COLLEGE and the NEEDY STUDENT in HAWAII volume 1: the basic report

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FOREWORD

This report on "College and the Needy Student in Hawaii", because of its length, appears in two volumes. The basic discussion of financial aid for Hawaii's college age youth appears in this volume and constitutes chapters I through VI of the report. The narrative and statistical appendices, referred to in this volume, appear in volume II and constitute appendices A through Q of the report. For the casual reader interested in an overview of the financial aid problem at the college level in Hawaii, this first volume may suffice. However, for the legislator, the administrator or other interested analyst concerned with acquiring an understanding of the subject in some depth or with reviewing the reasoning and conclusions of the report in detail, an examination of the materials in the appendices is essential. Much of the justification for the conclusions in volume I is contained in the narrative and tables of the second volume, as are the detailed discussions of the limitations of some of the data included in the report. If, for some reason, you have received only volume I of the report and are interested in the narrative and statistical appendices, a copy of volume II should be obtained.

The research on financial aid at the college level was undertaken in response to Senate Concurrent Resolution 57, S.D. 2, (1963 General Session), which called on the Bureau to study and report on the adequacy of financial assistance programs for Hawaii's youth who have the potential to benefit from college and to indicate ways of improving these programs. Clearly some very important value judgments are included in the terms "adequacy" and "the potential to benefit". But even more basic is the determination of what it is a community is trying to achieve through rendering financial aid to needy students and an evaluation of the importance of aid programs in contributing to the achievement of agreed objectives. This report, then, attempts to return to first purposes for it is only in terms of such purposes that any aid program can have significance and be analyzed in terms of its effectiveness. The report does not outline an ideal institutional or statewide financial aid program; rather it attempts to provide the general framework within which coherent and logical policy decisions can be made in developing financial aid programs for Hawaii's needy college age youth. Senate Resolution 41, adopted by the Hawaii Senate during the 1964 Budget Session, requests the University of Hawaii in cooperation with Chaminade College, Church College, and the Department of Education to prepare a comprehensive statewide financial aid program, including recommendations for appropriations and legislation, which could be effective for the 1965-66 academic year.
This study, which has been a year and a half in preparation, would not have been possible without the assistance and patience of many agencies and individuals, especially Thomas H. Hamilton, Harold M. Bitner, Edward T. White, Edward C. Greene, Jr., Mrs. Katherine Wery, and Edwin S. Kalai of the University of Hawaii; Robert R. Mackey and Harold Hammond of Chaminade College; Richard T. Wootton and Ralph D. Olson of Church College; R. Burl Yarberry, William G. Savard, Thomas M. C. Chang, Wah Jim Lee, Edith F. Keen, and Tad T. Nakano of the Department of Education; K. J. Luke of Hawaii National Bank; Robert Midkiff of Hawaiian Trust Company; and Andrew T. F. Ing and Howard H. Adams of the Department of Budget and Finance. We gratefully acknowledge the contributions of the individuals and organizations listed above and the many readers and numerous others who have assisted the Bureau. The report, however, remains the responsibility of the Bureau.

Tom Dinell
Director

November 1964
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Chapter I
COLLEGE AND THE NEEDY STUDENT:
AN OVERVIEW

In the past few years the problem of providing adequate financial resources for youth in America who have the ability to benefit from college training but who require financial assistance to undertake such training has received increasing attention. Studies relating to this subject have been conducted by, among others, educational associations, universities, private individuals and organizations interested in the problem, professional educators, state legislatures, federal congressional committees, and the Office of Education, Department of Health, Education and Welfare. Such studies follow a common pattern. Usually the study is undertaken as the result of a feeling or belief that some youths capable of benefiting from a college education are being denied the opportunity to pursue such training because of inadequate financial means. An attempt is then made to identify, in the population being studied, those students capable of benefiting from college training. This "capable" student population is analyzed to identify those who went to college and those who did not. This latter group is further examined in the attempt to find out why these "capable" students did not continue their education, and, in particular, which of these "capable" students did not continue their education for financial reasons. Ideally, for those conducting such studies, the end result is to be able to state that "x" number of "capable" students did not attend college because of financial need which amounted to "y" dollars. Finally, one or more ways of meeting "y" dollars of financial need are recommended.

THE ROLE AND LIMITATIONS
OF A FINANCIAL AID STUDY

The usual approach to a financial aid study is based on the limited view that the objective of financial aid is to provide more openings in higher education for youth of limited means through the device of direct grants to individuals. A harder look, however, reveals that the underlying justification for providing such opportunities arises out of the democratic commitment to and belief in the goal of equality of opportunity. Equality of opportunity is now equated with equality of educational opportunity, and, in particular,
equality of opportunity for higher education. Thus the most fundamental justification for and objective of a financial aid program is to contribute to the creation of equality of higher educational opportunity. A financial aid program and a study of financial aid should be undertaken with this objective in mind. Seen in this light, it becomes clear that the basic questions to be asked in a financial aid study are: "What constitutes equality of educational opportunity; how can equality of educational opportunity be created; and what contribution can and should a financial aid program make to this goal?"

As soon as these questions are raised, it can be seen that the amount of money needed for financial aid cannot be determined scientifically. In the first place, before a determination can be made as to what is needed to create equality of opportunity for higher education, there must be some agreement on the post-secondary educational activities that are included within the concept of higher education. This in turn requires some agreement on the goals of higher education and on the level of resources which society is willing to commit to higher education. Once this level is established, what is required to create the desired equality of opportunity can be more meaningfully discussed.

Secondly, providing financial aid to students is actually an alternative to contributing such aid directly to institutions so that they could afford to make places available to needy students. In fact, the need for financial aid will always vary with the level of public support of institutions of higher education, with the sources used for financing higher education (including whether public support comes from progressive or regressive taxation), with the type of educational institutions to be supported, and with the method used to effectuate public support (i.e., support to the individual or support to the institution or both). Higher education systems could make places available to students in two ways. On the one hand, institutions of higher learning offering free public education can be conveniently located throughout the community, as is the case with secondary schools, so that every student has a school within commuting distance. It would then be predominantly a family or individual student responsibility to pay board, room, and other individual expenses, although public financial aid would be provided for such costs including transportation to and from school to those students and their families who could not meet these costs. Aid could be provided through the public higher education system, public welfare programs, or a combination of the two as is presently done for needy families with children in elementary or secondary schools. On the other hand, it may be financially impractical to place free public
institutions of higher education in sparsely populated communities. In this case, centralized free public institutions of higher learning could be provided sufficient aid funds to ensure every needy student a place at the institution; aid would then cover normal living expenses (room, board, transportation, clothing) whenever the need existed.

Thirdly, even though any increase in the level of financial aid will presumably create at least greater equality of opportunity than existed theretofore, the commonly conducted financial aid study does not in itself prove that the same amount of money indicated as "needed" by the study could not be used to greater advantage otherwise. That is, the usual approach of financial aid studies provides no way of ascertaining how a given level of expenditure can be used so as to maximize the amount of equality of educational opportunity.

Need for financial aid is a political problem since it involves public determination of what constitutes the public good in higher education. All that a financial aid study can "scientifically" do is to determine how many potential students could be induced to attend institutions of higher learning through purely financial incentives. But an adequate financial aid study should discuss the relationship of a financial aid program to the objective of equality of educational opportunity and the complex relationships of aid programs and the means of financing higher education. The study should contribute to an understanding of the interrelationships of aid with other aspects of higher education so that the political decisions involved can be made with an awareness of such interrelationships.

EQUAL EDUCATIONAL OPPORTUNITY AND FINANCIAL AID

The three major reasons generally given for financial aid programs are: (1) to create greater equality of educational opportunity; (2) to prevent talent loss; and (3) to help support institutions of higher education financially. Actually, the first and second reasons given are reverse sides of the same coin. Society is thought to benefit from equality of educational opportunity because such equality is a prerequisite to societal assurance that each person contributes to the extent of his abilities to society. Contrarily, the interest of society in the contribution of all its members is justified by a belief that society exists for the sake of the welfare of the individuals who constitute it. This is nothing more than the early
perception of Plato, upon which much of Western political thought has been built, that the individual can achieve the good life only in the good community, and that the nature of the good community can be determined only after an examination has been made into the nature of man.

EQUAL EDUCATIONAL OPPORTUNITY AS AN INTEGRAL PART OF EQUALITY OF OPPORTUNITY

In mid-twentieth century America, equality of educational opportunity has become almost synonymous with the more generalized equality of opportunity which has always been one of the central objectives and justifications for democratic society and government. Vocationally speaking, education, and particularly education beyond the high school, is generally recognized as the key to social and economic mobility and occupational advancement; when speaking of the quality of an individual's life, education is recognized as opening the door to self-fulfillment and to the kind of personal freedom which only knowledge of alternatives can give.

In short, equal educational opportunity has been equated with equal opportunity because education is considered essential to the attainment by the individual of the good life. Since democratic theory posits that the well-being of society depends upon the well-being of the individual, education becomes for a democracy a crucial social good as well. More specifically, democratic society requires a citizenry capable of understanding, interpreting and judging in a complex world. Modern technological society also requires individuals capable of performing demanded specialized jobs, capable of facilitating rapid change and adapting to it, and capable of utilizing for humanistic ends the leisure which technology unremittingly creates.

REASON FOR FINANCIAL AID

Paradoxically, the reason for financial aid programs is in a sense a contradiction of the objective of such programs. Financial aid programs are required essentially because American society has thus far treated higher education as a privilege. If society were to treat higher education as a right, then it would be obligated to support it fully rather than require that a substantial part of the cost be borne by the individual student and his family. In a sense, this is repeating the arguments that were used by supporters of free public secondary education in the struggle to attain that goal. The
AN OVERVIEW

argument has two sides: (1) the needs of society for able citizens increasingly require training beyond the secondary level and as post-secondary education becomes more imperative to meet general societal needs, it is reasonable that society should provide free post-secondary educational facilities, and (2) as the distribution of the rewards society has to offer to the individual go more and more to those with post-secondary education, it is important to guarantee each individual an equal opportunity to share in those rewards by having an equal opportunity to pursue post-secondary education.

At present, higher education is a privilege extended to the socioeconomically advantaged, many of whom, by present criteria and standards, are among the intellectually select. A financial aid program is a device to close the gap; to make sure that other members of the intellectually select that are not among the socioeconomically advantaged have a chance to obtain higher education. Thus intellectual ability is used as a determinant of who should receive higher education for a certain proportion of students, while leaving socioeconomic ability, modified by admission standards, as the major determinant for selection of the majority of students.

Actually, the discussing of intellectual and socioeconomic ability as representing different bases for selection of students has more theoretical than practical ramifications for a higher education financial aid program. Even if society fully supported higher education, most of the available places would still go to the socioeconomically privileged; those who have the economic means to pay all or a significant portion of the costs; those who have been culturally conditioned to expect, demand, work and sacrifice for it; and those who have derived from their environment sufficient training to pass tests well, sufficient motivation to get good grades and sufficient information to apply for financial aid if needed. Actually by the time college age is reached the socioeconomically advantaged and the most able tend to be about the same group, because the disastrous consequences of environmental influence have already wreaked havoc on the potential abilities of most members of the underprivileged groups.¹

THE DEVELOPMENT OF INEQUALITIES

Educational inequality begins early in a child's life. The emotionally and mentally crippling effects of inadequate home environment are well known, as are the educationally negative effects of many small rural and urban slum environments.² Compounding the damage is the fact that few urban slum schools are equipped, even theoretically,
to deal with the culturally deprived child, since all but a few teachers and educational tools are oriented to the middle-class child. Additionally, the nature, adequacy and quality of school systems vary widely from district to district. The apparent process of progressive deterioration among deprived children has been well described:

For many years, educators, guidance workers, community leaders and intelligent citizens in large urban centers have been helplessly observing a dismaying phenomenon--a seeming progressive deterioration intellectually and educationally on the part of minority group children from the time they enter school at age 6 to the time they leave, at age 16 or 17, usually by dropping out. "The longer they stay in school, the dumber they seem to get" is the way one observer put it. There are, of course, many exceptions, but statistics for grades, schools, or areas, based on competent psychological testing, show an almost "normal" distribution of intelligence for these children in the first or second grade, with a regular decrease in mean score year by year until, in the 9th grade, the "normal" group has become a "retarded" group. The same type of regression is shown in test scores in reading and in other subject areas. Relatively few minority group children complete academic high school courses, and fewer still are admitted to college.

Intelligence test or achievement test scores are not important in themselves, but they do influence the type of education received, and this, in turn, influences life goals, vocational and economic success, status in the community, life satisfactions, and many of the other values that go hand in hand with the level of education completed.3

Failure to Educate and Social Problems. Insofar as children are lost to the educational system, society loses the benefit of their latent capacities and talents. Worse, perhaps, are the potential consequences of such failures:

Among the consequences which could be anticipated are: increased delinquency and criminality; intensification of bigotry, provincialism, and intergroup tensions and hostility; increased chances of successful manipulation of the primitive passions of the masses by political cynics, fanatics, or demagogues; increased incidences of emotional instability, particularly among the members of those upwardly mobile groups whose aspirations are being blocked, and other symptoms of personal and social disorganization.4

Solutions to the Problems of Educational Inequality. While there exists considerable information about the conditions which are associated with educational inequality, knowledge as to effective solutions is far more limited. It is not within the purview of this study to contemplate or discuss the variety of attacks on the problems of educational inequality that could be made. It must be made clear, however, that financial aid can only conserve a fraction of the talent
now being lost. To assure that every individual has the opportunity to develop fully his potential abilities will require the development and support of much more radical programs than are now employed; programs which would need to reach as far as the preschool child and his family.\(^5\) In order to be effective, such programs would have to be based upon: (1) a keener conception and analysis of what causes individuals to develop in certain ways in particular environments; (2) a general willingness on the part of legislatures, educators, administrators, teachers, and others to experiment with new programs in the schools and in society generally; (3) societal agreement to expand the present concept of the role of the educational organization in society so that it may assume new responsibilities and functions; and (4) the allocation of more resources to education.

THE MAGNITUDE OF TALENT LOSS
AND FINANCIAL NEED

Talent loss occurs at all levels of the educational process. The magnitude of talent loss is a variable quantity depending upon such factors as the educational level at which loss is identified, the criteria used for defining talent, and the standards used to measure talent loss. Thus one study of the 1955-56 high school graduates, using the Army General Classification Test (AGCT) as the measure of talent and identifying high school graduation and college entrance as the levels at which loss was measured, found that 91 per cent of the 17-year olds in the upper tenth percentile graduated from high school but only 77 per cent of those graduating entered college (the percentage of college entrants was much higher for boys than for girls).\(^6\) This study tends to point out that there was a fairly substantial loss of potential talent between high school and college for the highest ability level group as measured by the AGCT. Once the magnitude is defined, albeit in a somewhat arbitrary manner, it becomes important to identify the causes of the talent loss. Only a portion of the loss is attributable to financial need and it is extremely difficult to identify the exact size of the portion.

It must be emphasized that measuring financial need is not the same thing as measuring talent loss. Understanding the problem of financial need as a cause of talent loss requires at least an appreciation of the larger problem.
COLLEGE AND THE NEEDY STUDENT

FINANCIAL NEED AND TALENT LOSS

In recent years the literature on financial need as a barrier to post-secondary education has expanded tremendously. However, there have been few comprehensive and penetrating studies of financial need as a barrier to higher education. There is no doubt that financial need is a barrier to some able students' pursuit of higher education. The difficulty lies in estimating the magnitude of financial need as a barrier.

Measures of Non-Attendance Due to Financial Need. The number of qualified students unable to pursue college training because of financial need was found in the New Mexico study to be 1 per cent of all high school graduates and in the Wisconsin study 2 to 4 per cent. Another study with a less rigorous methodology and directed toward identifying the number of students unable to pursue any kind of post-secondary education because of financial need concluded that approximately 4 to 5 per cent of all high school graduates were in this category.

Applying the highest per cent (5 per cent) to all high school graduates in Hawaii, excluding Oahu private school graduates, there would have been on this basis slightly more than 400 students in the 1963 high school graduating classes who were unable to pursue some course of post-secondary education because of financial need. It is clearly within the economic abilities of the State to remove financial need as a barrier for this number of students. Chapter VI explores the Hawaii situation in greater depth.

AT THE HIGH SCHOOL LEVEL

There is widespread acceptance in the United States that, with few exceptions, individuals capable of entering the labor force will benefit from a high school education. The concern of those interested in achieving universal high school education will be with talent loss defined as failure to complete high school. In the late fifties only slightly more than 60 per cent of potential graduates actually completed high school. Although the trend is upwards, the U. S. Department of Labor estimates that of the 26 million youth who will enter the labor force between 1960 and 1970 only 71 per cent will have completed high school. In this case: (1) talent loss is identified at the level of high school graduation; (2) the criterion for determining the talent loss population is non-completion of high school; (3) total talent loss is being identified and not talent loss due to
some specific cause; and (4) intangible or hard to identify talent loss is not included. An example of a measure of hard to identify talent loss would be the attempt to measure the potential ability of those graduating against their actual achievement. To the extent achievement is below potential there has been a loss of talent.

**AT THE COLLEGE LEVEL NATIONALLY**

Discussions of the magnitude of talent loss at the college level are usually limited to high school graduates in some arbitrarily selected upper level of their class as measured by some standard test, rank in school, or other measure. West has summed up in one table a number of studies designed to measure talent loss at the college level. All such studies require and usually include numerous qualifications. They are at best rough indices of the actual magnitude. Perhaps the essential qualification concerns the arbitrariness of drawing a line separating college ability students from non-college ability students. The studies summed up in West's table were directed toward talent loss among students of high ability and definitions of this population ranged from the upper 1 or 2 per cent in California schools to the upper 31 per cent of all high school graduates in the nation (Table 1).

<table>
<thead>
<tr>
<th>Source</th>
<th>Population</th>
<th>Date of High School Graduation</th>
<th>Estimated Percentage Not Attending College</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Merit Scholarship</td>
<td>Merit scholars (N=827)</td>
<td>1957</td>
<td>0.2a</td>
</tr>
<tr>
<td>Scholarship Program</td>
<td>Finalists (N=6,428)</td>
<td>1957</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>Semifinalists (N=7,690)</td>
<td>1957</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Total (N=14,945)</td>
<td>1957</td>
<td>3.9</td>
</tr>
<tr>
<td>Terman and Oden</td>
<td>Highest 1 or 2 per cent, by IQ, in California schools</td>
<td>1928</td>
<td>12.0</td>
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</tbody>
</table>
### Table 1 (continued)

<table>
<thead>
<tr>
<th>Source</th>
<th>Population</th>
<th>Date of High School Graduation</th>
<th>Estimated Percentage Not Attending College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phearman</td>
<td>Highest 2 per cent, by achievement tests, among Iowa high school graduates</td>
<td>1947</td>
<td>8.0</td>
</tr>
<tr>
<td>Wolfle</td>
<td>Highest 2.8 per cent of high school graduates on intelligence test</td>
<td>1953</td>
<td>39.0</td>
</tr>
<tr>
<td>Phearman</td>
<td>Highest 9 per cent of Iowa's high school graduates</td>
<td>1947</td>
<td>36.0</td>
</tr>
<tr>
<td>Iffert</td>
<td>Highest 10 per cent in high school graduating class</td>
<td>1950</td>
<td>28.0</td>
</tr>
<tr>
<td>Corcoran and Keller</td>
<td>Highest 15 per cent, by IQ, of Minnesota high school seniors</td>
<td>1950</td>
<td>33.0&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Wolfle</td>
<td>Highest 8.8 per cent of high school graduates</td>
<td>1953</td>
<td>45.0</td>
</tr>
<tr>
<td>Educational Testing Service</td>
<td>Highest 10 per cent, by aptitude test, of public high school seniors</td>
<td>1955</td>
<td>30.0</td>
</tr>
<tr>
<td>Iffert</td>
<td>Highest 30 per cent in high school graduating class</td>
<td>1950</td>
<td>30.0</td>
</tr>
<tr>
<td>Wolfle</td>
<td>Highest 31 per cent of high school graduates</td>
<td>1953</td>
<td>53.0</td>
</tr>
<tr>
<td>Educational Testing Service</td>
<td>Highest scoring 30 per cent of public high school seniors</td>
<td>1955</td>
<td>47.0</td>
</tr>
</tbody>
</table>

**Source:** West, *Financial Aid to the Undergraduate: Issues and Implications*, p. 84.

<sup>a</sup> Two students awarded scholarships are having their scholarships held for one year.

