

DOCUMENT RESUME

ED 112 716

HE 006 641

AUTHOR Pfnister, Allan O.
 TITLE Trends in Higher Education in the United States. No. 1. Enrollments, a Review of Recent Literature. A Report to the Commission on the Future, the Lutheran Educational Conference of North America.
 INSTITUTION Lutheran Educational Conference of North America, Washington, D.C.
 PUB DATE Mar 75
 NOTE 46p.; For related documents, see HE 006 640-645
 AVAILABLE FROM Allan O. Pfnister, Professor of Higher Education, University of Denver, 2199 S. University Blvd., Denver, Colorado 80210 (\$2.00)

EDRS PRICE MF-\$0.76 HC-\$1.95 Plus Postage
 DESCRIPTORS *Birth Rate; College Students; Demography; Educational Attitudes; *Educational Trends; *Enrollment; Enrollment Influences; Enrollment Projections; Enrollment Rate; *Enrollment Trends; *Higher Education; Literature Reviews; Population Trends; School Demography; Student Attitudes; Student Characteristics; Student Enrollment

ABSTRACT

Two basic developments during the late 1960s and early 1970s will have long-term consequences for higher education in the United States. The first is the striking change in population trends; the declining birth rate reached a low of 15.6 live births per 1,000 population in 1972. The second factor examined is the apparent shift in attitude toward college going among the traditional group of college-age persons. These two factors will obviously not in themselves account for all of the changes that will take place in higher education before the year 2000, but numbers of students who finally enroll will always establish the context within which institutions must develop strategy, and will set the parameters within which changes will be effected. In reporting on the recent literature in these areas, the report makes no attempt to establish specific projections for any group of institutions, much less any individual institution. It does, however, examine the predictions of several other sources. The report examines the traditional pool from which college enrollments are drawn and the expanding college going pool, the "new student," and its impact on both public and private institutions. (JMF)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

TRENDS IN HIGHER EDUCATION IN THE UNITED STATES

NO. 1 ENROLLMENTS
(A Review of Recent Literature)

A Report to
The Commission on the Future

THE LUTHERAN EDUCATIONAL CONFERENCE OF NORTH AMERICA

Allan O. Pfnister
University of Denver

March, 1975

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

PERMISSION TO REPRODUCE THIS COPY
RIGHTED MATERIAL HAS BEEN GRANTED BY

Allan O. Pfnister

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER.

HE 006641

Lutheran Educational Conference of North America
955 L'Enfant Plaza, S.W. Suite 4500 North Building Washington, D.C. 20024

© Allan O. Pfnister, 1975

Preface

This is one of six monographs written during the period covering the latter half of 1974 and the first months of 1975, and that review developments in American higher education through the mid-1970s. The sources have been articles and books published in large part between 1964 and 1975. Writing during this period has been voluminous, augmented in the last five years by the many reports, staff studies and other project prompted by, or related to, the work of the Carnegie Commission on Higher Education. The output has been so great that it is difficult for the college administrator, much less a faculty member involved in his own discipline, to view the literature in any broad perspective.

When the Lutheran Education Conference of North America established its Commission on the Future in 1972, it developed a series of proposals for projects that would result in documents useful for planning among the colleges related to the Lutheran Church. One of the resources requested by the Commission on the Future was an overview of the current status of higher education in the United States as that was reflected in the contemporary literature. In addition, the Commission requested that this overview be particularly directed to the implications for planning for the Lutheran colleges.

In early 1974 I was asked to undertake this particular phase of the work of the Commission. After the Commission approved a preliminary outline, and after I had completed certain other commitments, including meetings in Germany and Switzerland in June, 1974, I turned to the development of these monographs. I had considered assembling the materials in a single and fairly brief report. As the writing progressed, however, it became obvious that I would not be able to complete the work, at least to my satisfaction, in a single document. After making several revisions in the format, I decided on six monographs, five of which would deal with general topics, and the sixth of which would focus upon the colleges related to the

Lutheran Educational Conference of North America. The Commission on the Future reviewed drafts of four of the monographs in October, 1974 and approved the continuation of the work.

The six monographs are being issued under the general title of Trends in American Higher Education: A Review of Recent Literature. The titles of the six monographs are:

- No. 1 Trends in American Higher Education: A Review of Recent Literature--Enrollments
- No. 2 Trends in American Higher Education: A Review of Recent Literature--Students in the 70s
- No. 3 Trends in American Higher Education: A Review of Recent Literature--Governance (Organization and Administration)
- No. 4 Trends in American Higher Education: A Review of Recent Literature--Instructional Programs
- No. 5 Trends in American Higher Education: A Review of Recent Literature--Financing the Program
- No. 6 Trends in American Higher Education: A Review of Recent Literature--Implications for the Predominantly Undergraduate Church-Related Institution

The monographs, while each of them is fairly lengthy, do not pretend to present an exhaustive analysis of all of the literature that has been produced. The selection of books and articles from which the material is drawn was arbitrary. These are the items considered by the author to be of significance and that were readily accessible to him and that would appear to be readily accessible to those who would be using the monographs. Each monograph provides a substantial cross-section of the writing and opinion on each of the topics. The sixth monograph draws upon the preceding five monographs and attempts to outline specific implications for planning for predominantly undergraduate church-related institutions. It will be noted that, and this is particularly the case for the most recent information, the monographs draw heavily upon the Chronicle of Higher Education. The Chronicle provides the

most up-to-date references on the items covered; some of the references are taken from issues in December 1974 and January 1975.

--Allan O. Pfnister
Professor of Higher Education
University of Denver
January 1975

Declining Birth Rates and Other Options to the Traditional College
Key Factors in Future Planning?

In proposing policies relating to the future development of higher education in the United States, the Carnegie Commission on Higher Education predicted that the three decades before the year 2000 will be a time of substantial innovation and change.

The next three decades are likely to be a period of substantial innovation and change in the organization and structure of higher education comparable in significance to two earlier periods of change. The first was the period following the Civil War when many of the leading colleges were transformed into universities. The second was the period since the end of World War II, which was characterized not only by rapid enrollment increases and a steady increase in this year of the public institutions in total enrollment, but also by the emergence of planned state systems of public higher education and of the public two-year community college as the most rapidly growing type of institution.¹

Among the changes the Commission anticipates are: (1) a movement toward a more "free-flowing pattern of participation spread over a broader span of years," (2) the combining of work experience with a more extended collegiate attendance, (3) the giving of more attention to career goals, (4) the broader development of open universities and external degree systems, (5) and the introduction of other approaches to flexibility. The final report of the Commission refers to the same possibilities but characterizes the 1970's as a time during which higher education moved "from golden age to time of troubles."²

While the final report goes on to explore a number of additional issues, both Commission volumes call attention to two basic developments during the late 1960s and early 1970s that will have long-term consequences for higher education in the United States. First, there has been a striking change in population trends. In 1972 the birth rate in the United States appeared to have reached the lowest in the century, 15.6 live births per 1,000 population. Moreover, the actual number of live

births in 1972 was the lowest in 27 years. In 1945, with a smaller population base and a higher birth rate, the number of live births recorded was 2,858,000 and the following year the number increased to 3,411,000. By way of comparison, in 1972 the number of live births recorded was 3,256,000, more than 1945, but less than 1946. This decline in birth rates in the United States began in 1958 when the rate dropped below 25 per 1,000 which had been reached in 1952 and sustained through 1957. More recent data show a continuing decline. By the end of 1973 it was reported that American women were having only 1.9 children each, insufficient to replace the present population.³

The second significant factor is an apparent shift in attitude toward college-going. The Carnegie Commission observes that there has been a shift away from formal programs in higher education to a wide range of other kinds of postsecondary learning. The National Commission on the Financing of Postsecondary Education reports the same phenomenon and calls attention to the growth of the "noncollegiate" sector of education. The latter Commission, on the basis of a review of recent studies comments that data indicate "that the college-going rate has risen slowly during the past two decades and may decline somewhat during the next two decades."⁴ There may already be a hint of the decline in college-going in recent reports of the Bureau of the Census. In 1971 some 53.1 percent of the high school graduates attended college that same year, but in 1972 the estimate was 48.8 percent, lower than at any point in recent years. And the proportion of 18-24 year old persons enrolled in college was lower in 1972 than in 1971.⁵ Data for 1973 indicate also that the percentage of 18- and 19-year-olds entering college has continued to decline since 1971.⁶

These two factors, declining birth rates and the decreasing proportion of the traditional age group enrolling in college, will obviously not in themselves account for all of the changes that will take place in higher education in the next three

decades. The value society places on advanced education, the availability of financial resources, the perceived needs of society, these and other factors will also influence the directions colleges and universities will take. But numbers of students who finally enroll will always establish the context within which institutions must develop strategy and will set the parameters within which changes will be effected. As population expert Philip Hauser observes, the current and predicted changes in population have implications not only for the size of enrollments but for the "composition and characteristics of the enrollees" and "for the curriculum at all levels of schooling, and especially, perhaps, for secondary and higher educational institutions."⁷

In the pages that follow, we examine these two factors, the declining birth rate with its impact upon the traditional source of college-going persons and the apparently changing patterns in college-going. In considering the implications of these factors for higher educational institutions in general and particularly for undergraduate private colleges, we are mindful of the difficulty in predicting how any group of institutions, much less individual institutions will fare. To be sure, some recent state-wide enrollment studies have established 5 to 10 year projections for individual institutions. Ronald Thompson has made projections for public and private colleges and universities state by state.⁸ But, with John K. Folger, we are sobered by the knowledge that the Carnegie Commission within two years (1971 to 1973) revised its projections downward by 12 percent to 1980. And, as Folger points out, the Carnegie Commission's projections "were very carefully done, utilizing the best available projection methods."⁹

As numerous reports and articles have documented, higher education in the United States has experienced an almost continuous growth pattern since its establishment with the founding of Harvard in 1636. Planning among higher educational institutions, such as it was, has long been based on the assumption that

continuing growth is inevitable. In the early 1970s, however, an increasing number of voices question the standard assumptions. Even the earlier Carnegie report, whose enrollment projections were subsequently reduced, as Folger notes, raised a strong caution against assuming continuous growth.

