Department of Education. We were also told that Hawaii cannot realistically absorb all of the university's graduates in fields like electrical engineering and library studies.

Of more direct interest is what has happened in the two fields where Hawaii has started programs of its own even though programs were available under PSEP. These two fields are law and medicine. In both of these fields, there have been significant increases in the numbers of practitioners in Hawaii since the two

programs were inaugurated. These increases have been accompanied by equally significant decreases in the ratio of population to practitioners. The results are set forth in Table 7.3.

Table 7.3

Changes in Population/Practitioner Ratios
in the Fields of Medicine and Law

<i>Field/Year</i>	<i>Population</i> ¹	<i>Number of Active Practitioners</i> ²	<i>Practitioner to Population Ratio</i>
Medicine			
1974	867,000	1,141	1:760
1982	993,700	1,658	1:599
Law			
1975	884,000	1,572	1:562
1982	993,700	2,718	1:366

¹ Estimates of Department of Planning and Economic Development.

² Figures provided by the Hawaii Medical Association and Planning and Statistics Office of the State Judiciary.

If an oversupply situation has been reached in the PSEP fields, then it can probably be said that much the same situation has been reached in the fields of law and medicine as well as in many of the other fields where the University of Hawaii is offering professional education programs. Under these circumstances, it would appear that any effort to relate the State's support for professional education to job opportunities in Hawaii should be approached on a comprehensive basis rather than be restricted to the PSEP programs.

Location of graduates of professional education programs. Another way of gauging employment opportunities in professional fields in Hawaii is to see how many graduates from educational programs in various fields locate in Hawaii to engage in the practice of their professions. Accordingly, we attempted to find out how many PSEP students from Hawaii have remained in Hawaii since leaving PSEP.

For the period from 1964 through 1983, Hawaii graduates from PSEP totaled 388. For most of these graduates, we were able to determine whether or not they are licensed to practice in Hawaii and are actually practicing here. For the five graduates in forestry and one in music therapy, however, we were unable to obtain any information. This left 382 as the population for our study.

Table 7.4 summarizes by field of study how many of the 382 PSEP graduates from Hawaii are licensed or certified to practice in Hawaii and are known to be practicing in Hawaii as of November 1983. Of the 382, 231, or 60 percent, are licensed or certified to practice in Hawaii. Of these so licensed or certified, 204, or 53 percent of the total, are known to be practicing in Hawaii. The number licensed or certified and the number actually practicing differ because a sizeable group of PSEP graduates maintain their Hawaii licenses even though they are currently practicing elsewhere (usually on the West Coast).

While Table 7.4 may indicate that many PSEP graduates do not come back to Hawaii to practice, this information should be used with caution. First, it should be recognized that some of them may be remaining on the mainland to receive additional specialized training and experience which they will eventually bring back to Hawaii. Others, as already indicated, are licensed to do business here and may also return. Then, too, there are graduates who marry and who must take into consideration the interests of their spouses and families when deciding where to locate. Finally, there are those graduates who are very desirous of returning to Hawaii, but who cannot be assured of employment opportunities equal to those available to them on the mainland.

From the information we have been able to obtain, the situation concerning the location of PSEP graduates is not too different from that of graduates from many of the professional education program offered by the University of Hawaii. As previously noted, information of this type is not available for a number of the fields. However, we have been told that more than half of the graduates at the medical school have left Hawaii at least temporarily. Many of these have done so to complete their training as interns or to pursue areas of specialization, and may eventually come back to Hawaii. Others, however, will undoubtedly settle permanently elsewhere.

While the school of public health could not provide detailed information on graduates for specific years, it did indicate that only 41 percent of all of its graduates over the school's lifetime of 20 years are thought to have remained in Hawaii. In the past three years, 458 students have graduated from the public health program. Many of these are believed to have left Hawaii due to the inability of the local community to absorb so many graduates.

Table 7.4

Hawaii PSEP Graduates Licensed and Practicing in Hawaii as of November 1983

Professional Field	Total Number of Graduates ^a	Number Licensed or Certified in Hawaii	Percentage Licensed or Certified	Number Practicing in Hawaii	Percentage Practicing in Hawaii
Medicine	85	44	52	40	47
Dentistry	90	75	83	63	70
Veterinary Medicine	50	34	68	32 ^b	64
Physical Therapy	37 ^c	18	49	18	49
Occupational Therapy	60 ^d	19	32	19	32
Optometry	37	31	84	23	62
Podiatry	3	0	0	0	0
Pharmacy	20	10	50	9	45
TOTAL	382	231	60	204	53

^aIn all fields except medicine, students graduated from 1964 to 1983. Support of medicine ceased in the mid-1970s.

^bWhile there is a discrepancy between the American Veterinary Medical Association and the Department of Commerce and Consumer Affairs, the department's figure is shown here.

^cFour 1983 graduates have made licensure queries; the license of another graduate has expired as of January 1983; and still another resides in Hawaii, but is not employed as a Physical Therapist.

^dOne graduate resides in Hilo, but is not employed as an Occupational Therapist; another graduate is a pre-med student at the University of Hawaii; and four 1983 graduates are still students while yet another 1983 graduate plans to return to Hawaii in January.

Source: Based on licensing records of the Departments of Commerce and Consumer Affairs and Health and membership roster of the American Occupational Therapy Association.

A major exception to this pattern of professional mobility seems to be the graduates of the law school. According to information on these graduates, a vast majority of them have remained in Hawaii and are licensed to practice here.

Chapter 8

COSTS AND FINANCING OF THE PROFESSIONAL STUDENT EXCHANGE PROGRAM FROM THE PERSPECTIVE OF PROGRAM PARTICIPANTS

In preceding chapters, the Professional Student Exchange Program (PSEP) is looked at primarily from the point of view of the state government—particularly with respect to the costs and financing of the program. However, participants in the program are also incurring substantial costs themselves, and must be concerned with matters of financing. Moreover, proposals have been made to shift some or all of the State's PSEP costs to the program participants. In light of these considerations, it is important to look at the costs and financing of professional education under PSEP from the perspective of the program's participants.

Accordingly in this chapter we look first at the benefits received and the costs incurred by PSEP participants. We then compare these benefits and costs with the benefits and costs experienced by resident students pursuing professional education programs at the University of Hawaii. Finally, we review what the financial impact on participants and other implications may be if a payback requirement is imposed on the PSEP program or if Hawaii's participation in PSEP is terminated altogether.

Benefits and Costs for Program Participants

Benefits under PSEP. Residents of Hawaii studying under PSEP may benefit financially from the program in two ways: (1) through lower transportation costs in some cases, and (2) through lower tuition costs in almost all cases.

Lower transportation costs can be achieved to the extent PSEP makes particular professional education programs available at points less costly to reach than would otherwise be the case if students had to go elsewhere for such training. Generally, transportation costs are a function of distance. Thus, by opening up programs in the Western region—particularly along the West Coast—that might otherwise be closed to Hawaii residents, PSEP enables Hawaii students to avoid the higher costs of going further east for their education.

However, this benefit is by no means certain and can vary widely. Due to competitive considerations and the way in which airlines price their short-haul and long-haul fares, it may sometimes be cheaper to travel a long distance to a major population center in the Midwest or on the East Coast than to go to many intermediate points within the Western region where PSEP programs may be located. Another variable is whether a student makes only one or several roundtrips between Hawaii and the school attended during the school year. Thus, among PSEP participants from Hawaii, this benefit may vary from nothing to a few hundred dollars up to perhaps as much as a thousand dollars a year.

Of much greater significance is the benefit which PSEP participants receive in the form of tuitions lower than they would be in most cases if there were no PSEP. At state supported schools, PSEP students from Hawaii pay the resident tuitions charged at the receiving schools instead of the non-resident tuitions which would normally apply and which are usually much higher than the resident tuitions. At private schools, PSEP students generally pay only one-third of the regular tuitions charged to most students.

In this sense, then, PSEP provides a form of scholarship or financial aid to its participants. It directly lowers their cost of education. However, in another sense, PSEP support is no different than the subsidies which Hawaii students receive when pursuing professional education programs at the University of Hawaii where costs are much greater than the tuitions paid.

The amount of the lower tuition benefit enjoyed under PSEP varies widely among participants; some enjoy a much greater benefit than others. Several factors contribute to this situation. First is the fact that costs and tuitions vary widely among the different professional fields—medicine, dentistry, and veterinary medicine are much more expensive than occupational therapy, architecture, and forestry. Second is the difference between private and public institutions of higher education in their dependence upon tuition income. Private schools must rely heavily upon tuition and set their prices accordingly. State supported institutions, however, can look to fairly heavy subsidization from government and thus can keep tuitions well below costs.