<sup>b</sup> Percentage attending college within four years of graduation.
AN OVERVIEW

AT THE COLLEGE LEVEL IN HAWAII

In defining the magnitude of talent loss in Hawaii, the U. S. Office of Education drew the line at the upper 40 per cent of the high school graduating class:

Out of a total of over 3,500 high school graduates who ranked in the upper two-fifths of their classes, about 2,300 entered a 2- or 4-year college; this means that some 1,200, or over a third who had academic capability did not go on in such a program.13

The cutoff point for defining students with college potential in Hawaii schools tends to be based on standard tests administered to all students and varies from school to school. In some schools students are considered college potential if their test scores place them in the 20th percentile, while other schools consider the 75th percentile as the cutoff point.14 School achievement and teachers' recommendations are also considered. There are others who believe that completion of high school is sufficient evidence of ability to benefit from at least two years of post-secondary education. In part this explains the support for establishing community colleges. California, in effect, has made the decision and offers what closely approximates 14 years of free public education.

Perhaps the only safe conclusion at this point is: to define the magnitude of talent loss in Hawaii is going to require the making of certain arbitrary decisions and that regardless of how the magnitude is defined, talent loss will continue to be a serious problem requiring the concentrated efforts of individuals and groups throughout the State in working out solutions.

FINANCIAL AID AND THE FINANCING OF HIGHER EDUCATION

Financial aid programs, at the present time, constitute less than one-tenth of the actual amount of subsidy to students at the college level. That is to say, student aid amounts to $200 to $300 million annually, while $3 billion of subsidies are provided through pricing higher education below actual cost.15 Of the $3 billion of subsidies, $2 billion, approximately, comes from governmental support of institutions of higher education.16

It is difficult to justify considering a specific financial aid program apart from a consideration of the total amount of subsidy now
being provided. Such consideration necessarily involves a look at the costs and means of financing higher education. Figures available for 1957-58 show that approximately 25 per cent of the costs of institutions of higher education were financed from tuition, 50 per cent from government, 15 per cent from gifts, grants and endowments, and 10 per cent from miscellaneous sources including scholarship funds. It is unlikely that this distribution will be maintained in the face of rising costs; it is also questionable whether the present distribution is efficacious in promoting equality of educational opportunity. Changes in the costs of higher education and in the distribution of those costs will clearly affect the need for financial aid.

Two additional questions relating to the financial aid problem need to be considered. How essential does society consider the preservation of private colleges and universities and, if considered desirable, to what extent does it wish to employ financial aid as a means of attaining this end? Secondly, what is the impact of the tax system employed in raising the government's share of the cost of higher education? If the taxes fall most heavily on those least able to bear them, then the amount of financial aid required for needy students is substantially increased if the achievement of the ideal of equal educational opportunity is to be approached. In addition, a regressive tax may result in continuing the indefensible practice of those with less economic means subsidizing the education of the more well-to-do.17

THE COSTS OF HIGHER EDUCATION18

There is agreement among those who have considered the matter that the costs of higher education are going to increase tremendously in the next few years. Although the estimates of the magnitude of the increase differ, they all are large. Using 1957-58 as his base year, Harris estimates that higher education operating costs nationally will rise from $3.8 billion in 1957-58 to $9.8 billion in 1969-70, an increase of $6.0 billion or almost 150 per cent.19 The actual increase may well be higher since capital expenditures are not included and the estimate assumes no inflation.

The recently completed report of the Academic Development Plan Committee of the University of Hawaii estimates that operating costs for the University of Hawaii will increase from $14.4 million to $42.1 million in 1970-71.20 The higher increase estimated for the University of Hawaii as compared to Harris' national estimate is due in large part to the inclusion in the former of an upward adjustment
to correct existing deficiencies in the present budget and an allowance for inflation. Costs are going to increase and finding the necessary resources will be a major concern of administrators, educators, legislatures, and others interested in higher education. Some observers believe that the situation has already reached crisis proportions and that radical action is now required.21

THE MEANS OF FINANCING HIGHER EDUCATION

AS THEY AFFECT FINANCIAL AID

The question of where the resources are going to come from to finance the increased costs of higher education is one of the most widely debated issues in education today. Four possible solutions with many possible variants are suggested by Thorp:

The first is to reduce the cost by stripping the educational process to its bare bones. The second is for the state or private contributors to pay much of the cost so that the charge to the student is reduced. The third is to have high tuitions but to . . . provide scholarships in appropriate amounts to those who cannot pay their way. The fourth is to put the responsibility upon the student and his family. . . . In actual fact, these various approaches are not as antithetical as is sometimes argued, and some elements of all four appear in most institutions.22

Reduce the Cost of the Educational Process. This alternative partly explains the tremendous growth in the United States of junior and community colleges for most of these institutions are able to offer education at a lower per capita cost than it is possible to achieve in most four-year institutions. A junior or community college charging no or little tuition and within commuting distance for the student costs him little more than his high school education, if income foregone is excluded. A system of such institutions available to most residents of the State would reduce the role for financial aid programs at the 13th and 14th grade levels to one of meeting a few exceptional cases of need.

Still another aspect of reducing costs is the possibility of economizing. There is some feeling that present practices are inefficient. Harris believes, "Economies . . . may well yield gains of $1 billion to $2 billion per year by 1970."23

Whatever means are employed to reduce the costs of higher education will correspondingly result in the reduction of pressures to increase student charges and will reduce the need for financial aid.
COLLEGE AND THE NEEDY STUDENT

Increase Government or Private Financial Support of Higher Education. At the very heart of the question of public support for higher education is the debate over whether education is a social necessity or an individual privilege. If the debate results in a decision that higher education is primarily a social necessity resulting in significant societal gains, it logically follows that society should bear the major share of the costs. A decision that higher education is largely an individual benefit will lead to large proportionate shares of the costs being assigned to students and their families. In the United States the decision that elementary and secondary education is a social necessity was made many years ago. A similar decision concerning higher education has not yet been made but increasingly the tendency appears to be to look on such education as predominantly a social necessity.24

In Hawaii, the University's Academic Development Plan Committee concluded that the State of Hawaii could provide the necessary resources to meet the State's proportionate share of the increased costs of public higher education in the State:

The foregoing survey of resources for financing higher education in Hawaii indicates that the extensive expenditures called for in this report are within the economic capability of the people in Hawaii. The rise in incomes in the State of Hawaii in the next decade, when combined with federal aid programs and private philanthropy, will make possible the resources needed to move the University up the quality scale to achieve the distinction sought by Hawaii's citizenry.25

If the committee is correct, then it may be reasonable to assume that student charges will not proportionately increase as a part of the total costs of higher education. In turn, this would enable the establishment of a reasonably stable financial aid program sufficient to meet the financial need of all Hawaii youth to the extent of eliminating need as a barrier to college attendance within the State. If, however, the major burden of meeting increased costs is transferred to student charges there will be a need for a vastly expanded financial aid program if equal educational opportunity is not to be denied the economically disadvantaged child.

Private sources of financial support are more important to private than to public institutions of higher education but in either case they will constitute a proportionately smaller share of the total resources available for higher education in the future.26 This affects financial aid programs to the extent that the resulting slack is picked up through increased student charges.
AN OVERVIEW

High Tuition Charges and an Adequate Scholarship Program. The basic philosophical argument in support of high tuition is that higher education is primarily an individual and only incidentally a social good and therefore the costs should be borne by the prime beneficiary: the individual student. This philosophy has little general acceptance in American society today.

The arguments of Harris, Ostheimer and other authorities for increasing charges is not that higher education is primarily an individual benefit but that the economic situation of most students and their families is such that the increases will work no hardships on them. The view is further tempered by the clear statement that: (1) society has an obligation to provide scholarships or other financial aids to the able but needy student; and (2) if tuition charges are increased, financial aid resources should also be increased.

A continued increase in student charges is going to create a demand for expanded financial aid programs and, in particular, for increased scholarship aid.

Placing Financial Responsibility Fully on the Student and His Family. Basically the general discussion above on increasing charges is applicable to the approach of placing the responsibility on the individual. The significant difference lies in the complete or nearly complete acceptance of the belief that higher education is a private benefit to be paid by the recipient. In this view the emphasis on scholarships is minimal. For those individuals and their families who cannot readily meet the costs of a higher education from available resources, the proposed alternative is to borrow the necessary funds. Proposals include expanding private sources of loan funds and the federal NDEA program, and instituting new publicly supported loan programs. If this view should predominate, it would result in greatly expanded financial aid programs with a primary reliance on loans as the chief financial aid tool.

The very use of loans as a financial aid resource is antithetical to the basic purpose of financial aid programs which is to contribute to the creation of equality of higher educational opportunity. Providing educational opportunity through loans is not providing equal opportunity--it is merely providing opportunity to the economically disadvantaged person to increase his personal debt in order to obtain higher education, thereby further disadvantaging the financially needy student in relation to the student with adequate fiscal resources.
FINANCIAL AID AND FINANCING PRIVATE INSTITUTIONS OF HIGHER EDUCATION

The use to which a state wishes to put financial aid programs in strengthening the financing of private institutions is an important consideration in determining the nature and the fiscal extent of such a program. A financial aid program designed to get the student into the nearest and lowest-cost public institution is quite a different operation than the program designed to make it possible for a student to attend the institution of his choice. The answer to the question of whether choice of institution is going to be limited to in-state institutions or broadened to include out-of-state institutions will also have significant consequences for the nature and scope of a state financial aid program.

Financial aid programs play a more important role in the financing of private than of public institutions of higher education. In part this is attributable to the fact that most private institutions charge students more nearly the actual costs of their education. It is also in part attributable to the fact that, as time passes, with the exception of prestige schools, most private institutions are receiving proportionately less of their total revenues from private gifts and contributions and proportionately more from students. Public institutions are enrolling an increasing per cent of all college students and this may be partly due to private institutions' increasing reliance on ever-higher student charges which enhances the attractiveness of low-cost-to-the-student, public institutions. There is evident concern over the possibility that as public institutions become even more attractive, many private institutions may find themselves faced with declining student populations and the choice of closing their doors or of competing for students on other grounds. Prestige schools which compete for students on grounds of academic excellence may increasingly be available only to (1) the very well-to-do, and (2) the very bright scholarship students from non-well-to-do classes. The possibility that such an unbalanced mixture would be academically unproductive has led to some experimentation designed to avoid this situation.

The combination of heavy reliance on student charges and idle educational-plant capacity makes a financial aid program which would finance a student at the institution of his choice extremely attractive to many private schools. Among the strongest and most active supporters in California of legislation creating the California State Scholarship Program, which allows recipients to go to private or pub-
lic schools, were the private institutions of higher learning in that state.

CONCLUSION

There are a variety of methods that may be used to make financial assistance available to needy students. Any of these methods can be made to serve the simple purpose of giving able students sufficient funds to pursue post-secondary education; but, since particular economic, social and political consequences result from assistance depending upon the method or methods chosen to achieve the end of making education more widely available, decisions on such methods should be made with awareness of potential effects. The decision, for example, to emphasize loans as opposed to scholarships or part-time employment has obvious implications for recipients and, in addition, has a distinct and negative effect on accomplishing the primary purpose of financial aid—the attainment of equal opportunity. As another example, the decision to limit aid to those students who attend local public institutions affects the individual's choice of institutions and limits the kinds of education he may obtain; in addition, such a decision has direct financial consequences for private institutions. The interrelationship of aid, kinds of institutions of higher learning, and ways of financing institutions should be appreciated before decisions are made on methods of aid. Finally, the end purpose of aid—to provide equality of educational opportunity—should be kept in the forefront as various alternative programs and methods are considered.
GUIDANCE AND FINANCIAL AID

Inequality of educational opportunity arises from diverse causes; financial aid is only one of many approaches necessary to remove or alleviate such inequality. Even if blessed with unlimited funds, financial aid programs cannot make their maximum contribution to creating equality of educational opportunity unless: (1) students' abilities are identified early in their school career and periodically reviewed to measure the adequacy of the development of individual abilities; (2) students' abilities are fully developed through sound educational programs and the removal of barriers to satisfactory individual participation in the education process; (3) students' financial needs for pursuit of post-secondary education are identified; and (4) students' with need are matched with available financial aid resources.

Guidance programs have a major role to play in each of these variable factors. Through participation in the testing program counselors are intimately involved in measuring the abilities of students and the development of those abilities. Drawing in part on test results, counselors play a major role in guiding students to pursue that curriculum best designed to develop their abilities. Further, counselors should identify barriers preventing individuals from fully developing their talents, and insofar as possible, contribute to the lifting of those barriers. Finally, guidance programs are the logical place to assign responsibility for identifying student financial needs for post-secondary education and guiding needy students to sources of financial aid.

Guidance programs can be especially effective in making children and their parents aware that financial inability need not foreclose the possibility of higher education. Such an awareness should be developed as soon as possible in a child's school years, for the tacit assumption by parent and child alike that college is beyond the family's means and expectations has a negative effect on interest in and identification with the learning process and the school experience.\(^1\)
GUIDANCE AND FINANCIAL AID

THE EVOLVING ROLE OF GUIDANCE

Guidance is essentially a new and developing area. The persons most directly charged with responsibility for carrying out guidance programs, school counselors, are a new part of the educational structure. Their role in the whole structure is as yet somewhat ambiguous and undefined, and this state of affairs makes it difficult to evaluate present guidance programs as means used in conjunction with financial aid programs to equalize equality of opportunity for higher education. (See Appendix A for a further discussion of the role of counselors, goals of guidance programs and the nature of guidance and counseling.)

Broadly conceived, guidance programs can contribute most directly to equalizing educational opportunity through understanding and removing the obstacles in the way of full development of each individual child. This brings counselors face to face with the major obstacle blocking the achievement of equal educational opportunity today; namely, inadequate motivation. The meeting of this challenge will require (1) the improvement of existing activities and the development of new techniques and programs to remove the causes of lack of motivation or modify their effects, and (2) sufficient skilled personnel and resources to utilize the techniques and make the programs successful. This may require increased personnel or expenditures in elementary and secondary guidance programs if lack of motivation is to be removed as a barrier to full individual participation in the educational process.

More narrowly, guidance programs can be used to identify those children who seem capable of benefiting from higher education, to determine what barriers stand in the way of such children's eventual pursuit of higher education, and to remove such barriers. Insofar as financial need is a barrier, a guidance program can be used to match the student with available financial aid.

GUIDANCE IN HAWAII

Guidance and counseling in Hawaii have developed rapidly and impressively in the past few years. It appears that now might be an opportune time for educators in Hawaii to review the potential activities of guidance programs in comparison to present activities with the objective in mind of identifying areas requiring more attention. Guidance programs can make significant contributions to the attainment of equality of educational opportunity including the effective use of financial aid resources. They are not now making the full contribution of which they are capable. (Program evaluation is discussed in Appendix B.)
ROLE OF COUNSELORS

Guidance in Hawaii, as elsewhere, faces the problem of a lack of consensus on the role of counselors (See Appendix A), and the appropriate relations between counselors and teachers and other school staff.2 Review of counseling programs in Hawaii discloses a need to more sharply outline the counselor's role not only in the minds of some counselors themselves but also among teachers, administrators, parents and others concerned with education.3

Although the duties of counselors are prescribed by the School Code, principals are given wide latitude in determining the specific tasks of counselors.4 The result of this administrative situation combined with general lack of consensus as to the counselor's role appears to be that counselors spend an excessive portion of their time on tasks which do not produce an optimum return in terms of the basic purposes of counseling. (See Appendix C for a more detailed discussion of how Hawaii counselors spend their time.) Both the State Department of Education and the counselors feel that too much emphasis is placed on alleviating crises and meeting with graduating seniors, to the detriment of adequate counseling of children when they are first formulating their educational plans.5 In addition, clerical tasks, though generally frowned on as a proper assignment for counselors, still occupy over a quarter of their available time.

The importance of the responsibilities assigned to the guidance program in Hawaii, which include determining students' abilities, identifying students likely to profit from higher education, motivating such students to prepare for and enter college, identifying students with financial need, and informing such students of available financial aid argues persuasively that counselors should be allowed to devote themselves full time to discharging these responsibilities.

IDENTIFICATION OF STUDENTS WITH COLLEGE POTENTIAL IN HAWAII

The policy of the Department of Education in Hawaii is to attempt to identify students with potential for higher education at grades 8 and 9 and to plan their high school curriculum accordingly. The criteria used to determine ability at this age are (1) scores on tests (aptitude tests supplemented by subject matter tests); (2) school achievement (in terms of grades and rank in class); and (3) recommendations of principals and teachers. Hawaii's counselors indicate that primary weight is given to scores on standardized tests.
GUIDANCE AND FINANCIAL AID

Hawaii appears to have developed a satisfactory program for determining student potential at the high school level. However, it must be remembered that present tests and other methods of determining ability are by no means foolproof, and thus it is important for counselors and others to remain flexible in identification and selection procedures.

Hawaii's minimum testing program in the public schools covers every student between grades 2 and 10 and includes both achievement and aptitude tests. Private schools in Hawaii also administer standardized tests. However, it appears that the results of tests are not put to sufficient use in the public schools for: (1) adequate information essential to interpreting scores is not transmitted to students, teachers, parents and administrators who therefore often do not understand the meaning of test results; (2) test data are not used as effectively for purposes of educational research as they might be; and (3) most importantly, testing is not followed-up by intensive counseling and guidance of individual students to help each student overcome barriers to his full development. Rather, it is used to group students into fairly large categories and program their future high school work accordingly.

In addition, no system-wide attempt is made to measure the effectiveness of the child's participation in and commitment to the learning process prior to grades 2 or 3. Serious attempts to avoid talent loss necessitate combining follow-up efforts to identify under-achievers in the early grades with rigorous attempts to help these children, and their parents, to overcome their problems before these children develop hopelessly negative attitudes towards school and the learning process. This is, of course, the larger task of a guidance program. From the viewpoint of a financial aid program, it is the most important task that guidance in the elementary and secondary schools may perform. Only if students who might possibly benefit from higher education are encouraged and aided to prepare adequately for college may a financial aid program effectively equalize educational opportunity.