Higher education in the United States comprised a continuous rapid growth segment of the nation for more than three centuries. During that time, it has experienced steady enrollment increases at a rate faster than the expansion of American society generally. Over the past century, in particular, enrollments in higher education have doubled regularly every 14 to 15 years. But never again.¹⁰

The report goes on to predict only a 50 percent increase between 1970 and 1980, no increase in 1980-90, and a 33 percent increase in 1990-2000. Subsequently, as we have already noted, the Commission revised the projections for 1970-80 downward by 12 percent.

The annual meeting of the American Council for Education in 1970 focused on the theme, "Higher Education for Everybody?" While the major addresses seemed to reply in the affirmative, the bases for the responses were far from consensual. The editor of the volume published subsequently observed:

Surprisingly, the affirmative answers arise not out of a common set of premises nor out of a grand design within which some practices are found to be good and practicable and others are not. Instead...we see...quite different premises about higher education set forth by authors who, despite their differences, conclude that expansion is desirable and, under certain circumstances, may be feasible.¹¹

It was in exploring the feasibility of the further expansion of the enterprise that several contributors pointed up the difficulties faced. James L. Miller, Jr. contended that the year 1970 marked the end of a 25 year period in American higher education "during which the outstanding characteristic has been unprecedented growth."¹² He observed that as a result of the growth, the relationships of higher education to society had been fundamentally altered. But an era has ended as we observe a "reduction in the rate of enrollment growth, leveling-off of federal

financial support.../and/ the search for better ways of sensing and meeting students' educational needs," and these new developments "pose unfamiliar challenges to administrators whose earlier experiences had prepared them instead to cope with challenges of growth."¹³

Martin Trow similarly reflected upon the pattern of growth in the past and went on to write that "the signs are growing that the future of higher education will not be an extrapolation of the past." Indeed, his own prognosis was that,

...as a result of a number of forces both internal and external to the university, there will be over the next few years very marked discontinuities in the development of these institutions, and that the form the American system of mass education for increasing numbers and proportions of the group aged eighteen to twenty-two or twenty-four will take becomes more problematic.¹⁴

An early report on enrollments for the fall of 1974 found a mixed picture.¹⁵ There were increases among some sectors, but, as the writer of the report notes, the increases were "far from universal." From a survey of 800 private colleges and universities undertaken by the Association of American Colleges, it was found that approximately half of the institutions experienced increases, 25 percent remained the same, and 25 percent decreased in enrollment. The American Association of State Colleges and Universities earlier reported on 241 state institutions and found 47 percent expected enrollments to increase, 30 percent expected to remain the same and 27 percent predicted decreased enrollments. The same issue of the Chronicle of Higher Education in which the report appeared carried a story of how one private women's college had increased the freshman class by 170 percent.¹⁶

When the National Center for Educational Statistics released preliminary figures on the fall 1974 enrollments, it was found that there had actually been more of an increase in enrollment between 1973 and 1974 than between 1972 and 1973.¹⁷ In the fall of 1974 enrollment in American higher educational institutions had passed the ten million mark with a total of 10,231,878. This was more than half

a million above 1973 and an increase of 5.5 percent. Between 1972 and 1973 the increase was only 396,510, approximately 4.3 percent over 1972. The major factor in the 1974 increase appeared to be due to the presence of a larger number of women on the campuses; more than 60 percent of the additional students were women. Public institutions increased by 6.3 percent and private institutions by 3.0 percent. Public two-year institutions reported an increase of 17.3 percent. These increases occurred when the estimated number of high school graduates increased only by 1.7 percent between 1972-73 and 1973-74.

With such mixed evidence, it is exceedingly difficult to predict enrollments for the next decades. Still, perhaps we can describe what seem to be the best judgments at this time and urge individual institutions to examine trends in their own enrollments, assess the special factors which may be operating within and proceed more systematically in developing plans for the immediate and longer-term future.

The Pool from Which College Enrollments are Traditionally Drawn

By convention we have been accustomed to think of persons within the ages of 18 to 21 years or 18 to 24 years as the "college age" groups, and most projections of enrollment refer to these groups or work with ratios employing one or the other of these age groups. This is not to say that all persons enrolled in colleges fall within these age ranges, but it is to recognize that in the past the majority of college students have been in the range of 18 to 21 years or 18 to 24 years. In most currently used projections it is assumed that even with shifts in the pattern of college-going these ranges will continue to be useful in predicting enrollments for planning purposes. John Folger suggests that more elaborate cohort methods of projection "have not proved demonstrably better than the ratio methods for long-run projections" and he is prepared to use the ratio method, at least as a beginning point.¹⁸

Based upon data collected for 1971, it appears that 58.4 percent of the students enrolled in higher educational institutions were between 18 and 21 years of age and that 76.8 percent fell within the range of 18 to 24. Only 3.5 percent were less than 18 years of age, and 19.7 percent were 25 years of age or older. Thus, while the ranges of 18 to 21 or 18 to 24 do not include all students, the latter does include over three-quarters of those currently enrolled in degree-credit courses. Particularly, when one is considering the entering student, it appears reasonably accurate to use 18 years as the most common age of entrance.¹⁹

While definitive data were not readily available for any extended span of time for this review, there may be some indication in data for recent years that the average age of persons attending college is increasing. By comparing a report for 1971 with the same data for 1968, we find that 63.6 percent of the college students four years earlier were in the range of 18 to 21 years of age, while the range of 18 to 24 years included 78.7 percent. A slightly larger percentage were found within the 16 and 17 year range in 1968 than in 1971, 4.1 percent compared to 3.5 percent. The portion of students 25 years and older was less in 1968 than later, 17.1 percent in comparison to 19.7 percent.²⁰ The change in the relative proportions of students over the four years is made clearer in Table 1.

Table 1

COMPARISON OF AGE DISTRIBUTIONS OF COLLEGE STUDENTS, 1968 AND 1971

Age Ranges of College Students	Proportion of Enrolled Students Within Each Age Range	
	1968	1971
16 and 17 years	4.1	3.5
18 and 19 years	36.8	33.7
20 and 21 years	26.8	24.7
22 to 24 years	15.1	18.4
25 to 29 years	11.6	13.2
30 to 34 years	5.5	6.5
Total	100.0	100.0

Source: U.S. Department of Health, Education, and Welfare, National Center for Educational Statistics, Digest of Educational Statistics, 1970 (Washington, D.C.: Government Printing Office, 1970), p. 73 and in the 1972 edition, p. 81.

In a report issued late in 1974 there seems to be further evidence of the increase in average age. In 1947 persons 25 to 34 years old constituted about 18 percent of the resident (as distinct from the totals shown above) students; in the fall of 1973 they constituted 22 percent of the resident enrollment.²¹

The shift, largely in the recent past, to a more diverse student body, in terms of age lends substance to Todd Furniss' more sweeping statement that:

...higher education in the United States must make a long overdue effort to redefine "the college student." Today's working definition is based on an out-of-date stereotype--the full-time undergraduate resident in a four year college.../We need to/ look at our students as they actually are: some young, some older, some highly skilled, some wedded to nontraditional cultures, some intellectually far beyond introductory college work. Recognition of their real characteristics will call for the establishment of a variety of untraditional programs and, in turn, a reversal of the recent trend of institutions that house them to become more alike.²²

In a subsequent section of this monograph we shall examine, to the extent that data are available, the possible impact of assuming that a larger portion of college-attenders will be drawn from other than the more traditional 18 to 24 years of age cohort. In this section we shall examine some of the projections based upon the more traditional age group.

In the final report of the Carnegie Commission, Priorities for Action, data from reports of the U.S. Bureau of the Census are combined in a single basic table showing birth rate and number of live births from 1910 through 1972. Also included are projections developed by the Bureau for 1972-73 through 1992-93. In 1972 the Bureau developed two new sets of projections, Series E and Series F. These were developed on the basis of the striking change in birth rates in 1972 which revealed that the earlier projections, Series C and Series D, were already in error. The assumptions in C and D were that fertility rates would be 2.8 and 2.5 average number of births per woman, respectively. In 1972 these rates appeared unrealistic, and E and F were developed on the assumption of fertility rates of 2.1 and 1.8,

respectively.²³ Because the table developed by the Carnegie Commission provides a useful point at which to initiate a discussion of the pool of prospective students in the decades to come, it is reproduced below.