A third conditioning factor is that even in the public sector of higher education, states vary widely as to the extent they are willing to subsidize professional

education. They differ not only as to how much overall subsidization they are willing to provide, but also as to what the differential of subsidization should be between resident and non-resident students.

As a consequence of these factors, savings in tuition and required fees extend over a wide range under PSEP—especially between fields of study, but even within a single field of study. This is illustrated in Table 8.1 which shows the savings in tuition and required fee costs PSEP students from Hawaii could have enjoyed at each of eight PSEP dental programs at 1982–83 rates of tuition and required fees. As this table shows, savings at these eight institutions would have ranged from a high of \$21,933 (University of Colorado) to a low of \$3,981 (University of California, San Francisco). As might be expected, the savings at private institutions generally are greater than the savings at public institutions.

Table 8.1
Tuition and Fee Savings to PSEP Students from Hawaii
Under 1982–83 Rates at Eight PSEP Dental Programs

<i>Program</i>	<i>Tuition and Required Fees for Non-PSEP Student from Hawaii¹</i>	<i>Tuition and Required Fees for PSEP Student from Hawaii²</i>	<i>Amount of Saving for PSEP Student</i>
University of California, San Francisco	\$ 5,262	\$ 1,281	\$ 3,981
University of California, Los Angeles	5,602	1,226	4,376
University of Colorado ³	25,066	3,133	21,933
Oregon Health Sciences University	7,198	3,130	4,068
University of Washington, Seattle	6,942	2,745	4,197
University of the Pacific	15,900	5,300	10,600
University of Southern California	11,658	3,990	7,668
Loma Linda University	11,550	3,850	7,700

¹Regular tuition and required fees at private institutions and non-resident tuition and required fees at state supported institutions.

²Resident tuition and required fees at state supported institutions and one-third the regular tuition plus required fees at private institutions.

³Did not become a PSEP receiving school until 1983–84.

Source: American Dental Association, 1982–83 Annual Report: *Dental Education*.

It should be recognized that dentistry is one of the highest cost programs. Savings in lower cost programs, therefore, would not be quite as dramatic. Unfortunately, data are not readily available to make comparisons between all

seven of the PSEP fields where Hawaii provides support. However, at our request, the WICHE staff in Boulder, Colorado, was able to compile some weighted tuition and required fees for PSEP students in five of the seven fields and to compare these with what the full tuition costs would have been on an average in these same fields, using data for the 1982-83 academic year. The results of this comparison are shown in Table 8.2.

Table 8.2

Full Tuition Versus PSEP Tuition in Five Fields
1982-83 Academic Year

<i>Professional Field</i>	<i>Full Tuition and Fees</i>	<i>PSEP Tuition and Fees</i>	<i>Savings</i>
Dentistry	\$10,245	\$4,425	\$5,820
Veterinary Medicine	10,060	2,300	7,760
Optometry	7,035	2,365	4,670
Pharmacy	3,455	2,600	855
Podiatry	8,300	2,835	5,465

As the above figures show, PSEP students on a weighted basis enjoyed savings in tuition and required fees in the five fields in 1982-83 ranging from \$855 in pharmacy up to \$7,760 in veterinary medicine. It is fairly apparent, then, that students enjoy a substantial benefit under PSEP.

Costs under PSEP. Even with these benefits that PSEP provides to Hawaii students, the students must still incur costs of their own when they participate in PSEP. These costs include not only the transportation and tuition and required fee costs referred to above, but also all the other costs associated with going to school on the mainland—such as room and board, books, educational supplies and equipment, health and other fees, and incidental expenses.

To obtain a picture of what these costs to the students might be, we followed a dual approach. We requested the WICHE staff in Boulder, Colorado, to provide us with whatever information they might have available on the subject. We also surveyed 86 second-, third-, and fourth-year PSEP students from Hawaii participating in PSEP during the current 1983-84 academic year by sending them a questionnaire concerning expenses and financial resources. First-year PSEP students were omitted because the roster of entering students was not available

until late in 1983. Fifty-nine, or 69 percent, of the 86 students surveyed responded. Of the latter, one had to be eliminated because the student is temporarily out of the program.

The results of our inquiry to WICHE headquarters are summarized in Table 8.3. This table sets forth representative or average annual costs to Hawaii students in five professional fields under PSEP based upon 1982-83 data. The data are drawn from annual reports and admission guides for each of the professions and from graduate and professional school bulletins of PSEP receiving schools. Comparable data were not available for the fields of physical therapy and occupational therapy. Table 8.3 shows that average or representative annual costs for Hawaii students in these five fields ranged from a low of \$8,050 in veterinary medicine to a high of \$13,070 in dentistry. In some fields, however, data on some costs were not available. It should also be noted that only one Hawaii-mainland round trip was assumed in these calculations. If one additional round trip were assumed, then the costs would have to be increased by another \$500 to \$1,000.

Table 8.3

Representative Annual Costs to Hawaii Students
in Five Professional Student Exchange Fields for 1982-83¹

Category	Dentistry	Veterinary Medicine	Optometry	Pharmacy	Podiatry
Weighted Tuition and Required Fees	\$ 4,425	\$ 2,300	\$ 2,365	\$ 2,600	\$ 2,835
Room and Board	3,200	3,050	3,300	3,200	4,000
Books	485	350	350	300	350
Educational Supplies and Equipment	2,215	N/A	650	—	—
Health and Other Fees	545	150	—	120	—
Incidental Expenses	1,000	1,000	1,000	1,000	1,000
Transportation ²	1,200	1,200	1,200	1,200	1,200
TOTAL AVERAGE COST TO STUDENT PER YEAR	\$13,070	\$ 8,050	\$ 8,865	\$ 8,420	\$ 9,385

¹The figures shown represent the weighted average tuition and required fees charged PSEP students by receiving schools and average or representative costs for other categories, which may vary from school to school.

²Assumes only one round trip to mainland per year plus local transportation expenses.

Sources: Annual reports and admissions guides for each profession; graduate and professional school bulletins of receiving schools.

Under this latter approach, the benefit enjoyed by a Hawaii resident of being able to receive professional training at the University of Hawaii would be the difference between total costs of attending the University of Hawaii and total costs of attending a mainland institution. Due to the many variables involved, this means of measurement is much more difficult to calculate. However, some indication of the amount of this benefit can be derived by comparing overall costs of PSEP students and overall costs of attending the University of Hawaii.

Generally, it may be said that it costs considerably more for a Hawaii resident to go to school on the mainland than to go to the University of Hawaii. For example, based on data developed by the University of Hawaii, the school year cost of a medical student living at home and attending the University of Hawaii medical school during 1983-84 would be \$4,680. By comparison, the lowest cost reported by a Hawaii PSEP student in dentistry for 1983-84 is \$10,317. (Almost everywhere medicine is more expensive than dentistry, so it is assumed that the cost of going to medical school on the mainland would be even higher than going to dental school.) It can be said, then, that Hawaii residents enjoy a very substantial benefit when they are able to obtain a professional education at the University of Hawaii rather than having to go out of state for this purpose.

Some students enjoy even additional benefits from the State of Hawaii. These benefits come in the form of financial aid which is made available to students under various state programs. The two most prominent of these are the granting of tuition waivers and making student employment available. For a medical student, the tuition waiver alone would amount to \$1,860 in 1983-84 and will increase to \$3,020 in 1984-85. Student employment can provide additional income ranging from a few hundred to a few thousand dollars.

Costs to UH students. For our comparison of costs to students at the University of Hawaii with the costs to students under PSEP, we have relied upon data developed by the University of Hawaii for student cost information at that institution. To assist students and their parents in making plans to attend the University of Hawaii, the Office of the Vice President for Academic Affairs annually develops, reviews, and publishes what it refers to as "normative budgets" for students attending the university under four alternative living arrangements: (1) at home with parents, (2) in an off-campus facility with roommates, (3) in a university dormitory, and (4) as a married student with a working spouse.

The results of our survey of PSEP students are summarized in Table 8.4. This table sets forth the number of students responding from each of the affected professional fields and indicates the highest, lowest, and average costs reported by the responding students in each category. As can be seen from this table, the highest costs per student in each field (excluding those reporting for only six months) range from \$8,600 in occupational therapy to \$21,086 in dentistry (a married student). The lowest costs per student in each field (excluding those reporting for only six months and the field of podiatry where there was only one respondent) range from \$4,555 in occupational therapy to \$10,317 in dentistry. Average costs in each field (excluding those reporting only for six months) range from \$6,507 in occupational therapy up to \$13,794 in dentistry.