DIRECTION OF STUDENTS

The public schools rely heavily on a unit in self-analysis and vocational planning which is part of the ninth grade curriculum to help students know and understand their own potential and plan their high school program with post-high school plans in mind. To this end students in the course of this unit are encouraged to take into
account their test results and academic records and interests as revealed by aptitude tests. (Appendix D describes a different approach.)

FINANCIAL NEED

Logically, a guidance program should follow-up identification of potential college students with identification of students who will need financial assistance to go to college. Further, the magnitude of need should be determined. At present, in Hawaii, it is up to the needy student to identify himself. A systematic approach to identification of financial need would be helpful not only to the less aggressive or knowledgeable student whose financial need may, under present circumstances, remain undisclosed, but would also provide information necessary to sounder planning of financial aid programs such as the institutional programs discussed in Chapter III or a statewide program.

The identification of potential college students with financial need and guiding them to financial aid resources would be, in effect, a major new activity in the guidance program. Guidance administrators should be involved in formulating policy guidelines defining need and procedures to be employed in identifying individual need. The actual workload of identifying potentially needy students, helping them complete need analysis forms, evaluating the completed forms, forwarding the forms and related material, and preparing or compiling data from the forms could be divided among teachers and counselors. However, the division of labor should not obscure the fact that this is a new work activity which may require additional personnel if it is to be performed adequately and if other guidance services are not to be impaired. The importance of identifying need is obvious, for it cannot be removed as a barrier if its existence is unrecognized.

DISSEMINATION OF INFORMATION

ON FINANCIAL AID

Some effort is made in all schools to disseminate information on aspects of college attendance—admission requirements, costs, methods of financing, selection of the college suitable for each student, applications and similar subjects—to all of the students interested in college. However, there is no set pattern of disseminating this information nor of counseling individual students.
GUIDANCE AND FINANCIAL AID

Generally, in most of the public high schools, information regarding admission requirements, costs, ways of financing a college education, and similar subjects is disseminated in group situations. In most cases, the social studies teachers, the English teachers, or the homeroom teachers discuss these matters with their students. In some instances, the counselors speak to the students in their social studies or English classes. In other schools, assemblies are organized at which college admission officials from both local and mainland universities often speak and to which interested students are invited.

Information about college admission requirements, costs, methods of financing and similar subjects is usually disseminated in Hawaii to juniors, though some schools begin as low as the ninth grade.

Generally, private schools attempt to counsel students on an individual basis to a greater extent than do the public schools. Parents are also invited to schedule conferences to plan their youngsters' college education. Where necessary, evening meetings are scheduled. In addition, seminars on different aspects of college attendance are also scheduled from time to time to disseminate general background information.

All of the high schools maintain educational-vocational libraries containing catalogues, most of which contain information on the cost of attending college, and occupational briefs either in the school library, the counselor's office, or in a "guidance center." There is great variation in the quantity and quality of these libraries. The educational-vocational library is open to students, in most cases, throughout the school day and counselors report wide interest in and extensive use of the materials, especially the college catalogues. The Department of Education also has placed books on financial aids on the minimum reference list.

DISSEMINATION OF INFORMATION TO COUNSELORS

Dissemination of needed material to counselors is an area requiring improvement in Hawaii's guidance program. The state guidance office recognizes that its office of occupational information service must disseminate more material on educational planning including financing of higher education. In particular, more original materials on higher education programs available in Hawaii are needed.

Hawaii's counselors themselves desire more information on: (1) trends in financial aid programs; (2) college admission policies;
(3) scholarships; (4) employment possibilities for college students; (5) more direct communication with the three accredited four-year institutions in Hawaii; (6) NDEA loans; and (7) other types of loans, in that order.10
Chapter III

FINANCIAL AID RESOURCES IN HAWAII

The major financial aid resources in Hawaii are located at the three four-year accredited institutions, University of Hawaii, Church College and Chaminade College, and are used predominantly to aid residents of the State. In addition, there are scholarships, loans, and employment opportunities available from private individuals and organizations, in as well as outside of the State, which are restricted to Hawaii residents. This chapter describes the three institutional aid programs and those private aid programs which are generally limited to residents of Hawaii including (1) the amount of aid available, (2) the extent of its use, (3) characteristics of recipients, and (4) for the three institutions of higher learning the administration of financial aid and related activities.

During academic year 1962-63 financial aid resources in Hawaii were approximately as indicated in Table 2.

Table 2
APPROXIMATE FINANCIAL AID RESOURCES AVAILABLE IN HAWAII TO COLLEGE AGE YOUTH ACADEMIC YEAR 1962-63 (thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>Institutional Aid Programs</th>
<th>Non-Institutional Aid Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$1,243</td>
<td>$988</td>
</tr>
<tr>
<td>Scholarships</td>
<td>379</td>
<td>149</td>
</tr>
<tr>
<td>Employment</td>
<td>619</td>
<td>619</td>
</tr>
<tr>
<td>Loans</td>
<td>245</td>
<td>220</td>
</tr>
</tbody>
</table>

Data on earnings of students from non-institutional employment, if available, would greatly swell the total of $1,243,000. This total, it should be noted, is the amount which is potentially available for financial aid, not the amount that is presently used to meet student financial need. Student employment, the single largest source of funds, is not used as an effective financial aid tool at the University of Hawaii nor by most private employers. Thus, there is no way at present to determine if student employees are those who need the income to pursue higher education or those who seek the income for other reasons.

Although the available amount appears large there are indications that unmet needs exist. Institutional records show applicants for aid who met academic ability and for financial need requirements but who were denied aid because qualified applicants were more numerous than available awards. Also some of the students withdrawing from the three institutions cite financial need as the reason for withdrawal and some high school seniors indicate they do not plan to continue their education because of inadequate financial resources. There are two basic ways to meet unmet needs: (1) add to scholarship, loan, and student employment funds; and (2) make more effective use of already available funds. Actually both courses of action may be pursued simultaneously. The inauguration of the United Student Aid Funds loan program, presently employed only by the University of Hawaii but available to Church College and Chaminade College, is an example of adding to available student financial aid resources. The appointment by the President of the University of Hawaii of a study committee on student employment illustrates the second approach, for such a committee will necessarily concern itself with the effectiveness with which student employment, or self-help as it is sometimes called, is used as a financial aid.

Even though the total amount of aid available might be sufficient to meet the financial needs of Hawaii's youth desiring to pursue post-secondary education, it might not be distributed among the forms of aid in the most desirable manner. Too much of the aid, for example, might be in the form of employment or loans and not enough in scholarships. The most feasible solution to such a situation would be to increase scholarship funds while holding other resources constant or, if advisable or possible, decreasing them.
AID IN HAWAII

FINANCIAL AID PROGRAMS AT
UNIVERSITY OF HAWAII, CHURCH COLLEGE
AND CHAMINADE COLLEGE

The administration of financial aid programs and the use of financial aids differ significantly among the University of Hawaii, Church College and Chaminade College, for many reasons including differences in: (1) size of student bodies; (2) the nature and educational purposes of the institutions; and (3) the resources available to the institutions for financial aid programs and related activities. (See Appendix E for a brief description of the general characteristics of the three institutions.)

It appears that financial aid resources are well utilized at Church and Chaminade to meet real financial need on the part of applicants. (A detailed discussion of the administration of financial aids, is provided in Appendix F for Church College and in Appendix G for Chaminade College.) The primary problem these institutions face is that of finding more financial aid resources as their population expands and their costs increase.

The University of Hawaii is a much larger institution and the nature of its problems in administering financial aids is somewhat different. (See Appendix H for a detailed discussion of the administration of financial aid at the University of Hawaii.) Effective use of available resources at the University suggests the need for a centralized financial aid program, the development of financial aid packages involving two or more forms of financial aid for students and the need for a radical revision of policies governing the use of student employment. The University is presently taking action in all these areas. Once new policies are formulated and a sound administrative framework developed it may become possible to determine the amount of additional financial aid funds required to meet the needs of able students who desire to attend the University of Hawaii. Such an estimate cannot be formulated at this time because of lack of knowledge concerning the amount of student employment funds being used to meet these needs.
MEASURES OF THE ADEQUACY OF INSTITUTIONAL FINANCIAL AID PRESENTLY AVAILABLE

One indication of the adequacy of available financial aid resources to meet the financial needs of able students is the record of financial aid applications denied and the reasons for denial by the three four-year accredited institutions (Appendix I, Table I). At the University of Hawaii 128 scholarship applicants, 3 long-term loan applicants, 33 short-term loan applicants, and some applicants for employment were denied aid because qualified applicants outnumbered available awards and jobs in academic year 1962-63. For this same reason 46 applicants for employment at Church College and 9 applicants for scholarships at Chaminade College were denied awards in the same academic year. These figures suggest that applicants met other standards including academic ability and financial need but to a lesser extent than the recipients of awards. In some sense this can be considered a measure of the need for more financial aid though this conclusion should be qualified in the case of employment at the University of Hawaii where financial need has only rarely been a criterion in the award of employment. These figures, while of some interest, cannot be accepted as a very adequate measure of unmet financial needs in the college age population of Hawaii. Many needy students simply do not apply for admission to college, or do not apply for financial aid believing that they do not have the requisite academic qualifications, or are not motivated to apply either for admission or financial aid.

Data on the number of students who withdraw for financial reasons sheds some light on the adequacy of financial aid programs. In the academic year 1962-63, 52 students at the University of Hawaii, 9 students at Church College, and 10 students at Chaminade College, withdrew from school giving as a reason for withdrawal a lack of funds to meet educational costs or the pressure of outside financial responsibilities such as contributions to family support or personal debt (Appendix I, Table J). Less than 10 per cent of the total withdrawals from the three schools were attributed to inadequate finances. There is some indication that while financial need is given as a cause for withdrawal it may not be the real or only reason, but is considered by students as a socially acceptable reason for withdrawing in contrast to such reasons as "flunking out." One example of such circular reason-giving is the extremely small number of withdrawals from the University attributable to failure to meet academic standards and the very high number ascribed to "going to work." Some administrators at the colleges feel that if the students had only financial need the institutions could help every such student meet that need.
AID IN HAWAII

No matter how adequate the financial aid programs of institutions there will always be some students for whom financial aid is not sufficient to keep them in school. For other reasons, including failure to maintain satisfactory academic records, they will withdraw from college (Appendix I, Table K). Sixty-nine holders of scholarships and 26 holders of loans at the three institutions withdrew from the three four-year accredited institutions in Hawaii during the course of the academic year 1962-63.

Some idea of the nature and extent of the financial aid programs at the three colleges can be gained from Appendix I, Table F showing ratio of awards to total students by classes and the average amount of aid per recipient. The range of awards to students at the University of Hawaii is from .63 awards per junior student to .19 awards per freshman student. Overall the ratio is .4 awards per student. This is a further reflection of the general policies which limit aid to freshmen. The average recipient at the University receives $280 with juniors averaging the most ($294) and seniors the least ($259).

Church College provides proportionately more students with aid than does the University or Chaminade with .65 awards per student. This is probably the result of the college's recruitment policies which encourage enrollment of students in Hawaii and the South Pacific from lower socioeconomic groups. Sophomores and juniors at Church receive 1.18 and 1.05 awards per student, respectively. The average dollar amount of awards ($234) is somewhat lower than at the other institutions which may reflect the lower costs at the institution.

The ratio of awards per student is .14 at Chaminade with the ratio for juniors and seniors almost double that of freshmen and sophomores. The average award per student is $383 which is significantly higher than University or Church figures and probably is a reflection of the higher student costs at Chaminade.

THE COST OF ATTENDING COLLEGE

The University, Church, and Chaminade have each estimated the average annual cost to students of attending the three institutions (See Appendix I, Table C for details). Total costs are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Oahu</th>
<th>Non-Oahu</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>$ 748</td>
<td>$1,698</td>
</tr>
<tr>
<td>Church</td>
<td>708</td>
<td>1,258</td>
</tr>
<tr>
<td>Chaminade</td>
<td>1,146</td>
<td>1,896</td>
</tr>
</tbody>
</table>
There are several significant cost differences which are important to consider when reviewing financial aid programs: (1) tuition at Chaminade is $600 or more than three times as much as at the University or Church; (2) the cost for neighbor islanders is much greater than for Oahu residents (no separate estimate was made by the schools of the average cost of transportation from rural Oahu which represents a significant amount for those from outside Honolulu attending the University or Chaminade or for the cost of transportation from Honolulu to Laie for Church College students living in town); and (3) costs affecting neighbor island students—meals and housing—total more at the University ($950) than at Chaminade ($750) or Church ($550) even though institutional housing costs $100 more at Chaminade than at the University. (This high neighbor island cost at the University may be somewhat exaggerated because of the University's liberal estimate of the cost of food.)

These cost figures need to be kept in mind when looking at the numbers of awards offered by each institution as well as the maximum and minimum awards offered and the average size of awards. Clearly, the needy student will require a great deal more financial aid to attend Chaminade College than to attend either the University of Hawaii or Church College; similarly the typical non-Oahu student's needs are greater than those of Oahu residents.

THE EXTENT AND NATURE OF AVAILABLE INSTITUTIONAL FINANCIAL AID

Almost $1 million was available for financial aid programs at the University of Hawaii, Church College, and Chaminade College during the academic year 1962-63 divided among institutions and forms of aid as follows (see Appendix I, Table D for details):

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Scholarships</th>
<th>Loans</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$987,760</td>
<td>$149,156</td>
<td>$219,835</td>
<td>$618,769</td>
</tr>
<tr>
<td>University</td>
<td>818,133</td>
<td>68,926</td>
<td>190,158</td>
<td>559,049</td>
</tr>
<tr>
<td>Church</td>
<td>150,842</td>
<td>73,630</td>
<td>17,492</td>
<td>59,720</td>
</tr>
<tr>
<td>Chaminade</td>
<td>18,785</td>
<td>6,600</td>
<td>12,185</td>
<td>--</td>
</tr>
</tbody>
</table>

Sixty-three per cent of the available funds were in student employment; loan funds accounted for over 22 per cent of the available funds; and scholarships amounted to approximately 15 per cent. With the exception of 45 scholarships totaling $21,415 at Church College, all of
AID IN HAWAII

This financial aid was utilized during the academic year (Appendix I, Table E). Financial aid funds at the three institutions went to more than 3,500 students or 36 per cent of the total full-time equivalent students. Approximately half of the recipients received student employment. Long-term and short-term loans were made to 1,139 undergraduate students and scholarships were awarded to 629 students. The single largest available financial aid resource is employment—$618,769; of this amount $559,049 was expended at the University of Hawaii.

The University of Hawaii, as the largest institution of higher education in the State, has the greatest total amount of financial aid funds available. Most of its funds come from the state government in the form of appropriations in the general operating budget (Appendix I, Table D). Next in order of importance are the National Defense Student Loans made available through the National Defense Education Act of 1958 followed by private gifts and grants which later category accounts for all the short-term loan funds at the University of Hawaii but less than 10 per cent of the total financial aid funds. The major source of financial aid for Church College comes from funds for scholarships and loans and student employment included in the regular budget of the College, most of which are contributed by the Mormon Church. Chaminade depended in 1962-63 wholly on National Defense Student loans and scholarships financed from private gifts and grants for its financial aids. During the current year student employment has been treated as a separate category of assistance.

Scholarship Restrictions. There are relatively few restrictions on scholarships available at the three four-year accredited institutions (Appendix I, Table G). The most significant is that scholarship applicants have financial need, and except at Church College, this requirement is closely linked to a demand for above average academic achievement. Other significant restrictions include limiting scholarships to classes other than freshmen, Hawaii residents, and to students with specific ability such as athletic ability, leadership in extracurricular activities or musical ability. A few scholarships at Church College are restricted to those preparing for teaching and some at the University of Hawaii and Church College are limited to foreign students. Most scholarships are available either for a four-year period or may be renewed from year to year if the applicant maintains satisfactory conduct and academic records. Only the University of Hawaii has awards which are limited to a one-year term and may not be renewed.
Loan Restrictions. The few restrictions on loans make them a very flexible form of financial aid. At the University of Hawaii short-term loans are given on the basis of need, the needs of full-time students being met before the applications of part-time students are considered. Church College awards long- and short-term loans on the basis of need. It has no other restrictions except trying to avoid loans to students who are obviously bad moral or fiscal risks, or who are very likely not to meet minimal academic standards. The University of Hawaii and Chaminade College also are required to abide by the provisions of the National Defense Education Act in making long-term loans utilizing federal funds. The criteria for granting such loans include financial need, academic ability, and full-time program. Priority is given to students preparing for teaching and to majors in science, mathematics, engineering and foreign language.

Student Employment Restrictions. Even fewer restrictions are attached to the use of employment as a financial aid than to scholarships or loans. Both Church and Chaminade attempt to award employment on the basis of the financial need of the student, with the qualification that the student be able to perform the duties required by the job. Occasionally, especially at Church College, it has been difficult to locate needy students with certain skills and some jobs have been awarded to students who normally would not be considered eligible.

At the University of Hawaii student employment is not awarded on the basis of financial need. The prime concern of the University student employment office has been to find a student with the necessary skills to perform a specific job; thus the office has performed in a manner more closely akin to that of a regular employment agency than as an arm of the College's financial aid program. If a needy case is brought to its attention, however, some effort is made to find the student a job. Attention to financial need is therefore on an exception rather than a routine basis. This has raised some questions at the University of Hawaii as to whether or not the large amounts of student employment funds are being used as efficiently as possible as a financial aid.

Size of Scholarships. Almost all of the available scholarships at the University and Chaminade are equal to or less than their respective tuition fees (Appendix I, Table H). The contrast with Church College is striking for most of Church College's scholarships are for more than the amount of the tuition. In fact, although Church College's costs run somewhat lower than the University of Hawaii and sharply lower than Chaminade's, it has larger numbers of scholarships available in the higher brackets.
AID IN HAWAII

The limiting of University scholarships to the amount of the tuition fee presents some interesting questions, particularly in relation to the utility of scholarships when tuition is a relatively small part of the student's total educational costs. In the case of a student who is a resident of Oahu a tuition scholarship may be sufficient to remove financial need as a barrier to his attendance at the University of Hawaii. For most non-Oahu residents, however, it is questionable if this amount makes the significant difference in overcoming financial need. The problem at Chaminade, where tuition costs make up a high proportion of total costs and scholarship funds are quite limited, is a very different one.

If scholarships are considered an integral part of the financial aid program, as they obviously must be, then it would appear that effective scholarship programs would involve flexible amounts of money to meet varying financial needs of different individuals. Such a line of thought might lead to consideration of revising the restrictions limiting the amount of the awards at the University of Hawaii. It might well be that the same total dollar amount used for fewer students but with grants which vary widely in size would actually eliminate financial need as a barrier to college attendance for more students than does the present non-flexible system.