Table 2

BIRTHRATE AND NUMBER OF LIVE BIRTHS, UNITED STATES, 1910 TO 1972
AND PROJECTIONS 1972-73 to 1992-93

YEAR	BIRTH-RATE*	LIVE BIRTHS (IN THOU-SANDS)	YEAR	BIRTH-RATE	LIVE BIRTHS (IN THOU-SANDS)	PROJECTIONS	
						YEAR	BIRTH-RATE
1910	30.1	2,777	1951	24.9	3,823		
1920	27.7	2,950	1952	25.1	3,913		
1930	21.3	2,618	1953	25.0	3,965	1972-73	17.1 3,581
1931	20.2	2,506	1954	25.3	4,078	1977-78	19.9 4,416
1932	19.5	2,440	1955	25.0	4,104	1982-83	20.9 4,949
1933	18.4	2,307	1956	25.2	4,218	1987-88	19.7 4,945
1934	19.0	2,396	1957	25.3	4,308	1992-93	18.0 4,788
1935	18.7	2,377	1958	24.5	4,255		
1936	18.4	2,355	1959	24.0	4,245		
1937	18.7	2,413	1960	23.7	4,258	1972-73	15.5 3,242
1938	19.2	2,498	1961	23.3	4,268	1977-78	17.2 3,773
1939	18.8	2,466	1962	22.4	4,167	1982-83	18.2 4,190
1940	19.4	2,559	1963	21.7	4,098	1987-88	17.3 4,165
1941	20.3	2,703	1964	21.0	4,027	1992-93	15.7 3,948
1942	22.2	2,989	1965	19.4	3,760		
1943	22.7	3,104	1966	18.4	3,606		
1944	21.2	2,939	1967	17.8	3,521	1972-73	14.8 3,112
1945	20.4	2,858	1968	17.5	3,502	1977-78	15.7 3,417
1946	24.1	3,411	1969	17.7	3,571	1982-83	16.2 3,674
1947	26.6	3,817	1970	18.2	3,725	1987-88	15.3 3,598
1948	24.9	3,637	1971	17.2	3,554	1992-93	13.9 3,365
1949	24.5	3,649	1972	15.8	3,256		
1950	24.1	3,632					

*Live births per 1,000 population

Source: Carnegie Commission on Higher Education, Priorities for Action: Final Report of the Carnegie Commission on Higher Education (New York: McGraw-Hill Book Company, 1973, p. 96)

What becomes apparent from the examination of the table is that by 1979-80 there will be fewer persons 18 years old than in 1974 and that at no time after 1980 and through the rest of the century will there be as many persons 18 years old as there are in 1974. This generalization is based upon the following line of reasoning. Those who are 18 years old in 1974 were born in 1956. We note that in 1956 the number of live births was 4,218,000. From 1956 until 1962, the number of live births increased beyond that number, with some little variation, each year. Beginning in 1962, however, the number decreased almost every year, and the lowest number was recorded in 1972. Information on trends beyond 1972 indicates a continuing decrease in live births through 1974. Assuming the same mortality rate, we can expect from these data that the number of 18 year olds will increase each year until 1980, when those born in 1962, the year in which the number of live births began to decrease, become 18. Thereafter, beginning in 1980, the number of 18 year olds will decrease, and based on data now available, the number will decrease through 1992, when those born in 1974 reach 18.

If, going beyond 1992, we use either Series E or Series F of the projections developed by the Bureau of the Census, it is clear that through the rest of the century the number of persons 18 years old will never reach the level of 1979. On the basis of the experience of the last few years, the Series E or Series F projections appear to be more realistic than the earlier projections given in Series D.

Another analysis by the Bureau of the Census carries forward the data on births to projections of the numbers of persons in age ranges appropriate to high school and college attendance.²⁴ The table is reproduced below. From this table it is clear that the number of persons of high school age (14-17 years old) has been increasing regularly, except for some decrease in 1950, from 1920 to the present date and will continue to increase until the late 1970s, when the decrease shown in

the data on birth rates in Table 2 begins to have an effect on the population group. The same trends are apparent, coming at somewhat later dates for the persons of college age (18-21 years old and 22-25 years old) in the early 1980s.

Table 3

PERSONS 14 TO 25 YEARS OLD, BY AGE, 1920 TO 1972 AND PROJECTIONS TO 1985

(In thousands)

Year	14 to 17 years old	18 to 21 years old	22 to 25 years old
1985 (projection).....	14,252	15,026	16,774
1984.....	14,001	15,608	16,899
1980.....	15,516	16,819	16,652
1976.....	16,734	16,574	15,361
1975.....	16,826	16,318	15,039
1974.....	16,817	15,964	14,754
1973.....	16,645	15,632	14,464
1972 (estimate).....	16,429	15,203	14,234
1971.....	16,157	14,902	13,367
1970 (census).....	15,844	14,613	12,631
1960.....	11,162	9,440	8,711
1950.....	8,473	8,998	9,607
1940.....	9,720	9,754	9,166
1930.....	9,341	9,027	8,523
1920.....	7,736	7,344	7,597

Source: 1973 to 1985 unpublished projection consistent with Current Population Reports, Series P-25, No. 493. 1970 to 1972 consistent with Current Population Reports, Series P-25, No. 483. 1920 to 1960 complete count census data. 1950 to 1972 data include Armed Forces overseas. 1971 and 1972 data as of April 1. 1920 to 1970 data as of census date. 1973 to 1985 projections as of July 1. [Source: U.S. Department of Commerce, Bureau of the Census, Characteristics of American Youth: 1972. Current Population Reports, Series P-23, no. 44, March, 1973 (Washington, D.C.: Government Printing Office, 1973), p. 7.]

The same conclusions are reached in the projections of the number of high school graduates presented in a recent edition of Projections of Educational Statistics.²⁵ There, it will be seen that the number of high school graduates continues to increase after 1973-74 until 1977-78. The number then decreases slightly in 1978-79 and continues to decrease through the rest of the years shown in the table. Indeed, for 1982-83, the number of graduates fall back to approximately what it was in 1968-69.

Thus, by whatever method of analysis one might employ, it becomes abundantly clear that the pool from which colleges and universities have traditionally drawn the major portion of their enrollments, while continuing to increase slightly during the 1970s, will take a decided turn downward in the 1980s. Table 2 shows that the number of persons 18 years old (typical age for admission to college) will begin to decrease in 1980 and, if the Series E or F projections of the Bureau of the Census obtain, will not during this century return to the 1979 level. Table 3 shows that the age group 18 to 21 years old begins to decrease in the early 1980s and by 1985 will be fewer in number than in 1972. The publication, Projections of Educational Statistics to 1982-83 shows that the number of persons in the high school graduating classes beginning to decrease in 1978-79 and by 1982-83 falling below the number in 1969-70. The projections for the 1980s for any of the groups shown in Tables 2 and 3 can be taken as fairly well established possibilities, because the basis for each projection is the number of persons currently known to exist.

After 1990 we enter the realm of speculation, because we must make guesses about birth rates and about numbers of persons yet unborn. We have suggested that the Bureau of the Census has provided a reasonably "realistic" series of guesses in its Series F projections. A recent article by Richard Berendzen uses the Series C (2.8 average births per woman) and the Series E (2.1 average births per woman) projections to show graphically the possibilities beyond 1990.²⁶ The Series C

projection shows a distinct rise in the 18 to 24 year group after 1990. However, even the Census Bureau statisticians suggested the need to consider lower estimates such as might be reflected in Series E and Series F (1.8 average births per woman). And Berendzen observes that in 1973 the birth rate had already fallen below the replacement rate of 2.1.

We would also note, with Berendzen, that the college-age group comprised in the late 1960s and early 1970s an abnormally large portion of the U.S. population but that by 2000, under almost any circumstances, youth will be a distinct minority. Berendzen suggests, "Thus it would appear that insofar as a youth culture arises from the presence of large number of young people, the dominance of youth is ended for the rest of this century." In the 1980s the dominant group will be the pre-middle-agers, those in the late 20s and mid-30s. Yet, for the next several decades, the "dominant cohort...will be composed of the same individuals--the youth of the late 1960s grown older."²⁷

The College-Going Portion of the Traditional Age Groups

Describing the way in which the pool from which college students have been drawn traditionally will change in the next two decades is relatively straightforward. We know the number of live births through most of 1974, and we can be reasonably sure, barring some catastrophe, how many persons of 18 and above there will be each year for the next two decades. When we begin to estimate how many persons from the pool will actually enroll, we enter a more complex arena. Until 1972 the proportion of college age youth actually entering college had, with some little fluctuation, grown at a fairly steady rate. But in 1972, and apparently in 1973 as well, the proportion declined. Is this a temporary decline, or is it indicative of a changed attitude on the part of college-age youth toward college-going?

The manner in which the ratio between the number of persons enrolled in colleges and the number of persons aged 18 to 21 or 18 to 24 has consistently increased for a century is well documented. Drawing from publications of the Bureau of the Census, the Carnegie Commission has provided summaries based both on the 18 to 21 year old group and the 18 to 24 year group. From 1870 to 1970 the ratio has increased from 1.7 to 47.6 in relation to the 18 to 21 year group and from 1.1 to 31.7 in relation to the 18 to 24 year group. The Commission in 1971 projected an increase in the ratio to 59.2 in 1980, to 67.4 in 1990 and to 72.6 in 2000 (in relation to the 18 to 21 year group) or to 39.5 in 1980, to 45.0 in 1990 and to 49.4 in 2000 (in relation to the 18 to 24 year group.)²⁸ These ratios, together with earlier population projections, led in 1971 to the Commission's projections of enrollments of 13,015,000 in 1980, of 12,654,000 in 1990 and of 16,559,000 in the year 2000. However, by 1973 the Commission was prepared to revise the estimates downward; the bases for the downward revision, which led to a reduction of 12 percent by 1980 and over 20 percent by 2000, were a slight downward adjustment of high school graduation and college entrance rates, an assumption that the proportion of bachelor's recipients that would continue into postbaccalaureate work would remain at the 1969 level, and that the use of the Census Bureau's Series E projections would be more appropriate.²⁹ The latter factor had the greatest effect on the enrollment projections. The Commission is still assuming a continuing increase in the enrollment ratio. The two sets of projections are shown below.