Table 8.4
1983-84 Expenses Estimated by Hawaii PSEP Students

<i>Professional Field</i>	<i>Number of Responses</i>	<i>Reported Expenses</i>		
		<i>Highest</i>	<i>Average</i>	<i>Lowest</i>
Dentistry	9	\$21,086	\$13,794	\$10,317
Veterinary Medicine	12	12,750	9,327	6,400
Physical Therapy	3 ^a	9,758	8,681	6,598
Occupational Therapy ^b				
Six Months	3	3,360	2,806	1,900
Nine Months	8	8,600	6,507	4,555
Optometry	14	12,517	9,126	7,100
Podiatry	1	11,337	11,337	11,337
Pharmacy	8	19,318	10,481	6,574

^aOne response omitted because student is temporarily out of the program.

^bSome students reported for a six-month period and some for a nine-month period.

It should be recognized that the data contained in Table 8.4 reflect only estimates for 1983-84. Moreover, some interpretation was required in extracting data from the questionnaires. Nevertheless, it is believed that the table provides a reasonable portrayal of costs being experienced by PSEP students.

From the foregoing, then, it can be seen that the costs being incurred by Hawaii students under PSEP are quite substantial. Few, indeed, are able to get by for less than \$7,000 per year, and many are having to pay out \$10,000 and more per year for their professional education.

Among the respondents to our questionnaire, only 12, or 21 percent, indicate that they and their families are able to defray these expenses from their own resources without having to resort to borrowing or obtaining other means of financial aid. On the other hand, 40, or 69 percent, of the 58 respondents report that they qualify for and are receiving loans. In some instances, multiple loans are involved. Many of the 33 students with guaranteed student loans are borrowing up to the maximum of \$5,000 per year allowed for graduate and professional students.

It would appear from the information available to us, then, that Hawaii's participants in PSEP come from a fairly wide portion of the social spectrum of our society and that for most of them the costs of going to the mainland under PSEP place quite a strain on the resources of the students and their families. There are undoubtedly some, however, who can bear the burden without undue strain and who would probably pursue their professional education on the mainland even if they did not participate in PSEP or receive any other type of financial aid.

Comparison with Benefits and Costs to Students in Professional Education Programs at the University of Hawaii

In looking at benefits and costs experienced by Hawaii students under PSEP, it is appropriate to see how these benefits and costs compare with the benefits and costs of professional education programs provided at the University of Hawaii. Set forth in this section are the results of the comparative review we have made of this matter.

Benefits received by UH students. In Chapter 4, we point out that subsidization by the state government is involved in all professional education programs offered by the University of Hawaii as well as in PSEP. In neither instance do the tuition and required fee payments made by students begin to cover the costs involved in providing the professional education services which the students receive. Therefore, students at the University of Hawaii are receiving a real benefit from the state government just as PSEP students are receiving such a benefit.

In the preceding discussion of PSEP benefits, we measure the benefits enjoyed by PSEP students primarily in terms of the difference between the tuition and

required fee costs they would have to pay as non-resident or regular students at PSEP receiving schools and those which they actually pay under PSEP—i.e., resident tuition in state supported schools and a two-thirds reduction of the regular tuition at private schools. For the reasons cited above, the benefit varies quite widely among PSEP participants.

If this same measurement is applied to Hawaii students in professional education programs at the University of Hawaii, then it might be said that the benefit received by such students equals the difference between non-resident and resident tuition charged by the University of Hawaii for the various professional education programs. Using this approach, the benefits received during 1983-84 on a per student basis are as shown in Table 8.5.

Table 8.5
Benefits Received by Resident Students
University of Hawaii at Manoa
1983-84 Academic Year

<i>Fields of Study</i>	<i>Non-Resident Tuition</i>	<i>Resident Tuition</i>	<i>Difference—Benefit Received</i>
Undergraduate Fields (e.g., Education, Engineering, and Architecture)	\$2,090	\$ 650	\$1,440
Graduate Fields (e.g. Public Health, Social Work, and Library Studies)	2,520	780	1,740
Law	3,260	990	2,270
Medicine	6,660	1,860	4,800

From the above, it can be seen that in terms of this measurement, the benefit to Hawaii students of going to the University of Hawaii for their professional education is significant although generally not as great as the benefit received by PSEP students. However, this is actually a very conservative indication of the benefit received. Probably a much more realistic indicator of benefit would be to determine how much more it would cost a Hawaii resident if a particular educational service were not available at the University of Hawaii and he or she had to go to a mainland institution to obtain the desired education.

These normative budgets for 1983-84 are summarized in Table 8.6. As this table shows, these representative costs range from a low of \$3,470 for an undergraduate living at home to a high of \$10,407 for a married student in the medical school living with a working spouse. It should be recognized, of course, that there are very wide variations in the actual costs experienced by students at the University of Hawaii at Manoa and that these reported costs can only be considered more or less typical. However, they are believed to be reasonable indicators of student costs at the institution.

Table 8.6
Normative Student Budgets
University of Hawaii at Manoa
1983-84 Academic Year¹

Category	Student Living at Home	Student Living with Roommates	Student Living in Dormitory	Married Student with Spouse
Tuition				
Undergraduate	\$ 650	\$ 650	\$ 650	\$ 650
Graduate	780	780	780	780
Law	990	990	990	990
Medicine	1,860	1,860	1,860	1,860
Fees	54	54	54	54
Books and Supplies ²	341	341	341	341
Meals and Housing ³	1,609	3,914	2,837	6,732
Personal Expenses ³	609	708	708	1,006
Transportation	207	207	104	414
TOTAL COSTS				
Undergraduate	\$ 3,470	\$ 5,874	\$ 4,694	\$ 9,197
Graduate	3,600	6,004	4,824	9,327
Law	3,810	6,214	5,034	9,537
Medicine	4,680	7,084	5,904	10,407

¹Based on nine-month school year.

²Reflects data compiled by the special University of Hawaii systemwide student budget committee.

³Based upon information released April 1982 by the U.S. Department of Labor, Bureau of Labor Statistics. Inflation factor for 1983-84 has been projected by the Department of Labor and Industrial Relations.

Source: University of Hawaii at Manoa, Financial Aids Office.

As can be seen, the costs for students at the University of Hawaii fall well below the costs being experienced by PSEP students as reflected in Tables 8.3 and 8.4. In this sense, then, PSEP students from Hawaii are bearing a much heavier financial burden than their counterparts who are pursuing their professional training at the University of Hawaii.

It should be noted, however, that this gap may be narrowed over the next several years in light of recent action by the Board of Regents of the University of Hawaii to raise tuitions in several increments. For example, resident tuition at the medical school is slated to increase from \$1,860 in 1983-84 to \$3,020 in 1984-85. It is not likely, however, that the difference will be entirely overcome. It is also possible that the costs under PSEP will rise faster than will costs at the University of Hawaii. Therefore, no drastic changes are foreseen in the overall relationship between PSEP student costs and student costs at the University of Hawaii.

Implications of Proposed Changes to Require the Payback of PSEP Support Fees or to Discontinue PSEP

Various proposals have been advanced and suggestions have been made that PSEP should be made self-financing by requiring participants to repay the State for support fees paid on their behalf or that Hawaii's participation in PSEP should be terminated altogether. The basic motive behind such proposals and suggestions is to save the State money—PSEP is now costing Hawaii in the range of \$1 million per year. A subsidiary argument is that the State is providing a benefit that is unnecessary or should be paid back because the benefit enables the person receiving it to pursue a career where handsome financial rewards will be realized.

The desire to save money is quite understandable and therefore it is appropriate to look for ways to reduce expenses or to pass them on to others—especially to those who may have the most ability to pay. At the same time, in taking actions along such lines, it would seem that persons in more or less equal circumstances should be treated equally and one group should not be singled out for special treatment to the detriment of another similar group.

Thus, when looking for ways to save money or to pass on costs in the area of professional education, it should be kept in mind that students in professional

education programs at the University of Hawaii as well as under PSEP are, or should be, involved. As brought out in previous discussion, both categories of activity are expensive for the State and participants in both categories are enjoying benefits from state action and are incurring costs of their own in pursuing their professional training.

To assist in the consideration of these issues insofar as the PSEP program is concerned, we have attempted to determine what the impact on program participants might be if PSEP were changed to require participants to reimburse the State for support fee payments made on their behalf or if Hawaii's participation in PSEP were terminated altogether. As part of this effort, we have also reviewed the way paybacks operate in the three states where provisions of this sort are in effect. The results of our examination are set forth in the following sections.