CHARACTERISTICS OF INSTITUTIONAL
FINANCIAL AID RECIPIENTS

An analysis of the characteristics of financial aid recipients permits an institution to evaluate, at least in part, whether its financial aid policies and practices are adequate in terms of: (1) favoring those students whom the institution wishes to assist such as those with low family incomes; (2) having unintended effects such as awarding almost all of the available assistance to residents of one area; and (3) indicating possible inconsistencies among the practices followed such as applying an academic qualification test for scholarships but not for student employment. Actually to make such an analysis, an institution's identifiable financial aid goals and the characteristics of its financial aid recipients over a period of years should be compared. The comments included in Appendix J on the characteristics of financial aid recipients in 1962-63 are more indicative of how such data may be used than a definitive discussion, since neither comparable data for prior years nor, in all cases, comprehensive formulations of financial aid policies and practices are available.
PRIVATE FINANCIAL AID PROGRAMS IN HAWAII

Information on private scholarship and loan programs is available in the Department of Education's publication Scholarship and Financial Aid for Advanced Training Available to Residents of the State of Hawaii, Bulletin No. 15, Department of Education. This publication is distributed to all high schools in the State of Hawaii and is a comprehensive listing of scholarship and loan programs available to Hawaii residents including some programs outside the State of Hawaii. The summary of each program includes the name of the sponsoring organization, the address where applications may be obtained, a brief description of the nature of the award, the qualifications required of recipients, and the amount of the award. An attempt is made to update the entries in this book annually. Supplementing and to some extent overlapping this publication is the Kamehameha School's listing of aid programs entitled Scholarship Opportunities for Graduating Seniors of the Kamehameha Schools'. Approximately the same type of information on aid programs is offered in this publication as is available in the Department of Education's bulletin. The Kamehameha Schools' publication is periodically updated.

Through the use of these two publications and other sources the Legislative Reference Bureau identified scholarship and loan programs in the private community in Hawaii and distributed a mail questionnaire, "Survey of Scholarships and Loans Available to College Students," to the responsible organizations. Of 165 mailings7 the Bureau received 104 (63 per cent) questionnaires in return. This questionnaire, in conjunction with the information in the publications noted above, provided the data on the amount of private aid resources, the nature of private aid programs, and restrictions on recipients of private aid included in Appendix K and summarized below.

THE EXTENT AND NATURE OF AVAILABLE PRIVATE FINANCIAL AID

The responses to the Bureau questionnaire totaled as follows:8

<table>
<thead>
<tr>
<th>Scholarships and Loans Awarded</th>
<th>Scholarships Available</th>
<th>Scholarships Awarded</th>
<th>Loans Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Amount</td>
<td>No.</td>
<td>Amount</td>
</tr>
<tr>
<td>455</td>
<td>$255,507</td>
<td>461</td>
<td>$213,059</td>
</tr>
</tbody>
</table>
There were 461 scholarships available in 1962-63 totaling $213,059 of which 402 totaling $205,277 were awarded or an average award of $511. Scholarships ranged in amount from $50 to $2,800 annually. Approximately 75 to 100 scholarships totaling less than $20,000 were offered by programs that did not respond to the Bureau questionnaire. Thus an estimated 536 to 561 scholarships totaling at most $233,000 were available for award to Hawaii students in 1962-63 by local private organizations.

Sixteen local organizations, which responded to the Bureau's questionnaire, maintain loan programs for college students; in the academic year 1962-63, 12 of these programs made 54 loans totaling $20,230. The maximum annual loan made under way of the loan programs is $2,500 and the total amount available to any one student varies at the discretion of the awarding organization. Four programs with available loan funds of approximately $2,500 indicated that no loans were made in 1962-63. There were 5 loan programs which did not respond to the Bureau's questionnaire; it is not possible to estimate with any accuracy the total loan funds of these programs, but it appears highly unlikely that they exceed a total of $5,000. The combined total of private scholarship and loan funds in Hawaii approximated $260,000 in 1962-63.

PRIVATE FINANCIAL AID PROGRAMS

IN THE FUTURE

Two related aspects of the existing private financial aid programs require some further comment. There is at present very little coordination in the administration of the private financial aid programs either among the private programs themselves or between the private and the institutional programs. Secondly, and probably attributable to the lack of coordination, there is little comprehensive data available on the magnitude of resources from the private sector of the economy which may be utilized in a statewide financial aid program.

Coordination. The financial resources of present private scholarship and loan programs range from the very small to those involving tens of thousands of dollars. The motives behind programs vary widely and lack any common thread except that of providing some student funds to defray a part of the costs of his education. The average award is small; it may therefore be questionable whether the awards are utilized effectively in the sense of aiding able students to seek post-secondary education who would be unable to do so without the award.
The motivation behind other private efforts, especially in employment, may bear only incidently on assisting the financially-needy student and the magnitude of available resources may be extremely elastic.

Private resources might more effectively be used to aid needy students if, through cooperative action or a statewide financial aid program, the many private programs in the community, including commercial loan programs, were coordinated on a voluntary basis. Proper recognition could be given to those providing the funds while at the same time a greater flexibility in the range of awards could be obtained, especially if institutional and community awards were considered to be equally available. This would enable awards to be based on the actual magnitude of student need and, hopefully, avoid the situation of giving a student insufficient funds to meet his needs so that after a few months or terms in school he might have to withdraw because of a lack of adequate financial resources. Other desirable products of adequate coordination include wide publicity of available awards, improvements in the selection process, and fuller utilization of available resources.

Employment off-campus, while not subject to control in the same manner as on-campus, self-help programs, still constitutes an extremely important financial aid resource. It needs to be considered as a component of a statewide financial aid program even though employers may not be as closely integrated in the program as others. Again, in designing a financial aid package for a student, the adviser should be able to consider and draw-on all available resources including scholarship, loan and employment opportunities whether they are provided by the State, the institutions, the community, or out-of-state sources.

The need for coordination of available financial resources is especially acute with respect to out-of-state financial aids. To the extent that a statewide financial aid program might bring about the more effective utilization of such resources, qualified Hawaii youth would receive benefits from programs in which they are entitled to participate and local resources, both public and private, would be made available to assist other needy applicants.

Information. Knowledge as to private resources available to Hawaii's college age youth is essential in determining what should be the dollar magnitude of a statewide financial aid program. There is little point in making relatively accurate estimates of student needs and institutional resources and then only guessing at the magnitude of aid available from the community, especially in terms of employment opportunities.
AID IN HAWAII

Better records of available private financial aid resources will be required if a more accurate picture of the total resources, public and private, available to Hawaii's college age youth is to be obtained. This is particularly true of employment opportunities. It would be very desirable for the administrators of a statewide financial aid program in Hawaii, if one is established, in cooperation with the Department of Labor and Industrial Relations and employer organizations, to develop data on employment opportunities for students in the private sector of the community.
Chapter IV

INCOME AND EXPENSES OF THE 1963 HAWAII RESIDENT UNDERGRADUATE STUDENT

Educators, educational administrators, legislators and others in Hawaii and elsewhere who make decisions affecting education increasingly realize that the quality of their decisions depends to an important degree upon the soundness of the information available to them. To be adequate for decision-making the information must be pertinent to the subject, of sufficient quantity to provide for meaningful analysis and in a form that permits ready application to the issue. Decisions affecting students can be improved as the knowledge and understanding of the characteristics describing the affected student populations are increased. The data presented in this chapter and Appendix M are indicative of the kinds of information which can be obtained to strengthen the decision-making process. Data such as these are critical for a number of purposes including (1) long-range educational planning at the state and institutional level, (2) specific institutional program planning (for example, curriculum development, projecting the need for institutional dormitories, financial aid programs, or counseling activities), (3) evaluating of instructional and student personnel programs, (4) defining unmet needs of students, and (5) suggesting areas where further research might be fruitful.

Financial aid programs can make good use of data on undergraduate students' characteristics although a casual review might suggest that this is the population which has managed to get into college, either through their own resources or by obtaining financial assistance, and therefore have few unmet needs. Such a view is too narrow. In the first place, data on the nature and amount of student expenses and sources of income are essential for answering such questions as: (1) how much higher education, including living expenses, costs students; (2) what financial contribution parents, other relatives and students themselves make to meet these costs; and (3) whether and how these factors differ between non-needy and needy students. Secondly, data on student characteristics (e.g., sex, cultural factors, family income, class, marital status, age) which affect their expenses and income are helpful in gaining an understanding of possible differences in the financial needs of students. Thirdly, data on grades, achievement and aptitude test scores, course loads, length of time for completion of college, and related factors are required to evaluate differences between students not receiving financial aid and those who do
and the effects of different forms of financial aid on the educational career of recipients.

Some of these data may be obtained from institutional administrators and records; much of it can be obtained only from students through direct questioning using oral or written questionnaires and statistically acceptable sampling techniques. It is also occasionally desirable to check data from one source against another. For example, the administration at each of Hawaii's four-year accredited institutions of higher learning estimates typical student expenditures including those for housing and food. Administration cost estimates for private rental units and non-institutional board may be significantly overstated if they do not take into account the possibility of students living together and sharing room and board expenses. The only feasible means of finding out how many students live together in private rental units and what are their actual expenditures for board and room is to ask the students. Such data are even more important for an institution such as the University of Hawaii where the overwhelming majority of students live at home or in private rental units rather than in institutional dormitories.

THE 1963 SURVEY OF HAWAII UNDERGRADUATES
AND OTHER DATA ON UNDERGRADUATES

Data included in this chapter and Appendix M are drawn primarily from a survey of the total undergraduate student population at the University of Hawaii Manoa campus, the University of Hawaii Hilo campus, Chaminade College, and Church College during the fall of 1963. A questionnaire, "1963 Survey of College Students," included as Appendix L, was prepared in October 1963 and tested on a sample of University of Hawaii students. Some modifications were then made in the questionnaire; in its final form it was distributed to all undergraduate students. Responses to the questionnaire are discussed in greater length in Appendix M which includes tabular summaries of much of the data. The questionnaire and the analysis of responses are intended to serve as examples of the kinds of questions which may need to be asked and the uses which may be made of answers. The Legislative Reference Bureau does not intend nor does it recommend that the data in this chapter and Appendix M be used in a definitive (rather than indicative) manner.

To begin with much of the data are useful only when available for a period of years thus permitting longitudinal analyses. Unfortunately comparable data over time are not available. In part this led
the Bureau to the early conclusion that perhaps its best contribution would be to provide examples of data needs and analyses and possible approaches to collection of the required data and its analysis. This line of thought helped shape the choice of a survey method, the questions included on the survey, and the form of analysis of survey data. It also resulted in the desirability of making some specific recommendations with respect to future surveys.

RECOMMENDATIONS FOR A FUTURE UNDERGRADUATE SURVEY PROCEDURE

Several conclusions may be drawn as a result of the survey experience:

1. Information on undergraduates should be derived by sampling the total undergraduate population. Either a pure random sample or a random stratified sample with students classified by location of their permanent home would be the most useful for financial aid purposes.

2. Oral interviewing is probably the most satisfactory method for obtaining the desired information from the random sample.

3. Sound conclusions on student expenses and income require carefully drawn and detailed questions. In effect, the question should take the form of a budget and should ask the student for as accurate as possible dollar figures. It may be useful to ask a random sample of undergraduates to keep a budget for a semester.

4. Detailed and specific information on the income and expenses of the undergraduate's major supporter (parents, relatives, spouse, or other) is essential to complete understanding of students' financial situations. Because many undergraduates apparently know little about the finances of their major supporter it may be necessary to modify the interview procedure to provide a way of obtaining the required information.

5. The data should be gathered in a consistent form from year to year for longitudinal analysis. Obviously, this requires that great care be exercised in preparing the questions for the initial sample.

6. Data collected through random sample surveying should be put on cards or tape for electronic data processing and data from institutional records which is routinely placed on cards.
or tape (for example, at the University of Hawaii grades, course loads, in some cases test scores, and other data are routinely placed on cards) should be systematically incorporated into the survey data.

OTHER DATA ON HAWAII UNDERGRADUATES

Other surveys touching on many of the same questions included in the 1963 survey have been conducted in the past in Hawaii by such agencies as the United States Office of Education in the course of its study of higher education in Hawaii, and the University of Hawaii's Student Facilities Survey of February, 1961. Studies of the expenses and income of college students have been conducted in other states and at other institutions of higher learning and some attempt has been made to do this nationally.

It is tempting to make comparisons between data from the 1963 survey and other surveys of student expenses and income in the hope that such comparisons (1) will reveal the unique characteristics of Hawaii's college population, and (2) will provide a measure of reliability of the data or point up major variations requiring analysis and explanation. With few exceptions it is not possible to make meaningful comparisons because no two studies make the same assumptions, utilize equivalent procedures in collecting or analyzing data, or define expenditure items or sources of income similarly. This fact underlines the importance of obtaining consistent data through longitudinal surveys.

However, it is safe to say that in general the patterns that appear in the Hawaii survey are similar to those elsewhere. For example, the heavy reliance by students on parents as a major source of income is duplicated in the findings of other studies. Peculiarities affecting expenses or income of students because of such factors as sex, class, place of residence while in college or other variable factors appear to have similar effects here as they do elsewhere.

FINANCIAL PROFILE OF 1963 HAWAII RESIDENT UNDERGRADUATES

It costs an average of $459 per semester for a Hawaii resident to attend college in Hawaii as an undergraduate student in the fall of 1963. The average cost, when the students are grouped by school (University Manoa, University Hilo, Church and Chaminade) and expense
category (high, high-middle, low-middle and low quartiles), ranges from a low of $269 to a high of $1,047 per semester. The expenses for some individuals will exceed this range.

Lower ranges generally represent the costs reported by students at the Manoa campus and Church College who are residents of Oahu and who are living at home while attending school and Big Island residents living at home while attending the Hilo campus. Higher ranges reflect students whose homes are in the State but who are living away from home while attending school.

Table 3

AVERAGE SEMESTER COST OF ATTENDING COLLEGE IN HAWAII FOR HAWAII UNDERGRADUATE RESIDENTS AND AVERAGE PERCENTAGE OF SUPPORT DERIVED FROM VARIOUS SOURCES

FALL 1963

Average Semester Cost of Attending College

<table>
<thead>
<tr>
<th>Expenditure Item</th>
<th>Average Cost</th>
<th>Range by Category of School and Level of Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$459</td>
<td>$269 to $1,047</td>
</tr>
<tr>
<td>Tuition</td>
<td>94</td>
<td>77 to 273</td>
</tr>
<tr>
<td>Fees</td>
<td>32</td>
<td>19 to 57</td>
</tr>
<tr>
<td>Books</td>
<td>48</td>
<td>33 to 57</td>
</tr>
<tr>
<td>Local Transportation</td>
<td>43</td>
<td>9 to 56</td>
</tr>
<tr>
<td>Interisland Air</td>
<td>9</td>
<td>0 to 39</td>
</tr>
<tr>
<td>Housing</td>
<td>52</td>
<td>0 to 295</td>
</tr>
<tr>
<td>Food</td>
<td>67</td>
<td>0 to 283</td>
</tr>
<tr>
<td>Clothing</td>
<td>44</td>
<td>27 to 69</td>
</tr>
<tr>
<td>Incidentals</td>
<td>70</td>
<td>34 to 124</td>
</tr>
</tbody>
</table>
Table 3 (continued)

Average Semester Contribution From Various Income Sources

<table>
<thead>
<tr>
<th>Source of Income</th>
<th>Average Contribution (Per Cent)</th>
<th>Range by Category of School and Level of Expenses (Per Cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>49.5</td>
<td>36 to 64</td>
</tr>
<tr>
<td>Friends and Relatives</td>
<td>2.4</td>
<td>1 to 7</td>
</tr>
<tr>
<td>Savings</td>
<td>23.7</td>
<td>6 to 31</td>
</tr>
<tr>
<td>Spouse's Earnings</td>
<td>2.8</td>
<td>0 to 8</td>
</tr>
<tr>
<td>Employment on Campus</td>
<td>4.2</td>
<td>0 to 10</td>
</tr>
<tr>
<td>Employment off Campus</td>
<td>9.0</td>
<td>2 to 16</td>
</tr>
<tr>
<td>Loan - on Campus</td>
<td>1.5</td>
<td>0 to 13</td>
</tr>
<tr>
<td>Loan - off Campus</td>
<td>.5</td>
<td>0 to 6</td>
</tr>
<tr>
<td>Scholarships</td>
<td>5.2</td>
<td>3 to 18</td>
</tr>
<tr>
<td>Other</td>
<td>1.2</td>
<td>0 to 8</td>
</tr>
</tbody>
</table>


See Tables FF and II in Appendix M for detailed data.

Tuition and fees accounted for $126 of the total bill (including the value of waived payments); books cost $48; transportation cost $52; housing required $52; food took $67; clothing totaled $44; and incidentals amounted to $70. The range for each category of expenditures is extremely wide.

Where did the money come from? Parents and friends and relatives contributed almost 52 per cent; 24 per cent was derived from savings including summer earnings; 13 per cent came from employment, on and off campus; 7 per cent was derived from scholarships and loans; and 3 per cent was earned by spouses. Again the range of the contributions from each source of support for various categories of students at the several institutions is large.

Average cost and contribution figures are of extremely limited utility except as they describe the situation of the hypothetical typical student. What is needed is the examination of the basic costs
and rates of contribution in terms of the factors which give rise to costs--institutional charges, residential circumstances, cultural patterns, and living habits--and which affect ability to meet these costs--institutional policies, family income, cultural background, and individual effort. Only in this way may an institution realistically appraise the financial requirements of its present and future students and the effects of its own and the community's policies on educational plans. Once so informed, an institution becomes able to follow those financial policies which will result in best achieving its own goals while providing the greatest possible benefit to the individual student and the community.

STUDENT EXPENSES AS RELATED TO SELECTED STUDENT CHARACTERISTICS

The following material briefly summarizes the more detailed analysis in Appendix M. It is intended to suggest the characteristics of students that relate to their expenditures for higher education and those that do not appear to affect expenses.

Sex

Male students spend more on their education than females.
Female students spend less on food and incidentals but more on clothing.
Proportionately more women apply for scholarships while more men apply for loans.
More male students apply for loans but the difference is not great.

Applications for Financial Aid

Students who incur low expenses do not generally apply for financial aid in greater numbers than those who incur high expenses.

Students who live-at-home tend to apply for employment in greater numbers while those who live-away tend to emphasize scholarship and loan applications.

Honolulu residents tend to apply for employment while non-Honolulu residents emphasize scholarship and loan applications.
Racial Background

Racial background may be related to cultural and socioeconomic differences and thus to student expense patterns.

Caucasians incur the highest educational costs, Chinese the lowest. For food alone, the spread between these two groups was $66.

Willingness to borrow is not related to racial background; actual applications may be.

Scholarship and employment applications, with a few exceptions, do not appear to be related to racial background.

Residence of Students Living Away From Home

Students who live away from home and reside in university and other dormitories incur higher educational costs than those living with relatives or in private homes where they are employed but lower costs than those living in private rental units.

Family Gross Income

The amount spent by a student on his college education is not related to his family's gross income.

Church and Hilo campus students tend to come from families with lower incomes.

It appears that students from out-of-state come from families with higher gross incomes than do residents; further, families of part-time students may have higher-than-average incomes.