Table 4

OPENING FALL ENROLLMENT IN HIGHER EDUCATION, BY LEVEL,
ACTUAL 1970; AND PROJECTED 1980 TO 2000
(IN THOUSANDS)

	1970	1980	1990	2000	PERCENTAGE CHANGE		
					1970-1980	1980-1990	1990-2000
PROJECTION I--PREPARED IN 1971*							
TOTAL ENROLLMENT	8,649	13,015	12,654	16,559	50.5	-2.8	30.9
PREBACCALAUREATE	7,443	11,082	10,587	14,123	48.9	-4.5	33.4
POSTBACCALAUREATE	1,206	1,933	2,068	2,436	60.3	7.0	17.8
PROJECTION II--PREPARED IN 1973+							
TOTAL ENROLLMENT	8,649	11,446	10,555	13,209	33.3	-7.8	25.1
PREBACCALAUREATE	7,443	9,720	8,882	11,221	30.6	-8.6	26.3
POSTBACCALAUREATE	1,206	1,726	1,673	1,988	43.1	-3.1	18.8

*See Carnegie Commission on Higher Education, New Students and New Places (1971).
Referred to in that report as "Projection C"

+Carnegie Commission staff, 1973

/Source: Carnegie Commission on Higher Education, Priorities for Action: Final Report of the Carnegie Commission on Higher Education (New York: McGraw-Hill Book Company, 1973), p. 100./

Notice that in these projections, even with the increasing ratio of persons attending to the college age group, both the 1971 and 1973 estimates show numerical decreases in total enrollment between 1980 and 1990.

The National Commission on the Financing of Postsecondary Education, reporting at the close of 1973, compared three sets of projections, those of the Office of Education, of the Carnegie Commission (revised figures) and those of the Bureau of the Census. Of the three sets, the projections of the Carnegie Commission, even when revised downward, continue to be the most optimistic.³⁰ The Comparison developed by the Postsecondary Commission is shown in Table 5.

Table 5

ENROLLMENT PROJECTIONS FOR THE COLLEGIATE SECTOR,
DEGREE AND NONDEGREE CREDIT, FALL 1970 TO 1990
(Individuals)

Year	Office of Education ¹	Carnegie Commission ²	Census Series E-2 ³
1970	8,581,000	8,499,000	-
1975	9,802,000	-	9,147,000
1980	10,517,000	11,446,000	10,284,000
1985	-	-	10,207,000
1990	-	10,555,000	10,397,000

¹U.S. Office of Education, National Center for Educational Statistics, 1973.

²Carnegie Commission Projection II, Priorities for Action: Final Report of the Carnegie Commission, 1973.

³U.S. Bureau of the Census, "Population Estimates and Projections: Projections of School and College Enrollment, 1971-2000" (January 1972), mid-range estimate.

Source: National Commission on the Financing of Postsecondary Education, Financing Postsecondary Education (Washington, D.C.: Government Printing Office, 1973), p. 23/

While in each set of projections there is an assumption that the ratio of college attenders to the number of persons 18 to 21 or 18 to 24 will increase, even that assumption is under question. At least, it seems clear that the ratio cannot increase in the next few decades as rapidly as it did between 1960 and 1970, when the ratio (based on the 18 to 21 year group) grew from 33.8 to 47.6, or 13.8 percentage points (40.8 percent increase in percentage), although under the Carnegie Commission assumptions, it should increase 11.6 percentage points (47.6 to 59.2) from 1970 to 1980. A number of recent reports of the Bureau of the Census suggest there is already somewhat of a reversal in the ratio. One report shows that while there has been a slight decline between 1968 to 1971 (from 54.8 to 53.1) in the proportion of high school graduates attending college the same year, the change between 1971 and 1972 was striking, from 53.1 percent to 48.8 percent. There has

been a decline for both male and female, but the decline has been especially sharp for the male, down from 62.3 percent in 1968 to 57.4 percent in 1971 and 52.4 percent in 1972.³¹ Another report shows that whereas the percentage of persons 18 and 19 years old actually enrolled in college increased from 28.8 to 39.0 from 1963 to 1969, there was a slight decrease in 1970, some recovery in 1971, but another and larger drop in 1972, from 38.0 percent in 1971 to 34.7 in 1972.³² The Bureau of the Census has also reported that for high school seniors in October, 1973 the proportion definitely planning to attend college decreased between studies made in 1972 and 1973.³³

Whichever of the several projections one uses, it would appear that institutions which view enrollment declines or a leveling off in the mid-1970s as a temporary phenomenon are unrealistic. For most institutions drawing on the traditional pool of students the enrollment will decline or at least level off. Only if institutions can attract new clientele or compete more effectively in an increasingly competitive situation will they experience significant increases in their own enrollments.³⁴ And, the desire to improve selectivity, often expressed, seems to be unrealistic. Individual institutions by exercising special effort may be able to move against the general trend and because of excellence of program or student interest in the curriculum they may be able to attract more "qualified" students. The general situation, however, will not be of this type.

In 1968, Humphrey Doermann, Director of Admissions of Harvard College from 1961 through 1966 published a study in which he sought to establish a correlation between SAT scores and family income and then to predict from among the total high school graduates how many could be included in particular cohort based on academic ability and financial level. Institutions could then estimate the pool from which their particular pool of entering students might be drawn. Using data from Educational Testing Service and the College Entrance Examination Board, he developed

some estimates of the proportion of high school graduates within each of the several levels of the SAT scores. Then, employing census data, he estimated the proportion of families within each of several income levels. His next step was to relate these two sets of data in order to indicate the proportion of individuals who would fall within a certain range of SAT scores and whose families were located within a certain income level. The results of his calculations are illustrated in Table 6.

In order to update the tables, one would have to review current ranges of SAT scores, since the ones on which he based his table grew out of studies made in 1960. Subsequently the average scores have dropped somewhat, although there was some indication of a reversal upward in 1974.³⁵ The family income information would also have to be revised in the light of inflationary trends. But offsetting increases in family income are increases in costs. In the fall of 1974 the College Scholarship Service sharply reduced the estimates of how much parents could be expected to contribute to their children's college education. For example, a family with adjusted income of \$20,000 and two children was expected to contribute \$5,470 in 1974-75, but only \$3,990 in 1975-76.³⁶ This latter figure is less than Doermann estimated for the same income when he developed his tables in the 1960s.

If the fluctuations in SAT scores have just about evened out, Doermann's distribution is probably as applicable in 1974-75 as it was in the 1960s. And if increases in family income have been balanced by increases in costs--and increased costs may even have outstripped increased income, the distributions according to income used by Doermann in the 1960s may be useful enough, in 1974-75 if one notes "expected contribution" rather than income alone. That is to say, it is probably appropriate to use the "expected contribution" in Doermann's table as a way of locating the potential pool of students in terms of academic ability and financial ability in 1974-75. Thus, referring to Table 6, we may say that in 1974-75 there are 22,000 to 34,000 young men, graduates of high schools, who have SAT average scores of 600 and above and whose families could contribute approximately \$4,000 to college expenses.³⁷

TABLE 6
Joint distribution of U.S. male high school graduates aptitude and family income 1974-75 (projected)

SAT score SAT percentile (adjusted)	200	250	300	350	361 Mean	400	450	500	550	600	650
Family income											
Amount (Possible contribution)											
Per- centage		14	31	48	63	77	88	94	98	99	
0	\$000	1,715,000	1,469,000	1,190,000	918,000	855,000	635,000	394,000	211,000	95,000	40,000
20	(\$000)	1,715,000	1,469,000	1,190,000	918,000	855,000	635,000	394,000	211,000	95,000	40,000
	\$5400	1,414,000	1,237,000	1,026,000	813,000	763,000	577,000	366,000	200,000	94,000	40,000
	(\$390)	1,424,000	1,265,000	1,036,000	875,000	821,000	620,000	390,000	210,000	98,000	40,000
40	\$9100	1,077,000	959,000	811,000	659,000	622,000	491,000	314,000	177,000	85,000	36,000
	(\$1040)	1,114,000	1,023,000	897,000	754,000	717,000	563,000	368,000	205,000	97,000	40,000
60	\$12,900	732,000	661,000	570,000	461,000	453,000	359,000	243,000	142,000	71,000	31,000
	(\$2010)	754,000	706,000	640,000	568,000	547,000	453,000	316,000	186,000	92,000	39,000
80	\$20,200	371,000	340,000	301,000	260,000	249,000	205,000	145,000	90,000	47,000	22,000
	(\$4550)	378,000	359,000	335,000	315,000	303,000	273,000	211,000	139,000	75,000	34,000
85	\$24,700	260,000	256,000	227,000	215,000	192,000	156,000	115,000	72,000	39,000	15,000
	(\$6250)	282,000	268,000	252,000	240,000	236,000	214,000	172,000	116,000	67,000	32,000
90	\$32,200	187,000	173,000	156,000	138,000	133,000	125,000	83,000	54,000	30,000	14,000
	(\$8850)	190,000	180,000	170,000	165,000	163,000	151,000	126,000	91,000	55,000	25,000
95	\$35,800	95,000	88,000	80,000	73,000	71,000	61,000	46,000	31,000	18,000	9,000
	(\$10,320)	96,000	91,000	87,000	85,000	84,000	81,000	71,000	56,000	37,000	20,000
Total: 1,715,000 (Projected)											

Source: Humphrey Doermann, Crosscurrents in College Admissions (New York: Columbia University, Teachers College Press, 1968), pp. 142-143.