Efforts of a payback requirement on participants. As generally conceived, any payback requirement would take the form of a loan to the participant. During the period when a person is a student, the State would advance money on the person's behalf. Then, when the person ceases being a student, the sum advanced would be repaid, with or without interest, over some extended period of time. In effect, then, the support fees would be translated into a debt imposed upon the student upon the completion of the student's program, and would be added to any other debts incurred while the person was a student.

Such a debt could be quite formidable. In the case of a student studying veterinary medicine for four years, it could amount to \$52,400 under the support fee rate set for 1983-84 (which is scheduled to go up another \$500 in 1984-85). Even the lowest cost programs amount to about \$4,000 a year so that the four-year debt would total \$16,000.

This, of course, would be in addition to any other debt the student may have incurred. As indicated earlier, many of the PSEP students are already relying heavily upon loans to help defray the costs of their education, and many are going up to the \$5,000 per year limit available under the guaranteed student loan program. Thus, after four years in school, many of them will already have a debt load of \$20,000 or more. This means that a veterinary medicine graduate under PSEP could end up with a \$75,000 debt the day he or she walks out of the school. With a \$60,000 debt, the dental student would not be much better off.

With the escalating costs of higher education—and particularly of professional education—debt is becoming more and more part of the package which graduates take with them when they leave school. In our survey of PSEP students, we found that many of them are incurring debt at a fairly rapid pace. A nationwide study of indebtedness among dental students confirms this trend as reflected by the data shown in Table 8.7.

Table 8.7
Indebtedness of Dental Students Nationwide

Debt Characteristic	1976	1979	1980	1981
Mean Entering Debt	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600
Mean Graduating Debt of Those with Debt	16,000	18,750	20,800	24,650
Percentage of Seniors with Debt	25.8%	33.5%	43.4%	56.1%

Source: *Report of the American Dental Association's Special Committee on the Future of Dentistry: Issue Papers on Dental Research, Manpower, Education, Practice and Public and Professional Concerns*, p. 49.

And this is not the whole story. Once many of these professionals graduate, they cannot begin immediately to earn income to start paying off such indebtedness. Besides having to meet various intern and licensing requirements, they must also incur sizeable start-up costs in the process of going into practice. Such start-up costs vary among the different fields, but in the case of dentists and veterinarians can amount to many thousands of dollars. In the past, such start-up costs have been financed through borrowing. However, such borrowing becomes considerably more difficult if the professional already has an indebtedness of \$30,000, \$40,000, or more.

Due to this financial hurdle and to other factors (such as overcrowding in a particular field in a particular region or socio-economic changes affecting a field), many professionals are now starting out as salaried employees of other established professionals, clinics, etc. rather than going into business for themselves. In the case of pharmacists, for example, they are almost all faced with the prospects of remaining salaried employees throughout their careers. In Hawaii at present, we have been told that many beginning dentists, veterinarians, and optometrists are

starting out as associates or employees rather than trying immediately to establish their own practices.

While this has the advantage of providing income right away without having to make a large initial investment, it also has the disadvantage of holding income down at a level where it is difficult to pay off a large debt of \$20,000 to \$40,000 or more.

To show what the effect on the individual would be in terms of monthly payments if the PSEP support fees had to be repaid, we have prepared Table 8.8 which shows repayment amounts under different alternatives—at no interest or at 5 percent simple interest for 8, 10, or 20 years and with repayments at 100 percent or 50 percent of the support fees. Total support fee payments were calculated on the basis of the actual support fees charged in the fields of dentistry, veterinary medicine, optometry, and pharmacy for the four years of 1979–80 through 1982–83.

As shown in Table 8.8, a veterinarian would have ended up with a debt of \$46,850 if full repayment of the support fees had been required and \$23,425 if only half repayment were the requirement. In terms of monthly payments, the resulting full debt would require \$488 per month over 8 years at no interest and \$593 per month at the low interest rate of 5 percent. If only one-half repayment were required, the monthly payments for 8 years would still be \$244 at no interest and \$297 at 5 percent interest. Payments would be more manageable if spread over 20 years, but this represents a rather long period of indebtedness for the State to administer.

Table 8.8 also shows that dentists would be in much the same position as veterinarians. Although the effect on optometrists and pharmacists would be much less, it would still be quite substantial—particularly if it were added on to other indebtedness in the vicinity of \$20,000 or more. Overall, then, it can be seen that a payback requirement would have a significant impact on PSEP participants.

Application of payback requirements by other states. Although no member of WICHE presently requires all PSEP participants to make full reimbursement of support fees paid on their behalf, three states—Arizona, Colorado, and Nevada—impose some form of partial payback or service/payback requirement. Arizona's plan goes back to the time that state joined WICHE. Nevada and Colorado have only recently inaugurated their plans.

Table 8.8

Monthly Repayment Amounts Required Under Alternative Conditions
Based on PSEP Support Fees for 1979-80 Through 1982-83

Field/ Support Fee Amounts		Repayment Over 8 Years		Repayment Over 10 Years		Repayment Over 20 Years	
		No Interest	5% Simple Interest	No Interest	5% Simple Interest	No Interest	5% Simple Interest
Dentistry							
1982-83	10,500						
1981-82	9,600						
1980-81	10,300						
1979-80	9,700						
Full Amount	40,100	418	508	334	425	167	265
Half Amount	20,050	209	254	167	213	84	132
Veterinary Medicine							
1982-83	10,250						
1981-82	11,200						
1980-81	12,300						
1979-80	13,100						
Full Amount	46,850	488	593	390	497	195	309
Half Amount	23,425	244	297	195	249	98	155
Optometry							
1982-83	5,600						
1981-82	5,200						
1980-81	4,700						
1979-80	4,500						
Full Amount	20,000	208	253	167	212	83	132
Half Amount	10,000	104	127	83	106	42	66
Pharmacy							
1982-83	4,100						
1981-82	3,600						
1980-81	3,100						
1979-80	2,900						
Full Amount	13,700	143	173	114	145	57	90
Half Amount	6,850	71	87	57	73	29	45

Nevada. Of the three plans, Nevada's is the most encompassing. Under this plan, all PSEP students in six fields of study are required to defray 25 percent of the support fees paid on their behalf. They have the option of paying this amount at the beginning of each school year or of borrowing the amount from the state government at a rate of 5 percent interest. Depending upon the amount of total indebtedness, repayment must be made within 5 to 10 years after graduation or otherwise leaving the program.

In addition to this universally applicable repayment requirement, Nevada also imposes a three-year service requirement on its PSEP students—that is, within 5 years of completing their education or residency, PSEP students must return to Nevada and practice their profession in Nevada. This three-year period can be reduced if the participant practices in a rural area or works for the state government. Students failing to comply with this service requirement must repay the State of Nevada the remaining 75 percent of support fees paid on their behalf. These additional amounts must be repaid within the same time periods as the student loans, but no interest charges are imposed.

The Nevada program is too recent for there to have been any non-compliance cases taken to the point where penalties have had to be imposed and defaults have occurred. The state's attorney general has indicated, however, that if such cases are referred to him, they will probably be difficult, expensive, and time-consuming to enforce—particularly with respect to persons not residing or practicing in Nevada.

Arizona. Arizona also has a service requirement—one year's service for each year of support provided under PSEP. This requirement can be cut in half, however, if the participant practices in an area of the state where it has been certified that an exceptional need exists for the particular professional service. The penalty for not complying with the service requirement is to repay the State of Arizona an amount equalling one-half of all the support fees paid on behalf of the affected student. Repayment is handled like a loan and may be stretched out over a period of years. Currently, interest is charged at a rate of 12 percent per year. Waiver of the service requirement can be granted under certain circumstances.

This requirement has been in effect since Arizona joined WICHE and began participating in PSEP. It currently affects students in five fields of study. According to Arizona officials, only a few students have actually defaulted on their obligation. For those who have, judgments have been obtained and the affected students are paying off against the judgments.

Colorado. Colorado is a sending state under PSEP only in the field of optometry. In that field, a service requirement is imposed on the participants—one year of professional service in Colorado for each year of PSEP support received. This requirement went into effect in 1979.

Failure to comply with this service requirement makes a participant liable for repayment of all fees paid plus interest at the rate of 12 percent per year. As in the case of Nevada, this requirement has not been in effect long enough to determine whether or not any serious problems will arise concerning the imposition or administration of the service/payback requirement.

Effects of terminating Hawaii's participation in PSEP. Just as imposing a payback requirement on PSEP students would have an adverse impact on such students, so would they similarly be hurt by any action to terminate Hawaii's participation in PSEP. Indeed, not only would the latter action serve to increase sharply the costs incurred by PSEP students to pursue their courses of study on the mainland, but also in some cases it would effectively eliminate altogether any opportunity they might have to study at PSEP schools.