Summer Employment

Over 75 per cent of the full-time resident undergraduate students work during the summer; almost all of these students earn $300 or more.

Employment During the School Year

There is little correlation between the amount a student spends on his education and the number of hours he works during the school year or the amount he earns.

Approximately 40 per cent of the students work during the school year but only 12 per cent work 21 hours or more per week and only 8 per cent earn more than $400 per semester.
Factors Which Appear to be Unrelated to College Expenses

Distribution of students among expense groups appears to have no correlation to:

- age,
- class in school,
- major source of support if other than parents or self,
- type of dependents (though the total number of dependents affects the amount of support a student may expect),
- gross family income,
- number of dependents if the student is self-supporting,
- earnings from summer employment,
- hours worked and amount earned during the school year,
- willingness to borrow for educational purposes,
- plans for graduate school,
- grades,
- college in which enrolled at the Manoa campus,
- residence (except for students whose legal residence is in Honolulu and who live away from home who appear in disproportionately high numbers in the high expense groups),
- race (except that Caucasians attending Manoa who live away from home are represented in disproportionately higher numbers in the high expense groups while Japanese students who live away from home and attend Manoa campus are represented in disproportionately low numbers in the high expense groups), and
- educational level of parents (except that students at Manoa campus living away from home whose fathers had completed an advanced degree and students at Manoa campus living either at or away from home whose mothers had completed a bachelor's degree or advanced degrees were disproportionately represented in the high expense groups).  

STUDENT SOURCES OF INCOME AS RELATED TO SELECTED STUDENT CHARACTERISTICS

This section lists only the major findings on relationships between student characteristics and income sources and degree of self-support. More detail may be found in Appendix M.
Female students are generally less self-supporting than are male students. They receive a higher degree of support from parents, spouse's earnings, loans, and scholarships.

Male students rely more on earnings than do female students; they also receive more assistance from friends and relatives.

Marital Status

Marital status affects the degree of support from various sources of income. Generally, a smaller proportion of the total income of a married student will be derived from parents, savings, loans and scholarships and more from earnings (including spouse's).

Age

The older the student the more self-supporting he tends to be; he receives less income from parents, friends or relatives, savings, or spouse's earnings.

Racial Background

There are relatively few significant correlations between racial background and degree of self-support, except that Caucasians, who receive less than half their support from their parents appear to be self-supporting to a greater extent than students of Chinese or Japanese background.

Gross Family Income

The degree of self-support tends to decrease for students whose family's gross income is higher.

Applications for Financial Aid

The more of his own support that a student provides the more likely he is to have applied for a scholarship, loan, or employment.

Summer and School-Year Earnings

Student summer and school-year earnings and number of hours working per week during the school year, as might be anticipated, correlate closely with the degree to which the student is self-supporting.
Grades

Being self-supporting or the degree of self-support does not appear to affect a student's grade adversely.

Effect of Inadequate Financial Aid Resources

Students reported that the lack of adequate financial resources had affected their educational efforts in a number of different ways, most particularly in limiting them from attending college outside Hawaii.

Borrowing

Most students would be willing to borrow money for a variety of reasons related to obtaining an education.

Residence

The extent of self-support for students living away from home while attending college is not correlated with the type of residence they choose while at college.

Parents' Educational Level

The degree of student self-support does not appear to be related to parents' educational level with one exception.

CONCLUSION

While the data in this chapter and Appendix M are proximate and must be used with great caution still they constitute the best available data on financial and related characteristics of undergraduates in Hawaii institutions of higher learning. The fact that these data are the best available is probably the most significant point of the chapter. It indicates the tremendous vacuum which has existed in information for financial aid planning and decision-making in Hawaii and suggests that past decisions have been necessarily primarily intuitive or based on experience from other areas applied to Hawaii situations. Intuition and imported knowledge might have been sufficient during the years when the educational systems in Hawaii were relatively static and changes occurred only rarely and slowly. Education in Hawaii, as elsewhere, shows signs of becoming an increasingly dynamic and viable process. In such a world the effective use of resources to develop Hawaii's youth to their fullest potential cannot be accomplished by relying on methods in use today.

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Chapter V
THE HAWAII HIGH SCHOOL GRADUATE AND A
MODEL FOR MEASURING FINANCIAL NEED

The Hawaii high school senior in both public and private schools has received increasing attention and study in recent years including: (1) graduating class surveys sponsored by the Joint Committee on Guidance and Employment of Youth annually beginning in 1951-52; (2) several follow-up surveys of graduates also sponsored by the Joint Committee; (3) work completed or sponsored by the U. S. Office of Education as part of its survey The University of Hawaii and Higher Education in Hawaii; and (4) the Community College Study Project at the University of Hawaii which is summarized in the report Feasibility of Community Colleges in Hawaii.1

Detailed and accurate information on not only seniors but all high school students is essential to planning for: (1) economic development and the expansion of the job market, (2) post-secondary educational programs, and (3) financial aid programs. High school students make up one of the most important of the populations these activities serve. In spite of recent efforts, much that is critical remains unknown. Thus, frequently where fact or definitive analysis is required, an estimate and a surmise must suffice.

Only by knowing the plans, characteristics, resources and post-graduation activities of the high school student and, more importantly, the reasons for his decisions can the institutions of higher learning and the state effectively plan to meet his needs, financial and otherwise, and make sure that successive generations of students have adequate opportunities to develop. This chapter, using the available data and making estimates when necessary, attempts to show by example how such an assessment might be done. The last part of the chapter develops a model as a way of pointing up how the future aggregate financial needs of Hawaii's college age youth might be calculated and what data are essential for making a workable model.

Two cautions must be observed by readers of this chapter. In the first place, data on Hawaii's high school seniors and college age youth and on their and their families' financial characteristics are sparse, not uniform, and often peripheral. Secondly, data presented in this chapter and Appendices N and O, the analyses of these data, the model, and the conclusions based on this model are not offered
and should not be accepted as conclusive and definitive. The intention of the Legislative Reference Bureau is (1) to show one way of working with the available inadequate material, (2) to discuss the implications of these limited data for policy, and (3) to suggest how an acceptable program of financial need analysis might be developed in the future.

THE HAWAII HIGH SCHOOL GRADUATE'S PLANS

High school graduates in increasing numbers and proportions are seeking post-secondary education. The changes during the past decade constitute a major social phenomena, the anticipated changes during the next decade will not be as radical in nature but will effect a larger population.

THE CHANGE IN EMPHASIS: 1952-1963

The significance of the data in Appendix N, Tables GGG and III showing the post-graduation plans of Hawaii's high school seniors may lie largely in the indication it provides of (1) what high school seniors feel is demanded of them by today's world in terms of post-graduate activities and (2) what they consider acceptable goals in relation to their own desires as well as to the demands of their families and the pressures of their immediate social environment. In 1952 almost as many seniors planned to work as planned to attend school. This suggests that although the highest premium was placed on post-secondary education by about half of all students and presumably much of the local community, there was almost equal premium placed on work. The succeeding decade brought a major shift in emphasis in plans of seniors from work toward education. In part this undoubtedly reflects the growing emphasis throughout society on post-secondary education, but it probably also reflects (1) the expanding local economy, (2) the general rise in average family income, and (3) a raising of the educational goals of students and their families as a high school education becomes a matter of routine achievement.

Approximately half of the seniors of 1953 through 1957 planned to pursue some post-secondary educational activity (Appendix N, Table GGG). In 1958 this percentage jumped to 59 and has progressively risen since that time to a high of 68 per cent reported in both the 1961 and 1963 surveys. The actual number of students with plans for further schooling doubled during this same period. The percentage and number of seniors planning to work following graduation has declined steadily.
since 1952 while the percentage of seniors planning to enter military service increased throughout the 1950's but sharply declined in the 1960's.

The number of students with plans for further schooling in each category of educational activity has increased except for nursing. There appears to be a growing demand, in terms of number of seniors, for training in universities and colleges, junior colleges, trade and technical schools, and business schools. The percentage of seniors planning to continue their education in a university or college, however, has declined although the actual number of seniors involved has increased (Appendix N, Table III). This development has been related by some to a change in admission standards at the University.3

PLANS AND ACTUALITY

Even the best conceived plans may go awry. What the senior expects to be doing in the fall may not turn out to be what he does. Therefore, there is a critical need to compare events and plans. The Joint Committee on Guidance and Employment of Youth and the Research and Statistics Division of the State Department of Education have made such comparisons by conducting follow-up surveys of Hawaii's 1952, 1956, 1961 and 1962 high school graduating classes, though only the study of the 1952 graduates is longitudinal (Appendix N, Tables HHH, JJJ, KKK, LLL, and PPP).

Generally, fewer students are in school or employed in the fall than originally intended to be in the spring and a larger number are in military service than so expected. The most severe and unanticipated (by students) category, however, is unemployment which includes 6 to 9 per cent of the seniors within 4 to 11 months of their graduation. Among seniors who have post-secondary education plans, the largest drop occurs among those who planned to attend trade or technical schools; a small reduction affects those with plans to attend a university or college.

The very large decline in the number of students who intend to pursue courses at a trade or technical school compared to actual attendance and the large degree of unemployment suggests that it may be advisable to make financial aid available to such students if lack of money is causing their change in plans. The sharp decline from January, 1963 to January, 1954 in the number of students engaged in other educational activities (except nursing) is a reflection of the short-term nature of such courses. The surveys suggest that there is
COLLEGE AND THE NEEDY STUDENT

a continuing demand for such programs over the years. It appears that many high school graduates wait for some years before entering a post-secondary education program. Possibly, procedures to encourage and facilitate graduates to re-enter educational programs, including the possibility of making financial aid available to students even though they have been out of high school for some years, are called for.

THE INCREASE IN THE NUMBER OF HIGH SCHOOL GRADUATES

Estimated high school senior enrollments in Hawaii by county for the years 1962 to 1972 are shown in Appendix N, Table MMM. The projected increase in number of seniors for the State over the decade is 4,229 or an increase of almost 43 per cent, almost all of which is anticipated to occur on Oahu. The fact that the senior class population on the neighbor islands will be relatively constant for a decade is important for financial need projections because the average costs of attending institutions of higher education and correspondingly the average financial need of students is higher for neighbor island students than for those on Oahu.4

This picture will change if community colleges become realities on the neighbor islands and if State financial aid is deliberately used to encourage attendance of local residents at these institutions. Obviously, the picture would also change if the economies of the neighbor islands were to expand significantly.

THE COMING DECADE

In 1962 approximately 55 per cent of Hawaii's high school seniors went on for further education; in 1972 it will be almost 75 per cent. In 1962 approximately 38 per cent of the seniors went on to a two- or four-year college or university; in 1972 it will be 55 per cent (Appendix N, Table NNN).

These projections are based on the assumption that the number of seniors going on for further education will continue to increase at the same rate as during the past decade. It is conceivable that the rate could increase more rapidly in the future if such barriers to education as lack of motivation, inadequate educational programs, and financial need are removed for large numbers of students. The little evidence that is presently available suggests that financial need is a barrier for relatively few students and eliminating need alone
would not significantly swell the number of graduates seeking post-
secondary education. Also, there is unquestionably some limit on the
percentage of the population that is able to benefit from higher edu-
cation as it is offered today and the projections adopted in
(Appendix N, Table NNN) may approach this limit.

If community colleges are established throughout the State
which absorb the existing trade or technical schools, then the per-
centage of seniors going on to universities or colleges would be
correspondingly greater. This overlap points out one of the diffi-
culties in developing a financial aid program based solely on the
organization of the educational system. A statewide program of finan-
cial aid limited to students going on to two- or four-year colleges
would exclude students going on to trade or technical schools, but if
the trade or technical schools were incorporated into a two-year com-
munity college system, then presumably these students would become
eligible for financial aid. Limiting financial aid programs to stu-
dents going on to two- or four-year college programs lacks logical
validity.

Projections of the number of high school seniors in Hawaii who
will be going on to the University of Hawaii Manoa campus, Hilo campus,
Chaminade College, Church College and two- and four-year colleges on
the mainland are shown in Appendix N, Table O00. These projections
assume that the proportion of students going to school in the mainland
and in Hawaii will remain the same over the ten-year period. Any num-
ber of factors could make this assumption invalid. The creation of a
statewide financial aid program which would provide aid to students
regardless of whether they went to school in or out of state might
well result in swelling the numbers of Hawaii seniors who would go to
school outside of the State. Similarly large gains in personal income
locally might result in providing many families with the necessary
resources to send their children out of state. Thus a need exists to
reevaluate these projections periodically on the basis of the most
recent data concerning the actual activities of graduates.

ELIGIBILITY AND DESIRE FOR
HIGHER EDUCATION

Educators, legislators and others have long wrestled with the
question of who should go on for higher education. Generally the
answer has been a pragmatic compromise which allows the freest choice
to the well-qualified student who has no financial need and the
slimmest options to the marginal student who has not the means to pay his own way. But even if the barriers were completely eliminated, and financial need is one of the smallest and easiest to remove, there would still be many able students not interested in pursuing higher education or academically prepared to do so.

ELIGIBILITY AND FINANCIAL AID

Arbitrary assumptions necessarily underlie any method used to develop some approximate idea of the total dollar amount of financial aid that would be necessary to remove completely financial need as a barrier to the pursuit of post-secondary education. Given the imperfect state of present knowledge in measuring the potential academic abilities and financial need of individuals, it is not possible to eliminate the arbitrariness of the assumptions, but it is possible to make the assumptions logically consistent with a basic philosophy of education suited to the values of a democratic society.

Defining the Population Eligible to Attend College. The predominant view today suggests that those eligible for post-secondary education may be identified through the application of criteria such as test scores, past academic records, and recommendations of teachers and other educators. In this view society's responsibility is to provide opportunity for post-secondary education only to those students who meet the standards as measured by the accepted criteria. The implication for students who do not meet these standards is that they must do without or find an institution whose standards are less rigid.

There are many difficulties in the use of standards, including their inexactness, but perhaps the most serious deficiency is that standards are used primarily as a device whereby an institution may fill its limited capacity with "better" students. Most public institutions, including the University of Hawaii, are not open to all students desiring a college education or even to all students who may benefit from a college education. Limited plant facilities and other considerations, such as improving the quality of education, result in most public institutions denying admission to an ever increasing number of students with the potential ability to benefit from higher education. Some individual institutions of higher education, public and private, in the face of increasing numbers of qualified applicants tend to resolve the problem, at least in part, by raising their admission standards. Other resolutions to the situation are also being aggressively pursued in many areas including expansion of existing facilities, initiation or expansion of community or junior college systems, and conversion of normal schools into four-year colleges.
A second school of thought suggests that because education is the key to many of the rewards of life in a democratic society, every individual should have the opportunity to be educated to the limits of his abilities. This view leads to the conclusion that sufficient post-secondary educational facilities should be available to insure equal educational opportunity to all individuals regardless of ability. To the extent that students with limited abilities attempt to pursue educational programs beyond their capacities some inefficiency will exist in the use of resources. This can be minimized through better elementary and secondary guidance and counseling programs and by providing for rapid and smooth student transfers among post-secondary educational programs for students who are in a program unsuited to their abilities.

In developing a statewide financial aid program it is obviously important to have a clear understanding of which of the two philosophies or what mixture of the two underlie the educational activities of the State. A program designed to provide aid only to needy students who meet the ever higher standards of institutions of higher learning will be of much smaller magnitude than a program designed to aid every needy student to become educated to the limits of his abilities.

Defining the Population Eligible for Financial Aid. Should every needy student desirous of pursuing post-secondary education be offered aid or should aid be restricted to certain categories of students? There are a number of restrictions which might be applied and many of which are being applied by existing financial aid programs in the United States including:

1. Requiring aid recipients to meet certain standards of academic ability or achievement, e.g., finish in the upper half of their graduating class, have a grade point average over a certain minimum, or achieve a minimal score on some test.

2. Requiring aid recipients to pursue a specific kind of post-secondary educational activity or even a specific educational program, e.g., limiting aid to students who attend institutions of higher learning or to students planning to become elementary or secondary school teachers.

3. Requiring aid recipients to attend specific institutions, e.g., limiting aid to students attending schools within the State or to one specific institution.
Clearly, every restriction on the needy student applying for aid which does not operate on the non-needy student is a limitation on the needy student's equal opportunity for education. Such restrictions raise the issue of the justification for denying equal educational opportunity to any individual because of his inadequate financial resources.

Other Basic Questions of Financial Aid Coverage. There are many other basic questions including how much of an individual's need a public financial aid program should meet. This is simply another way of asking what contribution, if any, should be required of the individual or his family to the costs of his education. Another question concerns the form in which aid should be offered: scholarships, loans, or employment. Here the basic issue centers on the use of loans which, in effect, increase an existing individual or family financial deficit. In part, these questions can be answered by deciding whether education is a privilege to be purchased and paid for by the consumer or whether it is a right to be offered by society to all citizens.

WHO MAY BENEFIT FROM AND WHO GOES TO COLLEGE

There is no general agreement on what proportion of the college age population could benefit from college level training. No exact measurements exist to help solve this question and therefore there is always an element of arbitrariness in any level or standard that is developed. One of the earliest attempts to answer this question was that of the President's Commission on Higher Education which commented in its report of December, 1947:

This Commission has concluded, after consideration of the results of the Army General Classification Test, the most inclusive testing program ever conducted, that even with the present inflexibility of college curricula, a minimum of 49 per cent of the college-age population of this country has the ability to complete at least the first two years of college work, and at least 32 per cent has the ability to complete additional years of higher education.5

If the standard of the President's Commission is applicable to Hawaii, then one-half (the half with most academic ability) of all Hawaii college age youth have the ability to benefit from higher education. In reality, a third of the students with academic ability placing them in the upper-half of their high school graduating classes go on for higher education. In the first place, some unknown number of talented students never finish high school. Secondly, of all those
finishing high school in the upper two-fifths of their class only about 64 per cent go on to two- or four-year institutions of higher learning (Appendix N, Table PPP). Of the Hawaii seniors going on to colleges and universities approximately 36 per cent rank in the lower three-fifths of their graduating class. Over 20 per cent of the seniors in the upper 40 per cent of their high school graduating class did not go on for any further education. The number of students by quintile ranking not going on to two- or four-year institutions of higher learning was as follows:

<table>
<thead>
<tr>
<th>Quintile*</th>
<th>1961</th>
<th>1962</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Quintile</td>
<td>% of Students Not Going On</td>
</tr>
<tr>
<td>Upper (81-100)</td>
<td>474</td>
<td>25.5</td>
</tr>
<tr>
<td>Mid-Upper (61-80)</td>
<td>792</td>
<td>46.5</td>
</tr>
<tr>
<td>Mid (41-60)</td>
<td>1,240</td>
<td>66.0</td>
</tr>
<tr>
<td>Mid-Lower (21-40)</td>
<td>1,345</td>
<td>78.3</td>
</tr>
<tr>
<td>Low (1-20 and un-ranked)</td>
<td>1,517</td>
<td>84.2</td>
</tr>
</tbody>
</table>

* See Appendix N, Table PPP for detailed presentation of these data.