Note that the table provides projections only for the distribution of U.S. male high school graduates. Doubling the figure allows a rough estimate of the total number of high school graduates within each of the cohorts. A comparison of his projections for 1969-70 with the information in the Statistical Abstract of the United States, 1971, suggests that as of that date his figures were fairly close.³⁸ The Statistical Abstract indicated that 47.8 percent of the 18 to 19 year olds had completed four years of high school and that there were 6,901,000 18 to 19 year olds in 1970. The relation of these two figures yields an estimate of 3,298,700 high school graduates for that year, and this may be compared with a doubling of Doermann's figures, or 3,430,000. There is a difference of approximately 131,000. If one were to make adjustments for sex differences, and include slightly more female graduates, the chances are Doermann's figures and the rough estimate derived from the Statistical Abstract would be fairly close.³⁹

Doermann provides two sets of figures for each group defined by SAT scores and family ability to pay. Note on Table 6 that for men with SAT scores of 600 and above and whose families can provide at least \$4,000 for college expenses, there are 22,000 or 34,000 shown. The smaller figure is derived using a correlation coefficient of 0.4--for which Doermann musters a fair amount of evidence, and the larger figure is based on a correlation of 0.7 between income and SAT score--which Doermann considers entirely too high.⁴⁰ In each cell, the numbers shown indicate the estimate of the total male high school graduates who meet or exceed the conditions specified. For coeducational schools, the numbers should be doubled.

In using tables such as that illustrated by Table 6, we must employ some caution, even as Doermann himself warns. The correlations, while based on some empirical evidence, are by no means firmly established. Yet, these estimates should provide a good beginning point for any institution's enrollment planning, for planning should begin with some realistic estimates of the actual pool of students available that meet the institution's conditions.

When considering the pool available, one must also take into account the proportion of students of a given academic ability and parental income who are already attending higher educational institutions. Thus, for a college locating its potential entering class among high school graduates of 600 average SAT whose parents can be expected to contribute at least \$4,000 to college expenses, not only must it be noted that there are probably only 44,000 to 68,000 such men and women available in 1974-75, but it must be recognized that most of these persons have traditionally been college attenders and for any given institution to increase its share of the pool will be difficult. William Turnbull notes that by 1960 some 80 percent of students in the top quarter of their high school class were going to college in contrast to 19 percent of those in the lower quarter.⁴¹ And Patricia Cross points out that in the 1970s very few additional college students can be expected from among high school graduates "who are high in both academic aptitude and socioeconomic status."⁴² The moral is that colleges seeking students with high academic ability and high family income and who are not now drawing heavily from that group will face fierce competition in breaking into the circle. The pool simply is not going to increase in the years to come.

Thus, for postsecondary institutions responding to the more traditional clientele, the pool of available students is leveling off and will decrease numerically in the 1980s. If the proportion of 18 and 19 year olds entering college during the year of their high school graduation continues to decline, as it appeared to be doing in 1972, 1973 and 1974, the pool will decrease dramatically, and enrollments in such institutions cannot but decrease. On the other hand, if such institutions are prepared and able to admit students of lower SAT scores and of lower socioeconomic status (and greater financial need), the pool of available students will at least remain fairly stable. What if such colleges look increasingly to the less traditional sources? Will their situations be different? We explore the implications of turning to the "new student" and the "nontraditional student" in the next section.

Expanding the College-Going Pool: The New Student?

Howard Bowen of the Claremont Schools, among others, disagrees with the predictions of declining enrollments for American higher educational institutions. At the Spring 1974 meeting of the Association of Governing Boards he argued that most of the assumptions regarding future enrollments are based on unduly narrow views of enrollment potentialities. Instead of using the more traditional structures as a basis, he called for considering enrollments in terms of "diversified education with low fees and liberal student aid, offered at convenient times and places and catering to many different classes and backgrounds."⁴³ He also pointed to the increase in numbers of persons beyond the typical college age as a factor in potentially larger enrollments in the future. And he suggested that training needs could expand if more professional health services were provided for the population, if early childhood education were expanded and if greater provisions were made for art museums, symphonies, operas and theaters. He condemned as fallacious the assumption "that the number of jobs that require college training are relatively few...that the jobs available for college-educated people should be congruent with their educational background, (and) that the economy needs many people to do menial tasks) and that these people should not be over educated."⁴⁴ In opposition he argued that education is not simply designed to prepare people for specific and limited occupations but that rather "it is intended to produce people of vision and sensitivity who will be motivated to direct technology into humanly constructed channels."

President Bowen is pointing to new markets and to a broader constituency than higher education has heretofore served. How and to what extent the bulk of higher institutions will approach and develop new "markets" remains to be seen. The "noncollegiate sector," the "other postsecondary schools" and "other learning

opportunities" to which the National Commission on the Financing of Postsecondary Education refers already serve nearly two million persons. Will these agencies be doing what Bowen calls upon the collegiate structure to undertake?⁴⁵

Whether they are motivated by the desire to maintain enrollments or to serve a constituency hitherto unserved or only partially served at least some American higher educational institutions are beginning to respond to the urging of study commissions and an increasing number of writers that more attention be given to other clienteles. These potential sources of new students appear to fall into two categories: (a) those persons within the traditional age ranges (18 to 21 or 18 to 24) who for reasons of scores on aptitude tests or class standing were not considered admissible, and (b) those persons classified as older adults whether capable of attending full-time or part-time, on-campus or off-campus. Patricia Cross in articles and monographs has provided as comprehensive an overview as any person on the first group, and the Commission on Non-Traditional Study has pleaded the case of the older adult.⁴⁶

Among many study groups, the Carnegie Commission in its final report called for more of an open-access system of education in the United States and for adjusting programs to students from a wider variety of backgrounds.

We have suggested special admissions provisions for disadvantaged students where their ability and the special assistance of the college will make possible their meeting, in full, the academic standards of the college within a reasonable period of time, and certainly by graduation....Colleges should also make provision for the cultural interests of more of the members of their increasingly varied student populations.⁴⁷

The Commission also calls for adequate financing of student costs where students and families cannot meet the demands from available resources. An earlier report of the Commission called for continued efforts to increase the number of minority and low-income students.⁴⁸ And while reference could be made to other reports and writings echoing the same concerns, the point is clearly enough stated by the

Carnegie Commission that the less able (so defined by performance on standard aptitude tests), minorities and those of lower income constitute a potential source of new students.

Low-achievers.--Patricia Cross refers to this segment of the college-age population as the "New Student." Drawing from four major studies of this group, she provides a highly useful profile of it as a potential addition to the college-going ranks. The evidence is clear that when low levels of academic ability, aptitude and achievement are combined with low socioeconomic status, the chances of a person entering college are vastly lowered. For example, only 9 percent of the males in the lowest quarter of both ability and socioeconomic status in the 1961 TALENT sample entered college, while 90 percent in the upper quarter on both characteristics enrolled in college in the fall following graduation.⁴⁹ It is equally clear, as has already been noted, that very few additional college students can be expected in the 1970s and beyond from among the high ability and high income students--most of them already enroll; the increase, if any, will be from the low ability, low income group.

What happens when the New Student is admitted to college? One of the first and obvious consequences is that if the New Student is from the low-income segment, whatever the ability level, significantly larger amounts of student aid will be required. Some smaller and private colleges, with student aid budgets already strained, will be unable to fund increased enrollments from this segment. Patricia Cross in Beyond the Open Door does not examine the financial aid issue but goes on to deal with the other aspect, the consequences of admitting students of lesser ability, as ability is measured by traditional aptitude tests.

How are potential college students who do meet conventional admissions requirements to be characterized? The following profile is offered by Patricia Cross:

Most of the New Students...are Caucasians whose fathers work at blue-collar jobs. A substantial number, however, are members of minority ethnic groups. Most of the parents have never attended college, and the expectation of college is new to the family. The New Students themselves have not been especially successful at their high school studies. Whereas traditional college students (upper third) have made A's and B's in high school, New Students have made mostly C's. Traditional students are attracted primarily to four-year colleges and universities, whereas New Students plan to enter public community colleges or vocational schools.

Fundamentally, these New Students to higher education are swept into college by the rising educational aspirations of the citizenry. For the majority, the motivation for college does not arise from anticipation of interest in learning the things they will be learning in college but from the recognition that education is the way to a better job and a better life than that of their parents.⁵⁰

She notes further that while the majority of the New Students come from financially and educationally impoverished homes, more than a quarter come from families in which fathers have attended college; these persons have not done well in school and the sense of failure for them is as intense as for their financially disadvantaged peers. And in analyzing the low achievers in terms of the Atkinson-Feather fear-of-failure theory, Cross points up the need for more than the typical remedial or compensatory programs.