The increases in costs to students resulting from Hawaii's withdrawal of PSEP support would vary among PSEP students, but would negatively affect virtually every one of them. The increases would equal the differences between the tuitions which they are now paying under PSEP and the tuitions they would have to pay if there were no PSEP program (i.e., out-of-state tuition in the case of state supported schools and full regular tuition at private schools). As indicated earlier, these differences on average range from a low of \$1,855 per year in the field of pharmacy to a high of \$7,760 per year in the field of dentistry. Insufficient data are available to determine what the differences would be in the fields of physical therapy and occupational therapy, but in all likelihood the variations in these fields would also be substantial.

In some cases, however, the other adverse effect would be the most serious one for Hawaii students. Without PSEP support payments available on their behalf, these students would probably find the affected programs completely closed to them. This problem would probably be most acute in the field of veterinary medicine. At present, only six entering students from Hawaii are allowed each year under strict quotas at two schools; and no out-of-state students are being taken into the third school, even under PSEP. Only PSEP support presently keeps the six slots open, and from all indications these slots for Hawaii students would disappear if this support should be withdrawn. Although perhaps not quite so severe, similar problems might be encountered also in the fields of optometry, physical therapy, and occupational therapy.

Other implications of proposed actions. Besides their direct impact on PSEP participants, the proposed actions of requiring the payback of PSEP support fees or of withdrawing support for PSEP have other implications. In the case of the payback proposal, for example, its installation would require the establishment of the necessary administrative machinery to implement what would, in effect, be a student loan program. The job would be much more than what could be handled by the present part-time, voluntary assistance now being given to PSEP. At a minimum, it would appear that a couple of positions and a computerized processing system would be required to carry out the program effectively.

It should also be recognized that a payback program could not become self-financing for quite some time, and so would not result in any immediate reduction in the state budget for PSEP—unless, of course, such action precipitates a sudden and drastic drop in participation in PSEP, which might well be an effect. Otherwise, due to the inevitable lag between the “borrowing” of the funds and their repayment, the State will continue to have to make outlays for this program.

An implication of the proposal to withdraw support for PSEP would be an indication to the other 12 members of WICHE that Hawaii is no longer committed to the basic concept which gave rise to WICHE in the first place. PSEP is the core around which WICHE was formed, and continues to lie at the center of WICHE’s activities. Hawaii’s non-participation in this central activity would greatly undermine the justification for and appropriateness of Hawaii remaining a member of WICHE.

Probably the most serious implication of either proposed course of action, however, would be the signal given that henceforth students receiving benefits under PSEP would be treated even more differently from students receiving benefits under programs offered at the University of Hawaii than they are currently being treated. Whereas the subsidy received by the former would have to be repaid or would no longer be available, the subsidy for the latter would remain untouched (or only minimally reduced through tuition increases). This would be true even though already the former are, on an overall basis, having to incur substantially heavier costs than the latter. PSEP students also do not have other forms of financial aid which the State makes available to students at the University of Hawaii. To come even close to any form of fairness between the two groups, they both should be treated in the same way as much as possible.

In summary, then, it would appear that the only changes which might or should be made in PSEP are changes made within the context of Hawaii's overall approach to providing professional education services to its citizens and residents. To do otherwise will open the door to the possibility of all types of arbitrary, capricious, and discriminatory action. In Chapter 10, we discuss more fully the policy framework within which decisionmaking on this matter might most effectively be carried out.

PART III
POLICY CONSIDERATIONS
RELATING TO HAWAII'S PARTICIPATION IN THE
PROFESSIONAL STUDENT EXCHANGE PROGRAM
AND IN THE
WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

Chapter 3

INTRODUCTION TO POLICY CONSIDERATIONS

In Part II, we examine in some detail the operation of the Professional Student Exchange Program (PSEP) as it affects Hawaii. In this examination, we also focus on areas of particular interest and concern to the Legislature. However, we do not draw any overall conclusions concerning PSEP nor make any recommendations relating to PSEP. Hawaii might also wish to consider the possibility of participation in PSEP or in the Western Interstate Commission for Higher Education (WICHE), the organizational entity through which PSEP is administered.

PART III

There are two reasons for taking this approach in Part II. The first is that PSEP should be looked at more than from individual aspects, in an overall policy context. The second is that the future of PSEP should be carried out within the broad policy framework of the State of Hawaii. **POLICY CONSIDERATIONS RELATING TO HAWAII'S PARTICIPATION IN THE PROFESSIONAL STUDENT EXCHANGE PROGRAM AND IN THE WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION**

Therefore, in this part, we review policy considerations relating to PSEP and WICHE. Chapter 10 focuses on the policy aspects of PSEP, and Chapter 11 looks at policy questions involving WICHE.

In summary, the general conclusions we have reached in Chapters 10 and 11 are that: (1) PSEP should be retained basically the way it is at present, and (2) Hawaii should continue as an active member of WICHE.

Chapter 9

INTRODUCTION TO POLICY CONSIDERATIONS

PROFESSIONAL STUDENT EXCHANGE PROGRAM

In Part II, we examine in some detail the operation of the Professional Student Exchange Program (PSEP) as it affects Hawaii. In this examination, we also focus on areas of particular interest and concern to the Legislature. However, we do not draw any overall conclusions concerning PSEP nor make any recommendations relative to possible actions Hawaii might take with regard to continual participation in PSEP or in the Western Interstate Commission for Higher Education (WICHE), the organizational entity through which PSEP is administered.

There are two reasons for taking this approach in Part II. The first is that PSEP should be looked at from a total perspective, rather than from individual aspects, in any decisionmaking that is undertaken to retain or change the program. The second is closely related to the first. It is that decisionmaking affecting the future of PSEP should be carried out within the broad policy framework of the State's overall approach to professional education and to higher education in general.

Therefore, in this part, we review policy considerations relating to PSEP and WICHE. The part is organized into three chapters. In addition to this introductory chapter, Chapter 10 focuses on the policy aspects of PSEP, and Chapter 11 looks at policy questions involving WICHE.

In summary, the general conclusions we have reached in Chapters 10 and 11 are that: (1) PSEP should be retained basically the way it is at present, and (2) Hawaii should continue as an active member of WICHE.

Based upon relevant policy considerations, we find as follows concerning PSEP:

1. The program fits in with and fills out the State's overall approach to professional education services.

2. Continuation of the program in basically its present form appears to be the most reasonable and appropriate course of action for the Legislature to follow.

Chapter 10

POLICY CONSIDERATIONS RELATING TO THE PROFESSIONAL STUDENT EXCHANGE PROGRAM

Regarding what to do about the Professional Student Exchange Program (PSEP), the Legislature basically has a choice among three alternatives: (1) it can keep PSEP more or less the way it is now; (2) it can terminate Hawaii's participation in PSEP; or (3) it can modify Hawaii's participation in PSEP so as to force students to bear all or a higher proportion of the costs of their education. As an adjunct to the first and third alternatives, the Legislature might also inaugurate an additional financial aid program to help the most needy students who would otherwise be excluded from the program for lack of adequate financial resources of their own. To promote equality of opportunity even more under these alternatives, efforts might be undertaken at the preprofessional level to bring more members of ethnically underrepresented groups into the PSEP professions.

As a policymaking body, the Legislature should approach the question of the future of PSEP within a policy context. For this reason, we identify and discuss in this chapter several important and interrelated policy issues that should be considered in any decisionmaking affecting PSEP. Then, in the light of these policy considerations, we indicate what we feel is the most appropriate course of action for the Legislature to follow.

Summary of Findings

Based upon relevant policy considerations, we find as follows concerning PSEP:

1. The program fits in with and fills out the State's overall approach to professional education services.
2. Continuation of the program in basically its present form appears to be the most reasonable and appropriate course of action for the Legislature to follow.

3. The program could be made more equitable by providing, separately from PSEP, additional financial aid for needy students and preprofessional preparation and assistance for ethnically underrepresented groups.

4. Major changes in the program should be undertaken only within the context of a comprehensive and integrated approach to state policy and action relating to all areas of professional education.

Major Issue Areas Requiring

Consideration Relative to the Future of PSEP

Major issue areas relating to PSEP are described and discussed separately below.

Overall role of state government in higher education. Probably the most basic issue affecting PSEP is one which revolves around the State's overall role in the field of higher education. Posed in question form, the issue might be stated as follows: Should the state government assume a responsibility for making higher education services available to its citizenry and for subsidizing the costs of such services?