The quintile rankings are by high schools. There is a wide variation between the abilities of students included in the same quintile in the table. This is, in effect, saying that students who finish in the top quintile in one school might well rank in a lower quintile in a different school. Even with this limitation these data suggest that there is much yet to be done in getting able high school graduates to develop their abilities more fully by pursuing a course of post-secondary education that will adequately challenge them. In addition to these students there is the problem of capable individuals who do not graduate from high school and who never fully develop their potential abilities. Further, some unidentifiable number of students in the lower 60 per cent of the graduating classes who do not pursue post-secondary education undoubtedly have the ability to benefit from such education. It appears desirable that Hawaii pursue policies designed to increase greatly the number of college age youth who continue their education after graduation from high school.
Appendix N, Table PPP is also interesting for what it reveals about students in the lower 40 per cent of their graduating classes or who are unranked. The number from this category entering a two-year or four-year college exceeded 7 per cent of the total graduating population. This raises again the question as to who should be encouraged and allowed to enter college level programs. Clearly, these hundreds of students had the motivation to attempt to pursue higher education and did find an institution willing to accept them. Probably most of these students are attending school with little, if any, financial assistance in the form of scholarships or loans. It may also be true that some of these students are in unaccredited institutions and that many of them will fail to finish their courses of study. The pertinent question is whether these students should be denied financial assistance if they have the desire to pursue higher education, can gain admission to an accredited institution of higher learning, and have need?

The question of whether it is defensible to deny financial aid to an individual on the basis of an intellectual or academic standard of achievement or ability is a very difficult one. It is closely related to the question of whether public institutions should deny admission to applicants on the basis of academic or intellectual standards. To do so is, in effect, to deny to the individual an equal opportunity for the pursuit of public education. On the other hand, of course, the guardians of public funds which support public institutions of education have a responsibility to the taxpayers to eliminate wasteful expenditures.

A MODEL FOR ESTIMATING THE FINANCIAL NEEDS OF HAWAII'S COLLEGE AGE YOUTH

Early in 1964, Rexford G. Moon, Jr., Director of the College Scholarship Service, College Entrance Examination Board, presented a paper to the Subcommittee on Education of the United States Senate Committee on Labor and Public Welfare titled, "A Model for Determining Future Student Aid Needs in the United States for the Support of Full-Time Undergraduate Education." The model is designed for the purpose of estimating, for various points in time, the total higher educational purchasing power of the American public. With such information it is then possible to determine what the dollar need or "deficit" will be for those families who are trying to "purchase higher educational services." Moon uses the model to suggest the approximate amount of student aid that will be required nationally, but points out that the model is useful and perhaps capable of more refined
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application at the state, local or institutional level. Moon's model is applied to Hawaii in this section utilizing some of the data discussed earlier in this chapter, in Chapter IV, and Appendix N. The model, although very rough, may be a more accurate tool for estimating financial need of Hawaii's college age youth than available estimates by the students themselves for there is evidence that Hawaii's high school seniors tend to overestimate their financial need and underestimate their own and their families' ability to meet at least part of the costs of post-secondary education.

THE USES OF THE MODEL

A financial need model helps locate those populations which have financial need and helps describe the magnitude of the need. This assessment provides the basis for considering the effectiveness of alternative solutions for meeting financial need and alternative uses of financial aid resources. Thus, the model provides a frame of reference for decision-making. Moon points out, in his discussion, that the use of such models at state, local or institutional levels stimulates theorizing about future educational trends. The development of assumptions underlying the model, for instance, encourages thinking and theorizing about a wide variety of educational problems. Moon suggests:

When used at the institutional level it will yield, besides estimates of student aid needs, information to assist in developing educational and staff services, in planning long-range recruiting activities, in pricing educational services, and in determining long-range development needs. There is every reason to believe also that this model will be a useful device to assist higher institutions and various government agencies, now and in the future, in reaching agreements on the allocation of funds for a variety of government supported, college administered aid services.7

Formulating Answers. The development, modification and improvement of a model for estimating financial needs is an essential prerequisite to an adequate financial aid program at an institution the size of the University of Hawaii. It is equally essential to the development of a statewide financial aid program directed toward aiding all Hawaii college age youth with financial need who desire to pursue higher education. Basic questions, such as the following, must be considered:

1. What is the aggregate financial need of Hawaii's college age youth going to school in institutions of higher learning in Hawaii?
2. What is the aggregate financial need of Hawaii's college age youth going to institutions of higher learning on the mainland?

3. What would be the financial needs of Hawaii's college age youth if they could be assured of adequate financial resources to attend the college of their choice and to which they can gain admission?

4. How much should a student's family in Hawaii and the student himself be expected to contribute to the costs of his own education?

5. What are the total financial aid resources available at present and how do they match the financial needs of Hawaii's college age youth?

6. Are more financial aid resources required to meet financial needs of Hawaii's college age youth or is the need for more effective use of available resources?

7. What should be the allocation of financial aid resources among the different forms of aid: part-time employment, scholarships, and loans?

Utilizing the projections (See Appendix P for an application of the model to the financial need of Hawaii's college age youth) based on the model and the assumptions underlying the model, it is possible to at least tentatively answer these questions. Without developing assumptions such as those that underlie the model and the projections which are derived from the model, there is no way even to begin to answer such questions.

Reevaluating the Assumptions and the Model. The continuous re-evaluation of the assumptions and the model are necessary since the model will never be a perfect and accurate tool for estimating financial needs. Many potential benefits can be derived from evaluating the assumptions included in the model developed for this study. For example, it has been assumed that all Hawaii students going to school on the mainland will be in public institutions and costs of inter-state transportation have been omitted though obviously these assumptions do not mirror reality. One way to improve the assumptions would be to substitute assumptions reflecting the actual distribution of Hawaii students between public and private institutions on the mainland and to include estimates of actual transportation costs incurred. These data are not now available; the problem becomes one of determining whether these data are important enough to warrant obtaining them. Other improvements may result from reviewing other
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assumptions such as how much it costs a student to attend institutions of higher learning in Hawaii, the actual distribution of families of Hawaii students by family income ranges, how much a student can be reasonably expected to contribute to his own education in the Hawaii economy, and how many of Hawaii's high school seniors should be going on for higher education.

CONCLUSIONS DRAWN FROM APPLYING THE MODEL TO HAWAII

The four low projections (Appendix P, Table YYY), which may be the most accurate, all reflect the total financial need of Hawaii's college age youth at less than half of the total public and private financial aid resources available to Hawaii youth. Certain conclusions, based on the above statement, are inescapable, if the assumptions inherent in the model, as discussed in Appendix P, are accepted. The two most basic assumptions are:

1. The student and his family have an obligation and responsibility to finance the cost of the student's higher education in accordance with their ability to pay; and
2. The degree of ability-to-pay for higher education for families with differing incomes and numbers of dependents has been accurately estimated by the College Scholarship Service.

These assumptions and indeed College Scholarship Service's model reflect the most conservative approach to financial aid and perhaps reflect a still prevalent general societal belief that higher education is a privilege for which families and students should pay rather than a right, the costs of which are assumed by society. A more liberal approach would require different assumptions and a different model. In developing a model for use in Hawaii a number of other possibilities deserve consideration.

For example, if one believes that the state should pay all students to attend post-secondary schools sufficiently well so that they may meet the reasonable costs of such education, a not indefensible approach, or if one believes that students and their families should make a significantly smaller contribution to meeting the costs of higher education than the scale proposed by the College Scholarship Service, then one will not reach the conclusions noted below.8
COLLEGE AND THE NEEDY STUDENT

Hawaii, as is true generally, is not following the payment approach; it clearly expects the student and his family to participate in financing the cost of higher education though the degree of desired participation has not been defined. In the absence of an explicit definition of the desired level of support, the College Scholarship Service scale has been accepted for purposes of this report.

Another approach assumes that the financial support of youth throughout their educational career is a shared responsibility of society and the family. Families provide room, board and other normal living expenses and society provides educational services, supplies and facilities from taxes and when necessary, contributes to living expenses. In line with this approach families would be expected to contribute to students' living expenses during post-secondary education in accordance with their financial ability and the responsibility of society would be similar to what it is at present at the elementary and secondary level. Because living expenses away from home would tend to be higher while family ability-to-pay would remain constant, society would contribute substantially more to student living expenses at the post-secondary level than at the elementary or secondary level. A variation of this concept would limit the family's contribution toward the living expenses of post-secondary students to the amount of income that was devoted to the student's living expenses during his secondary career.

The major conclusions which proceed from the model, based on the assumptions noted above and those discussed in Appendix P, are:

1. The total dollar amount of resources potentially usable as financial aids for Hawaii's college age youth appears to be sufficient to meet present need.

2. Too much of this aid may be in loan and employment funds. No needy student should be required to borrow or work to pursue public higher education. It might be argued that if a needy student desires a kind or quality of higher education unavailable within the State, loans may be a reasonable device to enable him to meet the additional costs of such an education. Most employment funds are not presently used as financial aid resources since need is not a qualification in selection. Even if need were taken into account in offering students jobs, however, there may well be many needy students who cannot work without their educational effort being negatively affected.
3. There is probably a need to increase scholarship funds either by transferring resources now allocated to loans or employment or by simply increasing the State’s contribution from the general fund.

4. There is a great need to explore the effectiveness of the present distribution of aid resources to determine (a) who is receiving aid, (b) what per cent of students receiving aid have need and the magnitude of such need, and (c) whether some needy students are not receiving aid and why not.

5. There is a pressing need to establish some policy guidelines for the distribution of aid based on the fact that present resources exceed needs.

The statement that adequate total resources appear to be available to meet all need is not the same as saying that all needy students are receiving the aid they require to pursue higher education. In fact, the evidence clearly suggests that not all needy students are being aided. Chapter III points out, for instance, that several hundred qualified applicants were denied institutional aid in 1962-63 and that at the University of Hawaii there were .63 awards per junior as contrasted with .19 awards per freshman, even though freshmen undoubtedly have less earning ability than juniors. Further, this study classifies student employment funds as financial aid resources even though such a classification is obviously inappropriate as long as need is not considered in filling student jobs. In addition, there are problems of (1) improving elementary and secondary education, (2) insuring sufficient motivation of students during their formative years, (3) identifying able, needy students in lieu of waiting for them to consider higher education and apply for aid, and (4) developing adequate procedures in financial aid programs for recognizing real need and effectively meeting it. Improvement in these areas might result in many more Hawaii students going on to institutions of higher learning. Such desirable increases will also increase the need for financial aid resources as depicted in the projections in proportion to the enrollment increase. Such increases should not significantly affect the projections on a per student basis since they already assume a representative cross-section of students from all economic levels in the population going on to colleges and universities; that is, unless changes were made in the assumptions as to the acceptable level of student-parent participation in paying the costs of higher education.

Exhaustive Use of Present Resources. The projections pose some interesting questions. If need, based on the assumptions noted
earlier, is so much less than resources, why are the available re-
sources being made use of to such a large extent? Why do so many
students borrow if the need of the population is less than the availa-
ble scholarship and part-time employment funds? A number of factors
must be considered in trying to answer such questions though no defi-
nitive answers can be provided given the present gaps in knowledge
about many of these factors. One possible part of the total answer
may lie in the present ineffective use of financial aid resources;
another in the feeling among students and their parents that they
should minimize their own contributions; a third in the possibility
that the assumptions do not jibe with the financial realities of the
day even though they appear to be widely accepted in many educational
circles.

The model assumes a certain contribution from the families of
students as well as from the student's own savings and summer employ-
ment. However, it is reasonable for both families and students to
seek other revenue sources if they consider such a contribution an
undesirable drain on their resources. Families may encourage their
children, for a number of reasons, to seek part-time employment during
the school year or to borrow to meet educational costs. The prestige
value of scholarships probably encourages applications from many stu-
dents with little or no need. Work, too, may have some assigned
prestige value in that it contributes to the concept of self-support
and independence, long an American ideal. No adequate procedures
exist in most of the present aid programs to evaluate applicants for
aid to insure that they and their families are making a reasonable
contribution to meet the students' costs of education. In large
measure then a substantive amount of present aid may be going to stu-
dents with little or no need as a substitute for what might normally
be expected from family contributions out of current income and from
student savings and summer employment.

Another important factor in the use of loan funds may result from
the low interest charges of many educational loan programs. A family
or even a student might choose to channel personal resources into
safe investments which yield fairly high returns and to finance the
student's education through low interest charge loans. At present
effective checks against such uses of loan funds do not appear to
exist.

Allocation of Aid Resources. The surplus of resources over needs
should encourage the examination of new ways to allocate the funds
which might better accomplish the purposes for which they exist. For
example, many awards, such as state scholarships at the University of
SECONDARY GRADUATES AND A FINANCIAL NEED MODEL

Hawaii, presently are limited to a fixed amount which is only a small fraction of the actual costs of education for many students. With the exception of some students in Honolulu or perhaps rural Oahu, it is questionable if these scholarships are substantial enough to make it possible for a needy student to pursue higher education unless they are supplemented by loans or other forms of financial aid. Consideration must be given to developing financial aid awards of flexible amounts which may be adjusted to meet a wide range of individual needs. This would allow a more realistic approach to be developed with respect to married students who present a special complex of considerations in the awarding of aid.

In addition to providing flexible amounts of aid there is need to improve the use of different kinds of aid. The truly needy student should have first call on scholarship funds with the most needy students receiving proportionately more from this source than the less needy students. If insufficient scholarship funds are available for needy students, they should be offered part-time employment provided their academic ability is high enough to enable them to assume such a burden. Part-time employment should be clearly recognized as a second choice and less palatable than scholarships as a financial aid tool. There is no philosophical base to support the use of loan funds for truly needy students. The projected need in Hawaii appears to make unjustifiable the resorting to loan funds on the basis of political or fiscal expediency and an unwillingness to provide sufficient scholarship funds. The use of loan funds should be restricted to students with no defined need but who wish to finance their education in this manner rather than through the normally expected contribution from themselves and their families. Such students should also be eligible for part-time employment funds once all needy students have been taken care of. The intelligent use of "aid packages" (aid provided to an individual student through two or more forms of aid) is a relatively unexplored aspect by many financial aid programs in Hawaii. Aid packages serve several essential purposes including increasing the effective use of different forms of aid and enabling aid to be tailored to the needs and abilities of individual students.

Given the aid funds potentially available it is reasonable to consider modifying limitations on present aid programs to permit needy students to attend any school of their choice whether in Hawaii or elsewhere. This and the other modifications discussed above are noted in the following chapter.
CONCLUDING OBSERVATION

Once again it must be emphasized that the adequacy of present funds to meet financial needs depends upon one's assumptions as to the desirable division of financing higher education between society and the family. The projections included in Appendix P and discussed above are based on assigning a large share of responsibility to the family and the student, a division which is widely sanctioned in society today. There are good reasons for taking exception to this arrangement. The G. I. Bill of Rights, possibly the most successful financial aid program ever undertaken, was based on an entirely different approach. Independent of the approach, however, three basic guides stand out:

1. The desired approach to financing higher education and to financial aid for students and the assumptions implicit in that approach must be clearly spelled out and accepted, if the financial aid program is to be rational and effective.

2. A model showing present and projected financial need may be constructed given a designated approach and the assumptions implicit therein. Such a model is essential to planning for financial aid and to executive and legislative decision-making.

3. Regardless of the approach accepted and utilized, the manner in which financial aids are administered will have a substantial impact on the effectiveness of the selected approach in achieving its objectives.
Chapter VI

SUMMARY AND CONCLUSIONS

The request for the study and present Hawaii financial aid programs supported by appropriations of public funds are clear evidence that the State accepts some responsibility for providing each Hawaii youth equal opportunity to the extent of removing financial need as a barrier to the pursuit of higher education. In essence, the underlying reasons for requesting this study are: (1) to clarify the nature and extent of the State's responsibility for providing equal educational opportunity through eliminating financial need as a barrier, and (2) to provide information and guidance as to how best the State might discharge this responsibility. The fundamental philosophy expressed in this study is that societal benefits from equal educational opportunity are so great and of such critical importance in the maintenance of a strong and dynamic society that the responsibility for government to create this equality is inescapable.

The barrier of financial need (i.e., the lack of sufficient funds to attain educational objectives in post-secondary education) arises out of many different factors and its effective elimination requires different approaches. Such financial need generally arises from expenses which may be attributable to the following situations:

1. Free public post-secondary educational institutions are usually not conveniently located.
2. Most public post-secondary educational institutions are not free but charge tuition and fees.
3. The kind and quality of education offered by post-secondary educational institutions varies widely thereby requiring additional expenses by many students if they are to have the kind or quality of education they desire.
4. Post-secondary students living away from home incur increased living expenses.
5. Many families believe that graduation from high school is the point at which the child should become self-supporting or at least commence to contribute to his own maintenance.
6. Many youth have financial obligations that make it impractical to forego the income they can gain from employment to pursue further education.
How can the State discharge its responsibility for eliminating need arising from these situations? It is economically unfeasible to place free public institutions of higher learning in every community. The alternative appears to be: (1) to provide centralized free public institutions of higher learning proffering a range of quality educational offerings and having sufficient spaces for all students who are motivated to pursue higher education and can meet the admission requirements, and (2) to provide grants to students, institutions or combinations of both to meet need arising from individual lack of resources to cover such personal expenses as transportation, room and board, or obtaining a kind or quality of education not available in local public institutions of higher learning, or, if necessary, to offset income foregone. The removal of much financial need then could be accomplished by allocating sufficient tax revenues to institutions of higher learning to provide enough spaces at no charge, a quality curricula, and free or subsidized housing and food to individual students with need. Such students might also qualify for individual grants to meet transportation costs or income foregone.

The result of this approach would be a division of responsibility for providing for the financial support of post-secondary students similar to the present division between parents and government at elementary and secondary levels. The normal expectation would be for parents to provide for the usual living expenses of the youth and for government to provide educational services, supplies and facilities. In cases where families lack fiscal resources to carry their share of the burden the government, rather than the individual, would make up the difference. In the best of all possible democratic societies: (1) public institutions of higher learning would be free to students with no tuition or fee charges; (2) government's contribution to the costs of constructing and operating such public institutions would be derived from a progressive tax system; (3) the funds for grants to individual students would also be derived from a progressive tax system and the grants would be without strings; (4) loans and part-time employment would disappear from use as financial aid tools; and (5) no needy student would have to borrow or work to gain equality of educational opportunity, a right which should be available to everyone.

It is likely to be a long time before free public higher education, as described above, is a reality in the United States. Similarly, the view that higher education is a privilege to be paid for by the recipient which justifies the use of loans and employment as financial aid tools will not be easily forsaken. It is difficult to convince many of those responsible for raising and allocating public
SUMMARY AND CONCLUSIONS

resources that increases in the population's general educational level and in the quality of available education are more than compensated by important social gains and economic benefits, and even if they are convinced raising the funds is no easy task. For these and related reasons the foregoing paragraphs suggest what may be an unattainable ideal. The remaining sections are deliberately qualified to meet today's "practical realities." They are concerned with highlighting some of the more significant observations included in prior chapters of this report (the flush paragraphs following the section headings) and spelling out the interrelationship of these observations in terms of equality of educational opportunity and the scope and nature of financial aid programs in Hawaii.