For those students who do apply and are accepted, the college should be prepared to allocate adequate resources to provide the necessary instructional and counseling support while the fear-of-failure pattern is replaced with a more positive self-confident approach to learning.⁵¹

Those colleges admitting such students will have to be prepared to provide "a new perception of the learning process."

The New Students are not as interested in the strictly academic pursuits as is the case for the more traditional college-going person. And, "this lack of interest, accompanied as it is by a lack of practice and familiarity with academic subject matter, is most assuredly a handicap to New Students in School."⁵² Moreover, the New Students, according to Cross, are more uncomfortable in the

traditional academic setting than are the students for whom the present academic environment is designed.⁵³ New Students are more pragmatic in their vocational aspirations.⁵⁴ In short, the college that admits the New Student and that honestly does so with the intent that the New Student have at least a fighting chance for success, is faced with a challenge to reexamine all aspects of its educational environment. Admitting such students to the more traditional programs is almost to guarantee exceedingly high attrition--as has been the experience for many institutions that have not been prepared to take new approaches that go beyond remedial programs.

As Patricia Cross notes, while membership in a minority group is frequently accompanied by low income, low socioeconomic and low test scores and thus places many from ethnic minorities among the New Students, the problems of ethnic minorities are even more complex.

For the next several decades, higher education will be held accountable for devising the methods that can assist in eradicating the educational disadvantages of minority youth born in a majority culture.⁵⁵

That some progress is being made is revealed in statistics compiled by the Department of Health, Education, and Welfare and released in late 1974. The data are for 1972 and indicate the highest enrollments of ethnic minorities to date. In 29 states the proportion of undergraduates from minority groups approached or exceeded the proportion of those minorities in the state's resident population.⁵⁶ Other reports suggest, however, that the trend toward increased enrollments of minorities may have peaked in 1972. And speakers at a Fall, 1974 meeting of the National Scholarship Service and Fund for Negro Services suggested the future involvement of minorities may be in jeopardy.⁵⁷

Older adults.--What of the other portions of the potential sources of new students, the older adults? The Chronicle story on the report of the Commission on Non-Traditional Study highlighted the Commission's recommendation that there be a substantial broadening of opportunities in "basic, continuing, and recurrent education" for adults 13 to 60 years old with the headline, "Colleges are not Meeting Needs of Adults, Panel on Non-Traditional Study Finds."⁵⁸ As the reporter assessed the report, the major theme was that "colleges should shift their emphasis from degree-granting to providing service to learners--'clarifying the need to counter... a degree-earning obsession.'" When queried as to what they would like to study, some 78 percent of the adults in a Commission-sponsored study of over 2,000 representative persons indicated vocational subjects, and 43 percent of the sample ranked such study as "first choice." Almost 63 percent wanted to study something related to hobbies and recreation, and over 13 percent ranked this first. General education, the more traditional academic studies, ranked third among "first choices", with 12.6 percent so ranking it; less than half of the total sample (47.9 percent), however, indicated that they were interested in these more traditional areas.⁵⁹

The Commission on Non-Traditional Study was created in 1971 and issued its final report in 1973. Noting the increased emphasis in interdisciplinary opportunities, the growing acceptance of interrupted study, the need for altered patterns of residence and the increased concern for closer articulation between early and higher education, the Commission found many signs that more flexibility is being introduced into existing programs.⁶⁰ Nonetheless, the Commission came out forcibly for the development of more adult-oriented programs.

The Commission strongly urges college and university policy-makers and administrators to cooperate in--and, if necessary, provide the leadership for--coordinated planning among all educational institutions for...adult education. The Commission also urges them to accept adult education as integral to the work of their institutions rather than offering it only if it pays for itself or helps support other activities.⁶¹

The Commission study of over 2,000 representative persons, referred to earlier, revealed that nearly 31 percent had in the 12 months up to the time of the study received some kind of instruction (evening classes, extension courses, correspondence courses, on-the-job training, private lessons, independent study, TV courses, or "anything like that"). Roughly half of the sample could be characterized as "would-be learners" in that, while not having engaged in a learning activity of the type just listed, they indicated a desire to undertake further study. The Commission infers that the adult "learners" and "would-be learners" constitute in the general population a potential of 79.8 million people who report an interest in more education; the actual "learners" represent 32.1 million engaged in some form of education.⁶²

Such evidence would seem to bolster Howard Bowen's optimism for continued growth in the higher educational enterprise.⁶³ Note, however, less than half of the Commission sample indicated interest in the more traditional subject matters of the academy, and the Commission itself throughout the report calls for new approaches to education for adults. Most of the Commission's "learners" were enrolled in other than traditional programs and in other than traditional colleges and universities. Still, continuing education campus-associated activities apparently enroll almost as many persons as "regular" programs. In 1967-68 it was estimated that colleges and universities enrolled 5,643,958 persons in noncredit activities; the "regular" enrollment in the fall of 1967 was just under 7,000,000.⁶⁴

In a more detailed analysis of the study of the adult "learner" and "would-be learner" undertaken by the Commission on Non-Traditional Study, Carp, Peterson and Roelfs show rather conclusively that adults are not interested in learning for its own sake and that they demand the kind of knowledge that can be immediately applied.⁶⁵ Some 82 percent of the sample included persons of age 25, or above. Among the "would-be learners" only 13 percent placed general education, including

"basic education" first among choices for additional education. Vocational subjects ranked first for 43 percent of the group. Among the "learners" only 16 percent were enrolled in college level or graduate level courses, and only 8 percent were taking courses in four-year colleges and universities or graduate schools. The largest group, 17 percent, were studying at home. The next largest group, 13 percent, were studying at the place of employment. Only 11 percent of the "would-be learners" indicated four-year colleges and universities or graduate schools as a preferred place of learning. And only 17 percent of the "would-be learners" indicated a desire for college degrees. Some 73 percent apparently would be satisfied with no formal credit or some kind of certificate.

The data from the Commission study strongly suggest that the traditional degree-credit programs are going to attract only a small proportion of the potential adult market. While special degree programs for adults have been underway for some 20 years, hardly more than a dozen established programs have had any measure of experience.⁶⁶ Another survey undertaken on behalf of the Commission found that among 1,185 representative higher institutions only 5 percent admitted most adults into special part-time programs, and the "overwhelming majority of colleges and universities expect their adult students to enroll in regular programs along with younger students."⁶⁷ A study completed in mid-1974 by the American Council on Education reported that part-time students are a "majority group that suffers massive and pervasive economic discrimination at the hands of educators and policy-makers." Among other observations made, the report notes that colleges tend to consider part-time students "less serious than full-time students." Even more significant, we think, is the observation that university officials were of the opinion that "failure to pursue and complete a degree program is largely frivolous and wasteful of academic resources."⁶⁸

An Expanding Pool.--We turn from these reports on the New Students and "would-be learners" among adults with mixed reactions. The commissions and their interpreters point to a vast new clientele. Institutional response seems enthusiastic, until we recognize the vast changes in attitudes and programming that will be required if colleges are indeed going to tap these new sources. Are American colleges and universities going to respond in such terms? We wonder.

The Twenty-Ninth National Conference on Higher Education, sponsored by the American Association for Higher Education had as its theme "Lifelong Learners--A New Clientele for Higher Education." The editor sets the task succinctly when he notes that the speakers at the conference set forth a new role for American higher education and several suggested that colleges and universities are prepared to make necessary changes, they can "pass from the dog days into a new era," and:

To restore flagging faith and flagging markets, these institutions will have to become inviting and useful to many persons formerly screened out or ignored: older learners, part-time learners, off-campus learners. These active adults have little time or inclination to adjust to the upper-middle-class youth ghetto we know as the modern university.⁶⁹

We repeat. Are American colleges and universities going to respond in such terms? We wonder.

Private Higher Education

How does private higher education fit into these developments? What are the prospects for the next few decades for private, and in particular for private undergraduate and church-related institutions? Documentation of the decline in the proportion of total enrollment going to private colleges and universities is provided in a number of references. Below is displayed a table from one source.

Table 7

ENROLLMENTS IN PRIVATE AND PUBLIC INSTITUTIONS IN THE UNITED STATES, 1950 TO 1972

Year	Private	Percentage of Total	Public	Percentage of Total	Total
1950	1,142,136	49.7	1,151,456	50.3	2,296,592
1951	1,064,450	50.3	1,051,990	49.7	2,116,440
1952	1,034,584	48.2	1,113,700	51.8	2,148,284
1955	1,240,988	46.1	1,453,371	53.9	2,694,354
1960	1,615,288	45.3	1,953,786	54.7	3,569,074
1965	1,951,268	33.0	3,955,971	67.0	5,907,239
1966	2,040,955	32.0	4,334,664	68.0	6,375,619
1967	2,095,720	30.4	4,801,449	69.6	6,897,169
1968	2,082,439	27.8	5,415,425	72.2	7,497,864
1969	2,150,045	26.7	5,916,126	73.3	8,066,171
1970	2,117,770	25.1	6,418,563	74.9	8,566,333
1971	2,170,347	24.1	6,854,685	75.9	9,025,032
1972	2,166,699	23.5	7,037,457	76.5	9,204,156

Source: Ronald B. Thompson, "Changing Enrollment Trends in Higher Education," North Central Association Quarterly, 47(Spring 1973), p. 345.

Figures from the annual reports of the Department of Health, Education, and Welfare will vary for given years depending on whether total resident and extension enrollment, degree-credit enrollment, or some variation is used.