At present, Hawaii and every other state has answered this question in the affirmative. It has become strongly embedded in the American tradition that state governments can and should play an important role in the provision of higher education services, and a substantial portion of state appropriations is devoted to this activity. A reversal of this policy position appears highly unlikely. It is fairly safe to assume, therefore, that Hawaii will maintain a strong commitment of state support to higher education.

This being the case, no additional action is required by the Legislature with regard to this particular issue. It is important to recognize, however, that this basic policy position underlies various other issues affecting higher education and PSEP which are discussed below.

Scope of state higher education services. Once the decision has been made that the state government has a role to play in the field of higher education, a number of other policy decisions must be faced in the process of determining just exactly what this role should be. Foremost among these is the matter of defining the

scope of state action. Higher education today encompasses a wide gamut of activities. Around the core activity of instruction there has grown up a wide array of research, public service, auxiliary, and athletic activities. Even within the instructional area, there are many variations: (1) by type—academic and vocational; (2) by level—lower division, upper division, graduate, and professional; and (3) by fields of study—arts, humanities, physical sciences, social sciences, etc. Potential clientele also cover a wide range.

Thus, each state must make some sort of decision regarding the scope of its activities in the field of higher education. Is it going to try to cover the full spectrum of services or is it going to settle for something else? Are services going to be made available to everyone or only to some selected portion of the population? If services or population groups are to be left out, which will be included and which will be excluded and how will this be determined?

Answers to these questions vary widely among the 50 states and over time. Only a few states are large enough and wealthy enough, like California, to try to cover the full range of higher education services within the scope of state action. It is only in relatively recent times that open admissions policies have been adopted which make at least some portion of higher education services generally accessible to the population at large. Even among the states which are most active and generous in their support of higher education, however, there are limits on services provided and on accessibility to those services. In addition to varying academic requirements that must be met to gain entry to different programs, there are enrollment ceilings which preclude even some of the academically qualified from being accepted.

Hawaii, like many of the Western states, has striven hard to bring higher education services within the reach of a high proportion of its population. Much of this has been accomplished through direct services provided by the University of Hawaii with its concentration of baccalaureate, graduate, and professional programs at the Manoa campus and its community college and other programs scattered throughout the State.

Also like its Western counterparts, Hawaii has joined in cooperative action with other states through WICHE to provide higher education services indirectly to its citizens which it cannot provide directly. As noted above, even this has varied over time. Professional programs which were initially supported only through PSEP are

now being provided directly by the University of Hawaii. Likewise, new fields of study have been added to those originally supported through PSEP.

In short, Hawaii has been quite liberal in its approach to the question of the scope of state responsibilities in the field of higher education. For many years, it has included a wide range of professional programs within this scope, provided either by the University of Hawaii or through PSEP. At the same time, however, it has placed limits on these programs—both at the university and through PSEP—so that not all those who are qualified and have sought entry have been accepted. With the costs of higher education escalating rapidly, especially at the professional level, this question of limits becomes ever more prominent.

One important issue facing the Legislature, therefore, is whether it should continue, curtail, or expand its current liberal policy toward the support of professional education. Each of these alternatives, of course, has its advantages and its disadvantages, its costs and its benefits. Even when trying to maintain the status quo, the effects of inflation must be dealt with. In any event, needs have to be weighed against the ability to pay and decisions have to be made concerning the variety of fields of study to be supported and the numbers of qualified applicants to be allowed into each.

Location and means of delivering higher education services. Even after the scope of state activities in the field of higher education is decided upon, additional decisions must be made as to where and how services are to be delivered. With regard to the matter of location, the question is whether services should be concentrated and students brought to where the services are or should services be dispersed and taken to where the students happen to be located? As to the how, the question is whether the State should provide services directly through institutions which it establishes, owns, and operates itself or should it utilize the services of private or other non-state owned institutions through some sort of subsidy or purchase of service arrangement?

Again, the answers to these questions vary widely among the states and over time. Every state places heavy reliance upon state owned and operated institutions, but some of them also provide substantial support to private institutions operating within their boundaries. Through cooperative arrangements such as PSEP, state support is even extended to institutions lying outside the territory of the state

providing the support. In earlier times, state institutions tended to be quite restricted with regard to their locations. More recently, however, efforts have been made to make services more accessible and facilities and programs have been widely dispersed throughout the geographical areas of the states.

As with most issues, there are two or more sides to the various questions involved. For instance, direct provision of higher education services naturally enables the State to exercise more control over the educational institutions and their delivery of services, but it also locks the State into much more firmly fixed commitments in terms of facilities, permanent staff, etc. Moreover, strong proponents of academic freedom find direct and extensive state control over institutions of higher education undesirable and something to be resisted. It is also argued that private institutions offer much needed diversity and counterbalance to what might otherwise be a monolithic structure of higher education.

Views similarly differ with regard to the question of concentrating or dispersing educational activities. Improved efficiency and avoidance of costly duplication of services are often advanced in behalf of concentration while greater accessibility to services is a major justification used for dispersal. In weighing this question, cost to users as well as cost to the State should be taken into consideration.

On these questions, Hawaii has steered a somewhat middle course. Within the State, it has not given support to private institutions but has devoted its full efforts to build up the University of Hawaii. On the other hand, it has given support to and obtained services from institutions outside of Hawaii through PSEP. Similarly, it has concentrated graduate and professional educational services at the university's Manoa campus, but has also widely dispersed lower division and some upper division educational services throughout the islands at the other campuses of the university system.

Therefore, another issue facing the Legislature is whether it is going to continue to pursue this middle of the road approach to the provision of educational services or is it going to confine its support to activities which are entirely in-state and fully and directly under the control of the State? This is particularly pertinent to the provision of professional education services through PSEP.

Bearing (sharing) the costs of higher education services. Closely interrelated with all of the preceding issues is the large and complex issue of how the costs of higher education services should be borne. Should such costs be entirely the responsibility of government or should the recipients of the services share in such costs? If the latter, on what basis should the sharing take place—on some fixed proportion of actual costs? On the recipient's immediate ability to pay? On the long-term benefit (earning power) of the service? On some combination of these alternatives? Or on some other basis?

As with the previously discussed issues, the answers to these questions by the different states have been many and varied. Throughout the United States there is much less consensus concerning the financing of higher education than is the case with lower education (primary and secondary schools). The broad policy position with regard to education up through high school is that such education should be not only free but also compulsory. This does not mean, of course, that there are absolutely no differences of opinion on the subject. Views differ, for example, as to whether government should provide financial assistance to families who choose to send their children to non-public schools as an alternative to sending them to public schools. Similarly, some costs associated with but not directly part of education (such as transportation) are sometimes considered not to be the full responsibility of government. Most Americans, however, generally expect government to cover most of the costs of educational services provided at the primary and secondary levels.

A different situation obtains with respect to higher education, however. Although some states, especially in the Western region of the country, have attempted to make higher education services readily accessible to their citizens, not one has gone to the extent of providing such services on the same *free* basis as primary and secondary educational services. There are several reasons why this is so. One is that not everyone desires or is qualified to go to college. While the social advantage of everyone having a high school education is broadly accepted, no such strong social advantage is attributed to a college education.

Closely associated with the first reason is the general assumption that while some social benefit is derived from having a large segment of the population attend college, a significant personal benefit also redounds to persons who obtain a college education—particularly if the education is in a professional field. Due to this

personal benefit, the feeling seems to be that the beneficiaries should share at least some of the cost of providing the benefit.

The high and rapidly increasing costs of higher education provide still another reason why states look to the recipients of higher education services to bear part of the costs involved in providing such services. With many states facing stringent economic and financial conditions, this is becoming an increasingly important consideration.

Despite these factors, all states have taken some action to lessen the financial burden that might be imposed on college students and none requires resident students to bear the full costs of the educational services received. The most common method of doing this is to keep tuition and fees at a level less than actual costs and to subsidize the difference through funding from other sources. Some states—including Hawaii—have gone a great distance in this direction and have kept such charges to resident students at a very minimum level. In these instances, the amount of state subsidization is quite high in terms of both dollars spent and percentage of total costs. It should also be recognized, however, that due to enrollment limits and minimum entry requirements—especially for the most costly programs—not all of these subsidies are available to everyone. Thus, even under the best of situations some selection process is followed to determine who will receive what benefits.

At present, the selection process used to determine admission into professional education programs supported by the State of Hawaii, both under PSEP and at the University of Hawaii, is based upon academic qualification as judged by the individual programs at the university and by receiving schools under PSEP. Decisionmaking in this regard, then, is left in the hands of academic authorities. This, in turn, places a heavy burden on such authorities to ensure that admissions policies, procedures, and practices are equitable and reasonable.