FINANCIAL AID AND EQUALITY
OF EDUCATIONAL OPPORTUNITY

The fundamental justification for and objective of financial aid is to contribute to the creation of equality of educational opportunity.

Equality of educational opportunity exists when every individual has an equal chance to develop his abilities through education.

The creation of equality of educational opportunity requires (1) providing an educational system of sufficient quality to develop individual abilities to the fullest possible extent, (2) motivating the student (and his family if necessary) to participate effectively in the educational process, and (3) removing the barriers to individual participation in education whether they arise from racial discrimination, social or economic disadvantages, or other conditions.

The major causes of inequality of educational opportunity are (1) the inability of the present educational system to overcome the societally caused negative or apathetic responses to the formal educational system which are referred to in this report as lack of motivation, and (2) elementary and secondary education which fails to fully develop individual abilities. Financial need is a relatively small cause of inequality of educational opportunity.
Financial need as a cause of inequality of educational opportunity at the post-secondary level exists because American society regards higher education, in large measure, as a privilege rather than a right, thereby justifying shifting a substantial part of the cost to the student or his family.

Providing aid to students is, in large measure, an alternative to adequate financing of a system of public higher education which would make places available to students with financial need.

Financial aid creates greater equality of educational opportunity than would otherwise exist providing it does not drain funds from the institution, or derive resources by placing a greater fiscal burden on students; however, the same funds might be more effectively used to create equality in a number of ways including applying them to improving elementary and secondary education or to increasing student motivation or to removing other barriers to individual pursuit of education.

The primary purpose of financial aid is the creation of equal educational opportunity. There are cases of unmet financial need in Hawaii and elsewhere which can be resolved only through additions to available financial aid resources or more effective use of present resources, but most inequality arises long before the student reaches the stage of considering college or the possibility that he may need to apply for financial assistance to attend college. The effective creation of equality of educational opportunity will require programs directed predominantly at pre-school and elementary school children and their families to improve the child's motivation to participate in the learning process, to remove barriers to the effective pursuit of education which grow out of socioeconomic disadvantages, and to provide an educational system capable of fully developing the child's abilities. Such programs would tend to greatly increase the number of children desiring to pursue higher education and, assuming that the present share of the costs of higher education borne by the student is not drastically reduced, this would increase the need for financial aid resources. Financial aid, taken alone, is the short-range solution (and hopefully only an interim one) to equality for those few students who are motivated to pursue higher education, academically prepared for acceptance by institutions of higher learning, and lacking the fiscal resources to pay the costs of higher education. Wolfle touches on this subject in commenting on the effectiveness of different means of reducing the loss of talent in society:
SUMMARY AND CONCLUSIONS

Of these possible courses of action probably the most important in the long run is to improve education at the elementary and secondary levels. In the intermediate run, early identification of talent plus efforts to improve motivation on the part of both the pupil and his parents appears to be the most promising direction of effort. And in the short run, intensive indoctrination plus financial assistance will have the earliest pay off.3

Direct costs to the student to attend public elementary and secondary schools are usually considered small or nonexistent. The general reliance on the family of elementary and secondary students to pay the child's normal living expenses is reasonable because the child is able to live at home while attending school. The school is located within a convenient distance of the child's home or public transportation is provided. In this somewhat limited sense it is possible to claim that public elementary and secondary schools are adequately supported by public funds so that a place is available for every student.4

When higher education is financed in a manner similar to public elementary and secondary education, there will be need for relatively small financial aid programs at the post-secondary level.5 The financing of an adequate public system of higher education, however, would not resemble the financing of elementary and secondary schools since it is not economically feasible to place an institution of higher learning in every community. Therefore, just as most school districts realize a responsibility to pay the transportation expenses of elementary and secondary students when no school is within a convenient distance of the student's home, it is reasonable to expect a public system of higher education to pay those expenses of students which exceed the normal family maintenance expenses including higher expenses for room and board and transportation.

FACTORS AFFECTING FINANCIAL AID PROGRAMS

Financial aid programs vary widely in scope and nature depending upon the decisions as to (1) who should receive aid and in what amounts and forms (scholarships or grants, part-time employment, or loans) and for what purposes, (2) the relationships among public and private, institutional and non-institutional financial aid sources, and (3) the kind and extent of activities to be assumed, if any, beyond the simple provision of financial grants.
REQUIRED RESOURCES AND FORMS OF AID

The amount of financial aid resources required to eliminate need of students pursuing higher education cannot be determined solely on the basis of empirically verifiable data. This determination requires the making of a number of value decisions on such difficult questions as defining the post-secondary educational activities to be included in the concept of higher education, the goals of higher education, and the level of public resources society is willing to commit to education.

The need for financial aid resources will vary with (1) the level of public support of higher education, (2) the share of financing higher education borne by different sources (student charges, endowments, gifts, or government appropriations, the effect of which will vary depending upon whether they are derived from progressive or regressive taxation), (3) the definition of institutions of higher education which receive public support, and (4) the share of public support that is to be provided to the individual, the institution, or both.

The development of a model for projecting the estimated aggregate of financial need among Hawaii's college age youth is essential not only for estimating the dollar amount of resources required but also as (1) a frame of reference for decision-making, (2) a stimulus to theorizing about future educational trends, (3) a source of information useful in developing educational and staff services, planning long-range recruiting activities, pricing educational services, and determining long-range development needs.

Better information on Hawaii's high school students is necessary to improve planning for (1) economic development and expansion of the job market, (2) post-secondary educational programs, and (3) financial aid programs.

Present funds which are being or could be used as financial aid resources for Hawaii's college age youth are approximately twice as great as the highest projected estimate of need for this population (see infra, Table 4) if one accepts the assumption that parents and students should participate in financing the cost of higher education to the extent proposed by the College Scholarship Service, an assumption widely but not universally held today. Even if the total amount is adequate, the distribution of funds among the three major
SUMMARY AND CONCLUSIONS

forms of aid may be unbalanced. Further, any significantly different assumption as to sharing of costs would result in a different total need figure.

The fiscal and administrative burden of a state financial aid program (if one were developed) will depend in large measure on the effectiveness with which institutional and non-institutional financial aid programs in the community allocate their resources to meet financial need and the relationships established between these programs and the state program.

Public Support of Higher Education. Everything else being equal, as the expenses of institutions of higher learning increase, the dollar cost to students would increase and fewer potential students would have the necessary resources to meet the costs. This situation could be alleviated by holding student charges constant, thereby lowering the percentage of total institutional expenses borne by students. Conversely, if student charges (including room and board) are raised to bring in a larger percentage share of the total revenues of institutions an increased demand for financial aid would result.

It is apparent that the United States has sufficient tax resources or could raise sufficient tax resources to support public higher education throughout the nation, and that Hawaii could provide enough tax revenues to support higher education within the State at adequate levels. The decision or series of decisions which will be made in the next few years affecting the extent to which public systems of higher education will be supported by public funds should be based on recognition of the fact that the basic issue is the development of a commitment on the part of the general public and the allocators of public revenues to use enough of the great wealth of the country to provide quality post-secondary education and equal opportunity to partake of that education.

Available Financial Aid Resources and Existing Need. Table 4 shows a conservative estimate of $1,558,000 available in actual or potential financial aid resources to meet the financial needs of Hawaii's college age youth. This amount is greatly in excess of the highest projected need of $986,000 for these students, a figure which is based on institutional estimates of student expenses and a rigid application of the model developed by Rexford G. Moon, Jr. including the level of parent-student contribution suggested by the College Scholarship Service.
Table 4

APPROXIMATE FINANCIAL AID RESOURCES POTENTIALLY AVAILABLE IN HAWAII TO COLLEGE AGE YOUTH AND PROJECTED FINANCIAL NEED OF HAWAII COLLEGE AGE YOUTH 1964 (thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Institutional Aid Programs</th>
<th>Non-Institutional Aid Programs</th>
<th>Highest Projected Estimate of Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarships</td>
<td>$1,558</td>
<td>$1,053</td>
<td>$505</td>
<td>$986</td>
</tr>
<tr>
<td>Employment</td>
<td>379</td>
<td>149</td>
<td>230</td>
<td></td>
</tr>
<tr>
<td>Loans</td>
<td>619</td>
<td>619</td>
<td>285</td>
<td>not available</td>
</tr>
</tbody>
</table>

Source: Chapter III, pp. 30, 34-35.

Scholarship and employment figures represent amounts available for 1962-63 although there have been increases in such funds. Loan funds for 1962-63 have been increased in this table to reflect $65,000 additional National Defense Student Loan funds and $250,000 available through United Student Aid Funds, Inc.

Appendix P, Table YYY.

If figures were available showing the part-time employment earnings of students in non-institutional jobs the potential resources would be more than twice as great as the estimated need.

At first glance the surplus of resources over needs suggests that no additional resources are required and that more effective use of present resources would eliminate what unmet need currently exists. Such may not be the case. For example, a decision to provide aid to needy students only through grants and if necessary through part-time employment and to reserve loans to increase the educational choices of students with limited resources but no basic financial need may result in the need for additional grant funds or a change in the
SUMMARY AND CONCLUSIONS

present allocation of aid funds among scholarship and part-time employment. In any case the present situation may make possible greater flexibility in meeting a wider range of financial needs than if funds were more limited.

IMPROVING THE EFFECTIVENESS OF FINANCIAL AID PROGRAMS

To the extent that resources of existing institutional or non-institutional financial aid programs go to other than needy students, the fiscal and administrative burden of aiding needy students would shift to a State program if such were to be established. Thus the State has a vital interest in the administration and effectiveness of these programs. The following recommendations for improving the use of financial aid resources are general conclusions developed in this study. They do not necessarily apply to every aid program:

1. There is a pressing need for more adequate data on student expenses and income. Obviously, in determining the amount of an individual's need it is essential to have an accurate estimate of his educational expenses as well as sufficient information to evaluate his and his family's resources to determine the share of his expenses to come from this source. The "1963 Survey of College Students" indicates that estimates of student expenses by the three four-year accredited institutions of higher education in Hawaii are excessive. With the exception of data collected from the 1963 Survey specific or general information on student incomes is not available.

2. Informal policies and guidelines governing the granting of aid may be sufficient for small programs with few awards but appear to result in some degree of confusion and inefficient allocation of resources as programs become larger.

3. At least for the foreseeable future, a program offering aid in more than one form should provide for the greatest possible integration and coordination among the different forms of aid. This will make possible maximum flexibility in meeting the varied needs of individuals as well as for getting the most mileage out of dollars used for grants to individuals, the most attractive or favorable form of aid.
4. The use of financial aid "packages" (involving two or more forms of aid) should be increased until such time as it is possible to provide aid solely through grants.

5. To the greatest possible extent awards should be flexible so that they may be related to individual need. Awards limited to tuition, which is generally a small part of the total costs of education to the student, may be so small that they cannot make the difference in the decision of many students to pursue higher education. Conversely, it is possible that the need of some students will be less than their tuition.

6. Discrimination against particular groups of students in the award of aid (for example, by class or location of permanent home) should be eliminated insofar as possible.

7. Until such time as grants become the sole form of financial aid, part-time employment funds should be recognized as a financial aid resource and used as such to the fullest possible extent consistent with filling jobs with individuals with the requisite skills and who are capable of assuming the burden of work without it detracting from their participation in the educational process.

The University's program needs review. Some of the major areas of concern should include (1) integrating scholarships, loans, and part-time employment each of which is now a separate program; (2) recognizing that for the present part-time employment funds need to be used as an aid resource and initiating steps to so use these funds; (3) developing policies and guidelines for awarding aid including procedures for defining and evaluating need, the portion of an individual's need that the University will meet, and the form in which the need will be met; (4) developing a single financial aid application form, perhaps as part of the regular admission form, to be completed only by students seeking financial assistance, or perhaps in conjunction with a statewide financial aid program; (5) reviewing procedures for reevaluating the need of students periodically during their college career; and (6) initiating the formal use of financial aid packages as long as it is necessary to use employment and loan funds as financial aids.

It should be recognized that it is going to cost more and require greater effort to administer financial aids, at the institutional and/or non-institutional level, if the programs are to be made more effective through better utilization of resources. Among the areas in which expenditures will need to rise and efforts made more
SUMMARY AND CONCLUSIONS

effective are planning, obtaining financial need data on individuals, designing financial aid packages, providing financial aid counseling, furnishing data to secondary schools, and conducting research.

DETERMINING THE RECIPIENTS

OF FINANCIAL AID

The removal of financial need in a manner most consistent with the concept of equal educational opportunity requires providing assistance to any individual who can gain admission to post-secondary educational programs of sufficient quality to meet accreditation or similar standards and who needs financial assistance to attend such programs.

Aid should be provided the student as long as he maintains a record sufficient for retention in the educational program and has financial need.

Insofar as possible uniform policies and standards for evaluating individual need should be adopted and applied uniformly to each applicant.

With the exception of Chaminade College, which utilizes the College Scholarship Service, and some of the non-institutional programs, there is little consistency or sophistication in the methods utilized by financial aid programs in Hawaii to evaluate need. To the extent that this leads to awards to non-needy or less-needy students, there is inefficiency in the use of aid resources. There is an element of unfairness in applying different sets of criteria for evaluating need of different individuals with similar financial characteristics.

As a practical matter, it may be easier to initiate a statewide financial aid program limited to providing assistance to students at two- or four-year accredited institutions of higher learning. In the long run it is logical to expand the program to assist students with need in all post-secondary educational activities and, if need is a factor affecting students before they reach the post-secondary level, it will be necessary to extend aid to these students.

INDIVIDUAL AWARDS

The amount of an individual award, at least until the basic assumptions relating to sharing of total costs by a student and his parent are modified, should be determined by the amount a
student needs over his own and his family's resources to attend the post-secondary educational program or institution of his choice provided it meets established standards of educational quality.

The free educational choice of the individual should be encouraged by eliminating restrictions on financial aid grants including restrictions based on ability or achievement levels of students, program they wish to pursue, or location or nature of institution they wish to attend.

The needy student already has a fiscal deficit in comparison to the non-needy student. This consideration leads to the conclusion that loans would simply increase the fiscal deficit of the needy student. Therefore, he should receive aid in the form of scholarships. Part-time employment can be used as a student aid if insufficient scholarship or grant funds exist.

On the grounds that financial need, as a barrier to equal educational opportunity, could be largely eliminated by financing an adequate system of public higher education in Hawaii which would make places available for all students desiring higher education it is reasonable to set the maximum individual grant (or earnings from part-time employment) at the level necessary to enable the neediest student to attend a public institution of higher education in Hawaii. If the individual desires to pursue a higher cost education, he may borrow the additional funds he needs.12

Loans might also be made available to students who choose to finance their education in this way provided that loan funds with particularly favorable terms (National Defense Student Loans, loans with little or no interest charge, loans which may be excused later) should not be available to such students.13

Part-time employment funds should be used as a financial aid resource as much as possible until sufficient grant funds are available, provided the needy student can work without impairing his participation in the learning process. Students lacking the ability to work while in school and who have financial need should be given first chance at grants.

The preservation of private colleges and universities in the community is a desirable objective and the employment of financial aid as a subsidy-through-students to such institutions is one means of contributing to their preservation. The weight assigned this factor could be sufficient to warrant setting the maximum individual award of grants or part-time employment earnings at the level necessary to enable the neediest student
SUMMARY AND CONCLUSIONS

to attend the public or private institution of his choice in the State provided he is admitted.

Any restriction operating on the needy student and not on the non-needy student is a limitation on the needy student's equal opportunity to education. In this sense, as few restrictions as possible should be attached to financial aid grants over and above the basic qualifications that recipients have financial need and have gained admission to an educational program or institution meeting some established standards of educational quality.14

SUGGESTED AREAS OF CONCERN FOR THE
STATE IN PROVIDING FINANCIAL AID

The State in providing financial aid, as an extension of its major objective of creating equality of educational opportunity, has a legitimate interest in contributing to the elimination of other causes of inequality including lack of motivation to participate fully in the learning process and poor quality educational programs which fail to develop student abilities.

In general, the contributions financial aid programs can make in eliminating causes of inequality other than need are limited to research or consultative tasks. Thus the data and knowledge available in the programs should be utilized for a broader range of activities.

The State, as an adjunct of providing financial aid, should cooperate with elementary and secondary schools in improving financial aid counseling to the end of making each student and his family aware that financial need should not be a determining factor in the student's choice of what to do after completing secondary school.

The State must be concerned with increasing the effective use of present financial aid resources and planning for the effective allocation of new resources.

Better guidelines based on more knowledge must be developed for determining the form and amount of aid which should be offered to individuals with different abilities and needs.
The most effective use of financial aid resources in creating equality of educational opportunity requires, first of all, an understanding of the causes of existing inequalities and their magnitude. Once such an understanding begins to be acquired, then it becomes possible to commence formulating and testing a variety of possible ways of removing these causes and to begin to define meaningfully the contribution that a financial aid program can make to this process.

Some hypotheses on causes of inequality have been advanced and some data and information have been collected to test these hypotheses.15 Much more needs to be done in gaining insights into causes of inequality and perhaps suggesting ways of achieving a greater degree of equality. Financial aid programs can obtain and analyze much useful data and encourage others to share in this process.

THE ASSUMPTIONS UNDERLYING A FINANCIAL AID PROGRAM

The nature and scope of a financial aid program is, in large measure, a product of the assumptions, either explicit or implicit, which underlie the program. This is why it is so important that the assumptions which are selected are the result of conscious decisions. From time to time, a desired assumption may have to be temporarily rejected because of existing financial or political realities. This is understandable; but it is important that those responsible for formulating financial aid programs put the desired assumption on the shelf for known reasons and with the intention of taking it out of limbo when that becomes possible. The principle areas in which decisions as to desired assumptions are required are discussed in this section. In reviewing the questions it should be very clear that it is neither possible nor desirable to avoid making choices.

1. Basic Purposes. Are the basic purposes of a financial aid program the removal of need as a barrier to the pursuit of higher education and by so doing the providing of equality of educational opportunity and the minimizing of talent loss? If these are the basic purposes, is it assumed that a financial aid program is simply a necessary but limited way of overcoming undesirable instances of individual need, while solutions to the much broader and more fundamental problems related to crippling of potential talents and inequality of educational opportunities are sought?
SUMMARY AND CONCLUSIONS

2. **Resources.** Are there presently available more potential financial aid resources than are necessary to ensure every needy student in Hawaii the opportunity to attend an institution of higher learning in Hawaii? Are potential financial aid resources being used effectively as financial aids? If not, how can their effective use be increased? The available evidence indicates that one may assume that the State of Hawaii could produce sufficient tax revenues to eliminate need as a barrier to the pursuit of higher education by adequately supporting public institutions of higher learning and providing direct grants to students if it deems such a commitment worthwhile.

3. **Qualifications for Aid.** Should state supported financial aid programs provide aid to every needy student motivated to pursue post-secondary education and who can gain admission to an acceptable post-secondary educational or training program? If one answers affirmatively, then the major criteria for financial aid would be a student's motivation and an institution's or program's acceptance of him. There would be no restrictions on financial aid eligibility based on some arbitrary measurement of ability or achievement, the nature of the post-secondary educational or training activity the student wishes to pursue, the age of the student or the time he has been out of the educational system, or the institution or geographical location of the institution the recipient might attend aside from the fact that it be a legitimate educational entity.