Ronald Thompson's review of public and private enrollment uses the fall resident and extension enrollment and is as useful as any such summary.⁷⁰ From Table 7 it is clear that private higher educational institutions since 1950, with a brief resurgence in 1951, have declined steadily in the proportion of students enrolled. In 1972, according to Thompson's tabulation, private institutions enrolled only 23.5 percent of the total collegiate enrollment for that year. While enrollments have increased from 1950 to 1970, the rate of increase has

been much slower than for public institutions. And there have even been years in which the private colleges as a group have shown numerical decreases; note in Table 7 the difference between 1968 and 1967; between 1970 and 1969 and between 1972 and 1971.

In another publication showing projections for 1970-1987 Thompson indicates a continuing decline in the future in the proportion enrolling in private colleges. Using as a base the trends of 1950 to 1969, he predicts that private colleges will have only 18.7 percent of the total enrollment in 1987, and numerically barely 6,000 more than were enrolled in 1972. Using another set of trends, those of 1960 to 1969, he credits private higher education with only 14.2 percent of the enrollment in 1987, and numerically some 300,000 less than in 1972.⁷¹

While more refined breakdowns are not regularly available in the data reported by the Department of Health, Education, and Welfare, the annual Digest of Educational Statistics has reported enrollments for Protestant colleges for three different years, 1965, 1967 and 1970.⁷² The figures are given below:

1970	478,604
1967	482,211
1965	454,637

It is clear that the Protestant colleges as a group enroll but a small portion of the total enrollment in higher education in the United States. What is of concern, however, is what appears to be a decrease in enrollments in these colleges between 1967 and 1970.

Between 1972 and 1973 private higher education as a whole increased by 40,978 students, a growth of 1.9 percent. Private four-year colleges other than university colleges increased from 1,351,256 to 1,386,953, a gain of 35,697 and a somewhat better 2.6 percent increase. All of higher education combined, however, registered an increase of 4.3 percent. Particularly telling for the four-year private colleges was a virtually stable (decrease of 62 students) entering class.⁷³

Between 1973 and 1974 private higher education registered a gain of 67,211 students, or an increase of slightly over 3.0 percent, somewhat better than in 1972 to 1973. Private four-year colleges other than university colleges increased from 1,386,953 to 1,430,883, a gain of 43,930, or approximately 3.2 percent. First time students increased by 2.7 percent in these four-year colleges. All of higher education combined increased by 5.5 percent between 1973 and 1974. Private higher education continued to decline in proportion to the total, however, in that private institutions enrolled 23.4 percent of the total in 1972 and only 22.3 percent in 1974.⁷⁴

Further Comments

Uncertainties regarding enrollments in higher education and recent downward revisions are not peculiar to the United States. In November, 1974 the Department for Education and Science in Britain announced a new planning figure of 640,000 students in universities, colleges and polytechnics by 1981. This is to be compared with an unofficial projection of 825,000 made in 1970 and 750,000 indicated in a Government White Paper in 1972. Brian MacArthur gives a brief overview of the situation in the Chronicle of Higher Education in October, 1974 and subsequently comments at length after the Government announcement; the fuller comments are in the London Times Higher Education Supplement.⁷⁵

The major study in post-war Britain of higher education was that undertaken by the Robbins Committee and issued in 1963. Officially designated Higher Education: Report of the Committee Appointed by the Prime Minister under the Chairmanship of Lord Robbins (1961-63), the Robbins Report, as it is popularly called, suggested very significant increases in enrollments. In 1963 there were 216,000 places in higher education; Robbins called for a minimum of nearly 560,000 places in higher education in all forms and 346,000 in the universities alone by 1980-81.⁷⁶ Among the many

recommendations in the report was one for the establishment of six new universities. By 1966-67 the actual enrollments had begun to outstrip the projections, and the targets were revised. The Education Planning Paper of 1970 suggested an unofficial target of 825,000. The White Paper of December, 1972 was more conservative, and in its judgment the student demand could be met through the provision of a total of 750,000 places by 1981. Now, the proposal is for 640,000 places, down 110,000 from 1972 and 185,000 from 1970.

In analyzing the announcement, MacArthur notes that even with the revised figures enrollments will surpass the minima set by Robbins, and the projections still allow for an increased percentage of the 18 to 20 year age group attending, from 14 percent in 1974-75 to 17 percent in 1980-81. Among the reasons for the downward revision are the 25 percent decrease in births since 1964 and decrease in percentage of persons with A-level passes entering degree courses, down from 87 percent in 1967 to about 80 percent in 1973. In addition, the standard of living of students has dropped and starting salaries for university graduates have dropped. The director of statistics for the Department of Education and Sciences observed:

...after 1983 the number of 18 year olds will decline for at least a decade, slowly at first to 1989 and then steeply to at least 1993 minoring the fall of 25 per cent that has already occurred in births since 1964. What happens to student numbers in higher education after 1993 depends on what happens to births next year and in the years after that.⁷⁷

The current experience in Britain with enrollments in higher education, while within a different structure, is not unlike that in the United States.

Planning in Canada seems to be fairly close to the target. The number of full-time students in courses comparable to the baccalaureate sequence in the United States nearly quadrupled in the decade-and-a-half between 1951-52 and 1967-68. In 1967-68 it was anticipated that undergraduate and graduate enrollments would reach 539,000 by 1975-76.⁷⁸ A report issued in December, 1974, shows an estimated enrollment of 513,690 in 1974-75 and a projected enrollment for 1975-76 of 530,670.⁷⁹

The proportion of the 18 to 24 year age group enrolled in colleges and universities increased from 4.2 percent in 1951-52 to 10.1 percent in 1965-66; it was predicted that the rate would reach 20.7 percent in 1975-76.⁸⁰ This latter figure may be somewhat optimistic. To use Ontario as an example, the rate had increased to 13.6 percent in 1970-71 from 9.0 percent in that province in 1965-66. The Economic Council of Canada was in 1970 projecting a rate of 18.9 percent for Ontario in 1975-76.⁸¹ But Canadian projections call for continuing growth in enrollments and actual lack of spaces to meet demands. Ontario studies also emphasize the growth in interest in continuing and recurrent education, noting, "We are clearly moving in the direction of lifelong education in the post-industrial society, and institutions of higher education will less and less be dominated by a narrow age group as the decade progresses."⁸²

Notes

- ¹Carnegie Commission on Higher Education, New Students and New Places (New York: McGraw-Hill Book Company, 1971), p. 39.
- ²Carnegie Commission on Higher Education, Priorities for Action: Final Report of the Carnegie Commission on Higher Education (New York: McGraw-Hill Book Company, 1973), pp. 3-4.
- ³"Those Missing Babies," Time, 104 (September 16, 1974), p. 55.
- ⁴The National Commission on the Financing of Postsecondary Education, Financing Postsecondary Education in the United States (Washington, D.C.: U.S. Government Printing Office, 1973), p. 24.
- ⁵U.S., Department of Commerce, Bureau of the Census, College Plans of High School Seniors, October 1972. Current Population Reports: Population Characteristics, Series P-20, no. 252, August, 1973. (Washington, D.C.: Government Printing Office, 1973), p. 4. Also, U.S., Department of Commerce, Bureau of the Census, Social and Economic Characteristics of Students, October 1972. Current Population Reports: Population Characteristics, Series P-20, no. 260, February, 1974. (Washington, D.C.: Government Printing Office, 1974), p. 3.
- ⁶"25- to 34-Year-Old Students on Increase in Nation's Colleges," Chronicle of Higher Education, IX (December 2, 1974), p. 6.
- ⁷Philip M. Hauser, "Population Problems and Their Application to Education," North Central Association Quarterly, XLVI (Spring, 1972), p. 369.
- ⁸As an example, cf. Kenneth E. Anderson and George B. Smith, A Study of Enrollment Trends in Higher Education in Kansas (Topeka, Kansas: State Education Commission, February, 1973.) and Ronald B. Thompson, Projections of Enrollments, Public and Private Colleges and Universities, 1970-1987 (Washington, D.C.: American Association of Collegiate Registrars and Admissions Officers, 1970.)
- ⁹John K. Folger, "On Enrollment Projections: Clearing up the Crystal Ball," Journal of Higher Education, XLV (June, 1974), p. 407.
- ¹⁰Carnegie Commission on Higher Education, New Students and New Places, op. cit., p. 1.
- ¹¹W. Todd Furniss (editor) Higher Education for Everybody? (Washington, D.C.: American Council on Education, 1971), p. xv.
- ¹²James L. Miller, Jr., "Who Needs Higher Education?" Higher Education for Everybody? op. cit., p. 94.
- ¹³Ibid., p. 95.
- ¹⁴Martin Trow, "Admissions and the Crisis in American Higher Education," Higher Education for Everybody? op. cit., pp. 28, 29.