This latter point is particularly pertinent because qualitative or subjective criteria frequently are given considerable weight in the admissions process. As brought out by the special committee that was commissioned to examine admissions machinery for professional programs at the University of Hawaii, the admissions process needs to be regularized for all such programs and special care needs to be taken to ensure that proper and appropriately circumscribed use is made of subjective factors.

The other major method of subsidizing higher education services is to help students defray the costs imposed upon them by giving them direct financial aid in the form of monetary grants, low cost loans, student employment opportunities, waiver of tuition and fees, etc. This method can be used either as an alternative to or in combination with the method of greatly reduced tuition and fees. The granting of this type of assistance is usually based upon the financial need of the recipients.

Some degree of subsidization is provided to virtually every student participating in a higher education program where state support may be involved. This is true even for non-resident students, who usually are charged much higher tuition and fees than residents, because such non-resident charges rarely equal the full costs of the services provided. However, two different but sometimes overlapping bases are used for determining when and how much subsidization will be provided. One is the ability of students to meet entrance qualification requirements. The other is the financial need of students.

Generally it may be said, therefore, that where overall tuition and fees are kept low, the emphasis is on subsidizing all or the most qualified students and there is less concern with deploying state resources where financial needs may be the greatest. Conversely, if tuition and fees are kept relatively high but there is a generous financial aid program for those most in need, then it can be said that financial need takes precedence over encouraging all qualified, or the most qualified, students to pursue programs in higher education. If low tuition and fees are used in combination with a comprehensive program of financial aid, then it can be assumed that a state is doing its utmost both to encourage qualified persons to utilize available services and to remove the financial barriers keeping the economically disadvantaged from gaining access to higher education.

As far as students attending the University of Hawaii are concerned, it can be said that Hawaii is at the forefront of the states assuring their citizens of accessibility to higher education services. Not only are tuition and fees kept relatively low (even after the most recent increases), but also the State sustains a fairly liberal program of tuition waivers and student employment. In addition, the widespread geographic dispersal of university activities at the vocational and lower division academic levels brings these services close to home for many students.

For students not attending the University of Hawaii, however, the extent of state support is much more limited. For students attending private schools within the State and non-PSEP schools outside of Hawaii, there is virtually no assistance at all available from the state government. Even for PSEP students, the State's assistance is limited to the area of keeping tuition and fee rates relatively low. As indicated earlier in this report, it is still quite costly for Hawaii students to participate in PSEP programs on the mainland. Other than financial assistance programs supported by the federal government, there is little, if any, financial aid available to such students to help them in meeting the costs not covered by the PSEP program.

This means, therefore, that if the State is really going to remove financial barriers to professional programs under PSEP for those who are in true economic need, then it will have to devise a financial assistance program to supplement the support already being provided under PSEP. Otherwise, such students will continue to be at a serious disadvantage relative to students participating in professional programs at the University of Hawaii among whom those in financial need have access to tuition waivers, student employment opportunities, and similar aid.

The key issue facing the Legislature in this area, therefore, is whether it is going to differentiate between PSEP students and students pursuing professional programs at the University of Hawaii. Such differentiation can take several forms, including: (1) requiring PSEP students to bear a much larger share of the costs of their education than their counterparts at the University of Hawaii; (2) denying other financial aid altogether to needy PSEP students or making much less of this aid available to them than to students in professional fields at the University of Hawaii; (3) imposing entry or post-graduation requirements on PSEP students which are not imposed on students in professional programs at the University of Hawaii; and (4) setting enrollment limits on PSEP programs which are much lower than enrollment limits set on professional programs at the University of Hawaii.

As brought out in earlier discussion, this issue has equity, legal, and constitutional ramifications—namely, is it fair, legal, and constitutionally permissible to treat the two groups of students in significantly different ways in terms of imposing costs and other requirements? At present, no definitive answer has been given to this question. However, in today's litigious climate, it is not safe to

assume that the question will not be put to judicial test. Accordingly, these ramifications need to be kept in mind.

The main point is, however, that some differentiation already exists as discussed earlier in this report. The question, then, is whether this differentiation is going to be increased, decreased, kept about the same, or eliminated altogether? This is the question the Legislature will have to address sooner or later.

After this issue is settled, the Legislature will still be faced with the further issue of deciding what should be done about the overall proportionate sharing of costs between students and the State. For a number of years, tuition and fees at the University of Hawaii were kept static while costs at the institution were escalating rapidly. Taking no action on tuition and fees during this period had the effect of shifting an increasingly higher proportion of the cost to the State. Recently, however, the Board of Regents has raised tuition and fees and has stated an intention to peg such charges generally at a fixed proportion of the costs of the educational services provided. This action not only has caused a sudden jump in the payments students must make, but also portends a continuing rise in such payments as the costs of higher education inflate.

In the case of PSEP, tuitions and fees at mainland institutions attended by Hawaii students under the PSEP program have tended to rise in consonance with the increases in costs at those institutions and in the support payments which the State makes under PSEP. Thus, unlike their professional program counterparts at the University of Hawaii, Hawaii's PSEP students have been bearing a more or less constant proportion of the costs of the services they have been receiving instead of a declining proportion.

The basic question pending, then, is whether the sharing of costs between students and the State should be set at some fixed proportion, and, if so, at what dividing point should the split be made? So long as higher education costs remain subject to inflationary pressures, this is an area where no decision to raise charges to students will in effect be a decision to shift a larger share of the burden to the State. On the other hand, as charges to students rise, the danger also increases of insurmountable financial barriers being raised against qualified but economically disadvantaged students. This latter problem can be dealt with, however, if the State's financial aid program for college students is also geared to take into account

changing economic conditions and accompanying changes and variations in the needs of students.

Generally, it appears that if this issue area is to be dealt with effectively, then all who are concerned with the delivery, financing, and accessibility of higher education services will have to recognize that the problems are on-going and that continuing attention will have to be given to interrelationships between and among: (1) the costs of higher education; (2) the benefits to be derived from higher education; (3) the charges to be imposed upon students; and (4) the varying financial needs of students.

PSEP Viewed in the Light of Policy Considerations

After viewing PSEP in the light of the policy considerations discussed above, we have reached several conclusions regarding the program. All of them have been touched upon in the preceding discussion, but for purposes of clarity are summarized herewith.

First, we find that PSEP fits in very well with the State's liberal approach to the support of professional education programs and helps to broaden significantly the range of educational opportunities open to Hawaii students. Moreover, the same general basis—academic qualification—is used to determine admission to professional education programs supported by the State of Hawaii, including both those under PSEP and those offered at the University of Hawaii. It should be noted, however, that with eligibility determination left in the hands of the individual programs and receiving schools, it is incumbent upon all such programs and schools to make sure their admissions machinery is fair and reasonable and does not give undue weight to subjective factors.

Second, taking into account the preceding point, it appears that the most reasonable course of action for Hawaii to follow with respect to PSEP is to maintain the program in basically the same form as it is presently structured. As conditions have changed over the years, PSEP has proved to be flexible and to be a reasonably effective part of the State's overall approach to supporting professional education. Almost 400 Hawaii students have graduated under the program and about half of them are practicing in Hawaii and presumably contributing to the well-being of the community. The benefits they have received under PSEP have not been out of

proportion to benefits enjoyed by graduates who obtained their professional education at the University of Hawaii, many of whom have also relocated outside of Hawaii.

Third, some differences continue to exist between the State's approach to students studying under PSEP and those who pursue their professional education through programs offered by the University of Hawaii. In the case of the latter, the State exerts more efforts to lower barriers keeping students out than is true for PSEP students even though the barriers may be higher for PSEP students. As brought out in Part II, it generally costs much more for Hawaii students to study under PSEP than to enroll in professional programs at the University of Hawaii. Yet, the State has no financial aid program for these students to match the financial aid available to students at the University of Hawaii. Also, there are no programs to bring students from ethnically underrepresented groups into the PSEP program similar to those which have been put into effect for the law and medical schools at the University of Hawaii. Thus, the PSEP program could be improved and made more equitable if steps could be taken to lower even more the barriers surrounding this program relative to those in financial need and those from underrepresented ethnic groups.

Finally, it should not be assumed that PSEP is perfect the way it is or that conditions will not change in the future so that no major modifications will have to be made in the program. On the contrary, it should be expected that the program should be subjected to review periodically and that changes will probably have to be made in it from time to time. However, the important thing is that such reviews and changes should not be made in a vacuum. Rather, they should be undertaken within the context of a comprehensive and integrated approach to state policy and action relating to all areas of professional education. This means conversely that changes in professional education programs at the University of Hawaii should similarly be viewed only after their possible impact on and interaction with PSEP have been taken into consideration.