4. **Aid Limitation.** Should the maximum amount of aid available for any individual student be based on the actual difference between the reasonable costs of living including food and shelter incurred by the individual in pursuing the post-secondary education or training program at the school chosen by him plus the cost of tuition and fees, if any, and the resources that he or his family can contribute toward these costs? An answer to this question depends, in large measure, on one's assumptions as to the qualifications for aid (#3 above) and to the parent's and student's responsibility to participate in financing the cost of higher education.

5. **Type of Aid.** Should students with financial need be offered aid in the form of grants? If one answers yes, then (a) part-time employment should only be used if grant funds are insufficient to meet all needs, and (b) loan funds should be used to enable a student to pursue higher-cost of quality education, for short-term emergencies, to enable students with no serious need to choose this means of financing their education instead of drawing on family or individual resources, or as a device to influence individual educational choices.
6. **Identifying Individual Need.** Is the elimination of need as it affects the student motivated to pursue post-secondary education and able to gain admission to an acceptable institution accepted as a basic objective of the program? If so, (a) is the early identification of individual need imperative to forestall the child or his family from making the decision early in the child's school career that the costs of higher education exclude it as a feasible post-secondary alternative, and (b) is it then important to motivate both the child and the family to consider applying for post-secondary education? If yes, then a partial and initial solution to these problems might be to encourage commencing financial aid counseling coincidentally with planning a student's post-secondary career. In this way it would be possible to help a student review the alternatives which will be available to him after his graduation from high school and to make him aware that financial need is not a barrier to a choice among these alternatives. More work with parents may be an essential step.

7. **Measuring Financial Need.** Is it important to use uniform standards and procedures to evaluate the financial needs of applicants and to determine individual awards in expending State financial aid resources? If so, the achievement of this end could be facilitated by the development of a standard financial aid application form and the adoption of standards and procedures for evaluating individual financial need by programs using State funds. Such forms, standards, and procedures might be extended to other programs if deemed desirable.

8. **State Financial Aid as a Last Resource.** Should State financial aid resources be regarded as a last resource for students who cannot obtain aid from other sources? An affirmative answer assumes State aid should not displace existing financial aid programs, but rather supplement them and that students should be encouraged to try all other financial aid sources reasonably available to them before they are granted assistance from State funds. This raises difficult questions as to the relationship of awards from State funds to those from other institutional and non-institutional financial aid programs in the community.

9. **Private Schools.** Is the preservation of private institutions of higher learning desirable, and if so, should a financial aid program be utilized in achieving this end, as well as in providing equality of educational opportunity to the individual student?

Mrs. Jean Fujimoto prepared the manuscript for printing.
FOOTNOTES

CHAPTER I

1. The offspring of the humbler classes of society contain as many potentially talented and able persons as do the more advantaged classes, but by college age much of this talent is already almost irretrievably crippled. Thus, most measures of ability that are now available show the individuals who constitute the more advantaged groups to be those most able to profit from higher education.


7. The reader interested in reviewing some of these studies to develop his own conclusions might begin with some of the studies cited in this report. West's bibliographies are helpful.


13. J. V. Martorana, Ernest V. Hollis, et al., The University of Hawaii and Higher Education in Hawaii, Report of a Survey (Honolulu: Department of Budget and Review, 1962), p. 37. This is not a good estimate of talent loss in Hawaii because the upper two-fifths are identified by quintile rankings by schools. It is conceivable that most of the upper forty per cent at one school might fall in the lower sixty per cent at another school.


17. This problem has not yet been definitively studied. A brief discussion of it may be found in Seymour E. Harris' chapter "State Expenditures on Higher Education," in his book Higher Education: Resources and Finance.

CHAPTER II

1. "[The decision to send a child to college] is better considered as something that becomes part of the habits of thought of the family, so that the decision to send a student to college is rarely reversed in the last year or two of high school except by family financial disaster. Reversal of the decision not to send a child to college is likely to be even rarer because of the inertia introduced into this decision as the effect of several years of a non-college orientation and preparation of the student." Norman Clift and Ruth B. Ekstrom, *Practices and Attitudes in Paying for College, College Entrance Examination Board Research Bulletin RB-62-2* (Princeton, New Jersey: Educational Testing Service, 1962), p. 10.

2. "It seems abundantly clear that counselors will continue to be the target of criticism and will in fact deserve the contradictory blur of perceptions held of them until they themselves do something about it. A basic responsibility of any professional is to redirect people's attitudes toward his role and to cultivate public understanding and support." B. Schertz and S. C. Stone, "The Counselor and His Publics, a Problem in Role Definition," *Personnel and Guidance Journal*, XI (April, 1963), 491.

3. ".. There is a need to clarify the basic issue of counselor role and function and relationship to other school staff. Dr. Don Twiford of the U. S. Office of Education pointed to this as a major problem. This is a national problem as well and the American School Counselor Association has adopted this area for its major project. The Oahu elementary counselors view it as a major area for discussion this coming year." (emphasis added) State of Hawaii, Department of Education, *Division of Guidance, Health and Special Education, Annual Report 1962-63*, p. 16. ( Mimeographed)


5. The Department of Education in its Secondary Guidance Evaluation Project noted that: "The primary responsibility of secondary school counselors, namely, that of providing assistance to all youngsters in developing meaningful and realistic educational and vocational plans, is subordinated in most school situations to the handling of crises and immediate problems. . . ." and recommended that "...there be a re-focus of the current counseling emphasis away from concern with crises and graduating seniors. That this re-focus take the form of increased counseling at the 8th and 9th grades when youngsters are formulating their educational plans. . . ." Hawaii, Department of Education, Division of Guidance, Health and Special Education, Guidance Branch, "State Summary, Secondary Guidance Evaluation Project," (October 18, 1962), p. 8. ( Mimeographed)

6. It is difficult to talk about the specific deficiencies in this most important function of the testing program because useful data for evaluation in this area are not compiled by the Department of Education and the procedures for
CHAPTER III

1. Many Hawaii youth each year compete for and receive financial aid from institutions or financial aid programs located outside the State of Hawaii which are not restricted to Hawaii residents. To some extent this relieves the pressure on local programs to provide the resources necessary to eliminate financial need as a barrier to pursuit of post-secondary education by able students.

The tremendous number and variety of financial aid programs outside Hawaii and the difficulty of obtaining reliable and comprehensive data on the share that Hawaii youth receive has made it unfeasible to include in this study a review of the nature of these programs and the degree to which Hawaii youth participate in them.

2. See Appendix I, Tables I and J for exact figures on financial aid applications denied and student reasons for withdrawal. Chapter V discusses need among Hawaii high school seniors.

3. Much of the statistical data on institutional aid were derived from a questionnaire, "Financial Needs of Hawaii's College Age Population," prepared by the Legislative Reference Bureau and completed by each of the institutions. Data from the questionnaires were supplemented by interviews with individuals responsible for financial aid activities at the institutions. The academic year 1962-1963 was used as the base period, but where significant changes have occurred or been introduced since that time they are described.

4. According to Office of Student Employment records an estimated 300 to 500 applicants for employment were not placed during the 1962-63 academic year because applicants (1) withdrew applications or rejected employment offers, and (2) failed to meet academic requirements.

5. The University of Hawaii Office of Student Employment prefers the word placement rather than award when speaking of student employment on the basis that the most important relationship is between student and employer and student employment is not an award. The word award is used throughout this study in reference to student employment with the clear recognition that the first criterion in granting a student employment is that he has the skills to do the job and is acceptable to the employer. There is no reason why other criteria should not be utilized in student employment including the criterion of student financial need.

6. The Church of Jesus Christ of Latter-Day Saints, which operates Church College, has a general policy of discouraging acceptance of subsidies from government. In accordance with this policy Church College has not participated in programs under the NREA and has evidenced no interest in USA Funds.

7. Mailing were to addresses of organizations or individuals and do not reflect the number of programs for a single organization might be responsible for several financial aid programs and would have completed a questionnaire for each program.

8. Neither the institutions which formally or informally place students in private employment nor the Department of Labor and Industrial Relations maintain accurate records on student employment so there

following up individual students on the basis of their identified abilities varies from school to school. For example, information is not available on how many students who score well on tests do not take college preparatory subjects, or on how many students pursue courses of study that would maximize the development of the abilities they possess as identified by testing. There is no uniform program for following up potential college students or students with other potentials to ensure that barriers to the realization of their abilities are identified and removed.

7. In Hawaii, as elsewhere, more attention is being directed to the potential learning abilities as related to actual achievements of children at the lower grade levels. The child who reaches intermediate school with high academic potential but a low achievement rate is often not salvaged due to a number of factors including the child's attitudes and feelings toward school and the learning process and the lack of sufficient numbers of adequately trained personnel to provide the intensive kinds of services such "under-achievers" require. An otherwise adequate secondary guidance program is not prepared to provide the kinds of help these students require to achieve their highest potential. (Guidance administrators in the State of Hawaii's Department of Education do not believe that providing these services is a proper guidance function.) The Department of Education realizing that the student's commitment or non-commitment to the learning process is often established by the second or third grade is making an effort to identify potential under-achievers in the first few grades of school, to analyze the causes of the student's under-achievement, and to correct these causes so that the student will develop to his full potential. Obviously, this is intensive educational counseling.

8. Public schools have from a few to 1,500 college catalogues in their library or an average of 320 catalogues while private schools indicated a range of 12 to 2,000 or an average of 355 catalogues.

9. These are: (1) Scholarship and Financial Aid for Advanced Training Available to Residents of the State of Hawaii, Bulletin No. 15, Department of Education, Hawaii (27 of the 29 responding high schools indicated having this publication which is sent to every high school), and (2) Lovejoy and Jones, College Scholarship Guide (16 of the responding 29 high schools have this book).


are almost no data available on the nature and magnitude of such opportunities for students in the general community.

9. Data based on responses to the Legislative Reference Bureau's questionnaire, "Survey of Scholarships and Loans Available to College Students."

10. Estimated from information in the Department of Education's Bulletin No. 15, Kamehameha Schools' listing of aid programs and files at Sinclair Library of newspaper clippings on scholarships.

CHAPTER IV


2. These average costs, as reported by the students themselves, are substantially less than estimated by their institutions (see Table C, Appendix I). This suggests that it might be advisable for the institutions to revise their estimates or substantially qualify them if their figures are to be useful for individual and institutional planning purposes.

3. For details of how students were grouped by expense and income categories see Appendix M, pages 132-137, 142. Average cost figures reflect total expenses reported for a group divided by the total number of students in the group. Since all students reported expenses for each item this tends to understate actual average per student expenditures. The Bureau has on file tables showing average costs for items of expenditure based on dividing total reported expenses for each item by only those students who reported such expenses. The average per semester costs on this latter basis for all Hawaii undergraduates responding to the survey were as follows:

<table>
<thead>
<tr>
<th>Expenditure Item</th>
<th>Average Cost</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>89</td>
<td>3,970</td>
</tr>
<tr>
<td>Fees</td>
<td>33</td>
<td>4,087</td>
</tr>
<tr>
<td>Books</td>
<td>49</td>
<td>4,114</td>
</tr>
<tr>
<td>Local Transportation</td>
<td>56</td>
<td>3,717</td>
</tr>
<tr>
<td>Interschool Air</td>
<td>187</td>
<td>1,164</td>
</tr>
<tr>
<td>Housing</td>
<td>54</td>
<td>660</td>
</tr>
<tr>
<td>Food</td>
<td>159</td>
<td>1,774</td>
</tr>
<tr>
<td>Clothing</td>
<td>53</td>
<td>3,316</td>
</tr>
<tr>
<td>Incidents</td>
<td>77</td>
<td>3,757</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>462</strong></td>
<td><strong>4,160</strong></td>
</tr>
</tbody>
</table>

Tuition and fees are understated in this table because tuition or fees waived by a scholarship are not included. The total does reflect scholarship waived tuition and fees.

4. While age does not appear to be correlated with expenses there are differences among the respondents from the different campuses. As might be expected the two-year campus at Hilo has a population considerably younger on the average than any of the other three institutions. The average age of students at Church College and Chaminade College is lower than it is for students at the University of Hawaii Manoa Campus. At the Manoa campus students who live away from home are, on the average, somewhat older than students who live at home.

5. The number of students involved, however, is so small as to provide no sound basis for drawing conclusions.

CHAPTER V


2. 1952 graduates surveyed in January, 1953 included 163 students in nursing as compared to the 1960 graduates of whom only 125 planned to enter nursing schools and the 1963 class which included only 73 seniors with such plans.

3. The Office of Education staff in their survey accounted for the percentage decrease by stating, "Evidence was discovered by the survey staff that these changes in senior plans correspond roughly to changes that have occurred in the admissions policies of the University of Hawaii over the past decade." University of Hawaii and Higher Education in Hawaii, p. 36.

4. The increased need of neighbor island students is attributable to several factors including (1) the lack of institutions of higher learning on the neighbor islands (with the exception of two-year programs at the University of Hawaii's Hilo campus on Hawaii and Manoa College on Maui) resulting in additional transportation, board and room, and incidental costs, and (2) the less healthy economies of the neighbor islands compared to Oahu as indicated by higher unemployment rates and lower average per capita incomes.


8. One additional note should be added. Simply holding the tuition rate down, or even eliminating tuition at public institutions, does not represent a totally different approach to financing higher education. No or low tuition will not, in itself, overcome the financial barriers faced by the needy student. His concern must necessarily be his total costs. Lowering tuition is most significant for the student who has few other cash outlays to make and, of course, is not related to individual financial need. It is least significant for students who must make
major cash outlays for housing, food and/or transportation or who must contribute to their family's support.

CHAPTER VI

1. The statement that loans and part-time employment should not be used as financial aid tools does not mean that they do not have a part to play in higher education. Loans can be made available to students who wish to finance their education in this manner or who have the means to attain an adequate education in the field they desire but wish to pursue a more expensive education. Student employment would continue to fill its traditional purposes of helping institutions do their work at cut-rate prices while offering students who desire work for the experience or other reasons than need the chance of employment.

2. Supra, Chapter 1, pp. 5-7.


Three variables stand out in importance in determining which high school graduates attend college. One is ability. Another is the wish to obtain a higher education. And the third is the ability to pay college expenses. The relative attention given to these three factors in any effort to get more bright students into college and later into the specialized fields depends upon the educational level at which remedial action is taken. If one is dealing with high school graduates or pupils in their last year of high school, financial assistance is probably the most important factor. It is too late then for much effective work aimed at changing motivation or increasing ability. If one is dealing with pupils in the 8th or 9th grade, the most important task is to identify those who should be encouraged to go to college so that the successive steps of education, indoctrination, and financial assistance can be combined in an effort to get the best ones into college. If one is dealing with boys and girls in the early years of grammar school, the important thing is to give good training, so that their abilities will be developed to the maximum, with the result that by the 8th or 9th grade more of them will be developing the skills and interests necessary to do college work successfully upon completion of their high school courses.

4. There may be a need for financial aid programs for other than post-secondary students, especially at the secondary level. Some families may be unable or unwilling to pay the maintenance expenses of the student or forego the income the student could be contributing to the family if he were working rather than going to school. Where such factors operate to limit the child's participation in the learning process or lead to his premature separation from school financial aid may be a necessary corrective.

5. Some cases of need would exist including students whose families cannot afford the income foregone while a student is in school instead of gainfully employed, married students, cases of poverty, and individuals with unusual fiscal problems.

6. Seymour E. Harris, Higher Education: Resources and Finance (New York: McGraw-Hill Book Company, Inc., 1962) estimates the operating expenses of all public and private institutions of higher education will rise from $3.6 billion in 1957-58 to $9 to $10 billion by 1969-70 (p. 20). Approximately 60 per cent of all students in 1957-58 were in public institutions of higher learning and this may increase to as much as 75 per cent by 1969-70 (pp. 48-49). Proportionately, this may mean expenses of public institutions would be as much as $7.5 billion by 1969-70 or an increase of approximately $5.5 billion from 1957-58. Considering the tremendous and rapid growth of federal expenditures for defense or space research it is clearly within the realm of possibility for federal contributions on this level. Of course, the federal burden will not be anywhere near this great, for state and local governments will increase their contributions and student charges will undoubtedly carry a large part of the burden. The point is that if Americans developed a commitment to publicly support systems of higher education there are resources which could be made available in the form of reallocated or additional tax revenues.

7. "The foregoing survey of resources for financing higher education in Hawaii indicates that the extensive expenditures called for in this report are within the economic capability of the people in Hawaii. The rise in incomes in the State of Hawaii in the next decade, when combined with federal aid programs and private philanthropy, will make possible the resources needed to move the University up the quality scale to achieve the distinction sought by Hawaii's citizenry." Academic Development Plan Committee, An Academic Development Plan for the University of Hawaii, January 1964 (Honolulu: University of Hawaii, 1964), p. 112.

8. For a further discussion of the use of loan funds see infra, pp. 64-65 and 78-79.

9. The judicious use of scholarship and employment funds might free large amounts of loan funds, and possibly, some scholarship funds, for students who wish to go to schools outside Hawaii. It might also make possible the granting of flexible amounts of aid related to the individual's need based on the costs of the institution he desires to attend. Special kinds of grants might be developed for married or older students who wish to re-enter the educational process after some years of separation.

10. Such data are important for other purposes as well, supra, Chapter IV, pp. 38-39.

11. This does not mean, for example, that the University of Hawaii should not evaluate the neighbor island student's need differently from the Oahu student's to account for higher transportation, board, and room costs. It should. It does mean that criteria related to financial need should not be introduced in some cases and not in others including racial background, grades, or recommendation of an alumnus or local legislator. Further, it means that allowances for unusual expenses such as medical
fees or the cost of a trip home in a family emergency should be made uniformly on the basis of some defined policy and not from case to case.

12. The setting of a maximum individual grant or limit on part-time employment earnings are probably primarily defensible on the grounds of expediency. If so, it is important to examine the assumptions underlying such criteria to determine if they are defensible on grounds other than expediency and, if not, to develop criteria which are supportable. The questions which must be explored are difficult. For example:

1. Does setting the maximum award at the amount required to enable the neediest student to attend a local public institution of higher learning imply that in-state institutions offer in all areas a quality education comparable to any institution anywhere or that equal opportunity is limited to attending certain schools?

2. Does equal educational opportunity mean opportunity to the individual to develop his abilities to the fullest possible extent which in some cases may justify supporting Hawaii students at private schools in or outside of Hawaii as well as at the University of Hawaii?

3. Are individual student choice and ability to get admitted to an institution of his choice which meets established educational standards sufficient criteria for granting awards?

13. Of course, loans with favorable terms might be used to gain other objectives than meeting need such as attracting students to pursue a particular field of study or to seek advanced or more specialized training.

14. It is defensible to limit the student's choice of post-secondary programs, if state financial aid assistance is to be utilized, to those programs that meet some standards of quality. This will ensure that the student will not be exploited and that public and other funds will be effectively used. The standards for identifying acceptable programs or institutions should be developed to weed out the incompetent, unqualified programs or institutions and not to favor one group or class of programs or institutions over another.

15. For example, the New York Higher Horizons program.