- 15 Jack Magarrell, "Enrollments: Up, Down, and Hovering," Chronicle of Higher Education, IX (October 15, 1974), pp. 1, 2.
- 16 Jack Magarrell, "Turnabout at Hood," Chronicle of Higher Education, IX (October 15, 1974), p. 3.
- 17 "Half Million More Students," Chronicle of Higher Education, IX (December 16, 1974), p. 2. cf. also "Fact-File" where full report on enrollments for 1972, 1973, and 1974 are given, same issue, p. 8.
- 18 John K. Folger, "On Enrollment Projections: Clearing Up the Crystal Ball," op. cit., p. 467.
- 19 U.S., Department of Health, Education, and Welfare, National Center for Educational Statistics, Digest of Educational Statistics, 1972 (Washington, D.C.: Government Printing Office, 1973), p. 81.
- 20 U.S., Department of Health, Education, and Welfare, National Center for Educational Statistics, Digest of Educational Statistics, 1970 (Washington, D.C.: Government Printing Office, 1970), p. 73.
- 21 Cf. "25- to 34-Year-Old Students On Increase in Nation's Colleges," Chronicle of Higher Education, op. cit., p. 6.
- 22 W. Todd Furniss (editor) Higher Education for Everybody?, op. cit., p. xv.
- 23 Cf. U.S., Department of Commerce, Bureau of the Census, Projections of the Population of the United States, by Age and Sex: 1972-2020. Current Population Reports, Series P-25, no. 493, December, 1972 (Washington, D.C.: Government Printing Office, 1972.)
- 24 Cf. U.S., Department of Commerce, Bureau of the Census, Characteristics of American Youth: 1972. Current Population Reports, Series P-23, no. 44, March, 1973 (Washington, D.C.: Government Printing Office, 1973).
- 25 U.S., Department of Health, Education, and Welfare, National Center for Educational Statistics, Projections of Educational Statistics to 1982-83 (Washington, D.C.: Government Printing Office, 1973), p. 45.
- 26 Cf. Richard Berendzen, "Population Changes in Higher Education," Educational Record, 55 (Spring, 1974), pp. 116-118.
- 27 Ibid., p. 117, 118.
- 28 New Students and New Places, op. cit., pp. 127, 128.
- 29 Priorities for Action, op. cit., p. 100.
- 30 National Commission on the Financing of Postsecondary Education, Financing Postsecondary Education in the United States (Washington, D.C.: Government Printing Office, 1973), pp. 23-24.
- 31 U.S., Department of Commerce, Bureau of the Census, College Plans of High School Seniors, op. cit., p. 4.

32 U.S., Department of Commerce, Bureau of the Census, Social and Economic Characteristics of Students, October 1972, op. cit., p. 3.

33 "Fewer Seniors College-Bound," Chronicle of Higher Education, IX (November 18, 1974), p. 5.

34 Cf. the report on Hood College and the 170 percent increase in freshmen in fall, 1974, Jack Magarrell, "Turnabout at Hood," Chronicle of Higher Education, op. cit. But note also, the report on New York institutions, "Enrollment Drop Foreseen," Chronicle of Higher Education, IX (November 18, 1974), p. 5.

35 "This Year's Freshmen: Decline in SAT Scores Halted, Says College Board," Chronicle of Higher Education, VIII (September 16, 1974), p. 3.

36 Malcolm G. Scully, "How Much Can Parents Pay," Chronicle of Higher Education, IX (September 23, 1974), p. 2.

37 Cf. Humphrey Doermann, Crosscurrents in College Admissions (New York: Teachers College Press, Columbia University, 1968), pp. 19-31.

38 Cf. U.S., Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1971 (Washington, D.C.: Government Printing Office, 1971), p. 110.

39 If, however, one takes data from other government reports, it would appear that Doermann has actually overestimated the number of high school graduates. Referring to 1974-75, Table 6, we find that Doermann shows 1,715,000 male graduates, or a total of 3,430,000. The U.S. Department of Health, Education, and Welfare, National Center for Educational Statistics in Projections of Educational Statistics to 1982-83 (Washington, D.C.: Government Printing Office, 1973), on page 45 shows an estimate of 3,162,000 high school graduates in 1974-75, some 268,000 less than Doermann uses for his calculations.

40 Humphrey Doermann, Crosscurrents in College Admissions, op. cit., pp. 29-30.

41 William W. Turnbull, "Dimensions of Quality in Higher Education," Higher Education for Everybody?, edited by W. Todd Furniss, op. cit., pp. 126-127.

42 K. Patricia Cross, Beyond the Open Door (San Francisco: Jossey-Bass, Inc., 1972), p. 8.

43 Quoted in, Malcolm G. Scully, "Higher Education's Expansion Outlook Held Almost Unlimited," Chronicle of Higher Education, VIII (May 13, 1974), p. 4.

44 Ibid.

45 National Commission on the Financing of Postsecondary Education, op. cit., pp. 18-20.

46 Cf. especially K. Patricia Cross, Beyond the Open Door, op. cit., and the Commission on Non-Traditional Study, Diversity by Design (San Francisco: Jossey-Bass, 1973).

- ⁴⁷Carnegie Commission on Higher Education, Priorities for Action, op. cit., p. 37.
- ⁴⁸Cf. Carnegie Commission on Higher Education, New Students and New Places, op. cit., pp. 25-31.
- ⁴⁹K. Patricia Cross, Beyond the Open Door, op. cit., pp. 8, 9, 10.
- ⁵⁰Ibid., p. 15.
- ⁵¹Ibid., p. 25.
- ⁵²Ibid., p. 68.
- ⁵³Ibid., p. 83.
- ⁵⁴Ibid., p. 98.
- ⁵⁵Ibid., p. 130.
- ⁵⁶Karen J. Winkler, "Minority Enrollments: They Rose in '72 Government Data Show," Chronicle of Higher Education, IX (November 11, 1974), p. 1.
- ⁵⁷"Minorities on the Campus: Their Involvement 'in serious jeopardy'?" Chronicle of Higher Education, IX (October 29, 1974), p. 3.
- ⁵⁸Robert L. Jacobson, "Colleges Are Not Meeting Needs of Adults, Panel on Non-Traditional Study Finds," Chronicle of Higher Education, VII (February 5, 1973), pp. 1, 7.
- ⁵⁹Ibid., p. 7.
- ⁶⁰Commission on Non-Traditional Study, Diversity by Design (San Francisco: Jossey-Bass, 1973), p. xvii.
- ⁶¹Ibid., p. 24.
- ⁶²Ibid., p. 16.
- ⁶³Cf. Malcolm G. Scully, "Higher Education's Expansion Outlook Held Almost Unlimited," op. cit.
- ⁶⁴Cf. U.S., Department of Health, Education, and Welfare, National Center for Educational Statistics, Noncredit Activities in Institutions of Higher Education, Registrations 1967-68 (Washington, D.C.: Government Printing Office, 1972).
- ⁶⁵Abraham Carp, Richard Peterson and Pamela Roelfs, "Adult Learning Interests and Experiences," Planning Non-Traditional Programs, edited by K. Patricia Cross, et al (San Francisco: Jossey-Bass, 1974), pp. 11-52.
- ⁶⁶Cf. Roy Troutt, Special Degree Programs for Adults, ACT Special Report Four (Iowa City: The American College Testing Program, 1971).

- 67 Janet Ruyle and Lucy Ann Geiselman, "Non-Traditional Opportunities and Programs," Planning Non-Traditional Programs, edited by K. Patricia Cross, et al, op. cit., p. 56.
- 68 Jack Magarrell, "Part-Timers: Students Massively Discriminated Against," Chronicle of Higher Education, VIII (July 8, 1974), p. 12.
- 69 Dyckman W. Vermilye (editor) Lifelong Learners--A New Clientele for Higher Education (San Francisco: Jossey-Bass, 1974), p. ix.
- 70 Cf. Ronald B. Thompson, "Changing Enrollment Trends in Higher Education," North Central Association Quarterly, 47 (Spring, 1973), pp. 343-351.
- 71 Ronald B. Thompson, Projections of Enrollment, Public and Private Colleges and Universities, 1970-1987, (Washington, D.C.: AACRAO, 1970), p. 5.
- 72 Cf. U.S., Department of Health, Education, and Welfare, Office of Education, Digest of Educational Statistics, 1966 (Washington, D.C.: Government Printing Office, 1966), p. 63. Also later editions, Digest of Educational Statistics, 1967, p. 66, and Digest of Educational Statistics, 1971, p. 66.
- 73 Reported in The Chronicle of Higher Education, IX (December 16, 1974), p. 8 and based on data from the Department of Health, Education, and Welfare, National Center for Educational Statistics.
- 74 Ibid.
- 75 Cf. Brian MacArthur, "In Britain: Fewer Students," Chronicle of Higher Education, IX (October 15, 1974), p. 3 and "Student Cut-Back of 110,000 'Still Maintains Robbins Ideal,'" The Times Higher Education Supplement, no. 163 (November 29, 1974), pp. 1, 24.
- 76 H.J. Perkin, New Universities in the United Kingdom, Case Studies on Innovation in Higher Education. (Paris: Organization for Economic Co-operation and Development, 1969); p. 54.
- 77 Brian MacArthur, "Student Cut-Back of 110,000 'Still Maintains Robbins Ideal,'" op. cit.; p. 1.
- 78 Barbara Burn, Higher Education in Nine Countries (New York: McGraw-Hill Book Company, 1971), p. 95.
- 79 "Canadian College Statistics: Enrollments," Chronicle of Higher Education, IX (December 23, 1974), p. 9.
- 80 Barbara Burn, Higher Education in Nine Countries, op. cit., p. 96.
- 81 Committee of Presidents of Universities of Ontario, Subcommittee on Research and Planning, Towards 2000: The Future of Post-Secondary Education in Ontario (Toronto: McClelland and Stewart Limited, 1971); pp. 49-50.
- 82 Ibid., pp. 58, 60.