Recommendations

Concerning PSEP, therefore, we make the following recommendations:

1. *PSEP should be kept a part of the State's overall approach to professional education services for residents of Hawaii.*

2. PSEP should continue to be operated in much the same manner as at present. However, the Hawaii WICHE commissioners should satisfy themselves that admission processes at all receiving schools are fair and reasonable and are not unduly susceptible to abuse or manipulation. Any efforts undertaken in this regard and the results thereof should be reported to the Legislature.

3. The Hawaii WICHE commissioners and the University of Hawaii should initiate an effort to determine the extent to which financial and other barriers may be keeping needy and ethnically underrepresented students out of PSEP and to devise ways of lowering these barriers through such means as financial aid and programs for pre-professional preparation and assistance. The results of such effort, with appropriate recommendations, should also be reported to the Legislature.

4. The Commission on Postsecondary Education should be revitalized or a special group should be formed to take an overall look at the State's activities relating to professional education and to develop appropriate recommendations for consideration by the Legislature. Such a review should give special attention to: (1) the role of professional education within the broad area of higher education; (2) the costs and benefits of providing professional training in various fields; (3) alternative means of delivering professional education services; and (4) how the cost of obtaining professional education in various fields might most appropriately be shared between the students and the state government.

Chapter 11

POLICY CONSIDERATIONS RELATING TO HAWAII'S PARTICIPATION IN THE WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

Throughout most of this report, the focus of attention is on the Professional Student Exchange Program (PSEP). This is appropriate inasmuch as PSEP is a matter of prime interest and concern to the Legislature. Beyond PSEP, however, is the matter of Hawaii's continued active membership in the Western Interstate Commission for Higher Education (WICHE). Although PSEP is a major element of WICHE and the core program around which WICHE functions, WICHE is much more than PSEP. Moreover, participation in WICHE is a matter deserving consideration in any decisionmaking that might be undertaken with respect to participation in PSEP.

For these reasons, we review in this chapter the larger role which WICHE fulfills with respect to activities of the state government and point out what the implications may be if Hawaii decides to continue as a member of WICHE or to withdraw from the organization.

Summary of Findings

Generally, we find that the functions performed by WICHE, in addition to fulfilling its role as administrator of PSEP, are useful and beneficial to Hawaii. Moreover, they are provided to Hawaii at a relatively modest cost. Therefore, Hawaii's continued membership in WICHE appears worthwhile.

Review of WICHE Services and Activities and Their Effect Upon Hawaii

WICHE's central mission is to facilitate interstate cooperation among the 13 Western states in matters relating to higher education. As a facilitator of cooperation, WICHE: (1) has developed specific cooperative mechanisms among

states and among educational institutions; and (2) serves as the focal point for coordinated regional higher education planning. WICHE's activities in both of these roles and the resultant effect upon Hawaii are described more fully below.¹

Student exchange program. PSEP is the backbone of WICHE's cooperative exchange mechanisms. Two subregional arrangements supplement the regular PSEP in the field of veterinary medicine. In one, Washington, Oregon, and Idaho share a veterinary medicine curriculum which is taught in all three states. In the other, eight states, including Hawaii, send veterinary medicine students to Colorado State University under a cost-sharing arrangement. WICHE is involved in both programs as fiscal administrator and coordinator of a review and recommendation process involving the affected states.

WICHE is involved in administering or coordinating several other subregional exchange mechanisms at non-professional levels. One such mechanism is the Regional Graduate Program (RGP) exchange. RGPs are a group of specialized graduate degree programs specifically selected by a regional committee and available to qualified students from the participating states at resident tuition rates at public institutions and reduced tuition rates at private institutions and with preference for their admission. Begun in 1981, the RGP exchange was limited to students from five Northwest states but is being expanded to include students from five more states, including Hawaii, in the 1984-85 academic year.

Besides enabling WICHE members to avoid duplication of costly graduate programs in which in-state enrollment is likely to be small in most states, this program will greatly expand educational opportunities for Hawaii students at the graduate level by opening out-of-state programs to them with the same benefit enjoyed by PSEP students—namely, lower tuition rates. Considering the rapid escalation of tuition rates and the wide differential in most places between resident and non-resident tuitions, this program holds promise of becoming increasingly important to Hawaii students.

Information clearinghouse. The interstate sharing of information regarding higher education and human resource issues and concerns has been a primary

1. This description of WICHE activities is drawn primarily from *The Western Interstate Commission for Higher Education: A Hawaii Perspective*, July 1983, pp. 10-14.

mission of WICHE since its inception. The clearinghouse identifies critical policy issues in higher education and disseminates relevant information and analyses. It also responds to inquiries on higher education issues and works to build a network of experts who will be available to assist the states in their decisionmaking. A survey of tuition and fees at public higher education institutions in the West is published annually by WICHE. In Hawaii, the tuition report formed part of the groundwork upon which decisions to adjust student tuition levels were based in 1983. Various officials at the University of Hawaii informed us that they have found publications of WICHE to be very useful to them.

Economic development program. This program strives to increase the effectiveness with which higher education resources are used to support state and local economic development programs and policies. Emphasis has been placed on developing and sharing information between higher education and economic development agencies and/or organizations in the region. Since January 1982, the program's efforts have been concentrated on building cooperation among higher education institutions, state governments, and the private sector in identifying and then meeting manpower needs, specifically those in the high technology and energy-related fields seen as vital to the economic growth of the Western states.

To date, Hawaii has not fully availed itself of the information and assistance open to the State through WICHE in this area. However, considering the current emphasis which is being given to high technology in Hawaii and the nature of competition among all states in this area, it would appear that Hawaii might derive some worthwhile benefits from this program.

Minority education program. This program strives to reverse the disproportionate loss of minority representation in Western higher education and in the professions. At each successive stage in higher education from community college to four-year institution, from undergraduate to graduate school, and from instructor to tenured faculty, the loss of minority persons is disproportionate in comparison to the general population. WICHE's efforts are directed toward the transition points in higher education where talented and often well-prepared individuals—whether students, faculty, or administrators—fail to advance to the next stage. This is an area that should be of deep concern to Hawaii as it should be elsewhere.

Nursing education program. This program helps collegiate schools of nursing and their affiliated clinical agencies to work together to provide high quality, cost-effective higher education programs in nursing to meet the needs of states and to strengthen nursing education and practice. Collaboration, research networks, and regional planning are utilized in these efforts. Hawaii personnel have been participants in these various activities.

Mental health and human services program. This program, instituted at WICHE at the request of Western governors, is funded by a combination of voluntary contributions from the states and federal resources. Its objective is to assist the states in cooperating to improve mental health care and education, especially through the development of state mental health manpower programs and the establishment of stronger links between higher education institutions and state and local mental health agencies.

Recent interstate activities have focused on improving the efficiency and effectiveness of mental health staff; building data bases to enable states to compare information on programs and staff; focusing professional education and research on state service priorities; sponsoring workshops aimed at improving service for target populations; and providing technical assistance and information sharing.

Some of the target groups include the chronically mentally ill; mentally ill criminal offenders; emotionally disturbed youth; residents in communities impacted by sudden energy development; and mentally ill persons housed in community residential facilities. The National Institute for Mental Health recently approved funding for WICHE to continue its work with states to solve problems dealing with the development of mental health manpower.

Hawaii had been an active participant in these efforts and has been one of the states making an annual contribution of \$15,000 to support the program. However, as a result of the cutback made in the budget for the Hawaii WICHE program this year, Hawaii's voluntary contribution for 1983-84 has been deleted.

Costs of supporting WICHE. The costs to Hawaii of supporting WICHE, outside of the PSEP program, are relatively modest. Like all member states of WICHE, Hawaii pays an annual membership fee which is now \$50,000. As previously noted, Hawaii in the past has also contributed \$15,000 per year to

WICHE's mental health and human services program. Small amounts have also been appropriated to defray the administrative expenses of the Hawaii WICHE commissioners in the performance of their duties.

The full amount of the support fees which Hawaii pays under PSEP is channeled through WICHE headquarters, but goes to the receiving schools. WICHE headquarters, however, is able to enjoy the interest income derived from these pass-through funds while they are in WICHE's hands. WICHE headquarters also derives income from grants and contracts which the organization receives from various private and governmental agencies.

The PSEP program, therefore, constitutes the bulk of the costs incurred by Hawaii through membership and participation in WICHE. For the services received, the expenditures that Hawaii makes for the WICHE program appear worthwhile.

Recommendation

So long as the benefits of interstate cooperation in the field of higher education appear as worthwhile to Hawaii as they are now relative to the costs involved, we recommend that Hawaii maintain its membership in WICHE.