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ABSTRACT

This document addresses how the widespread diversity of American higher education has become a distinctive and defining characteristic of the system as a whole. The goal of this document is to create an understanding of diversity in higher education by addressing the classification of higher education, the foundation and development of the different types of institutions, which constitute the American higher education system, current influences on diversity, and the value of diversity. In discussing the historical development of higher education, the author addresses how starting in 1,176 changes in American politics, social values, etc. shaped the diversity in higher education. The author pays particular attention to the following areas: (1) institutions for women; (2) graduate education; (3) higher education institutions for religious groups; (4) higher education institutions for ethnic/racial groups; (5) two year institutions; (6) institutions for education for the professions; and (7) current influences on diversity including the American government, classification systems, and external agencies. The author concludes by discussing the major benefits of diversity in higher education including increased choices for students, access for students of different abilities and backgrounds, autonomy afforded to different institutions, and allowing for a system that is as varied and complex as society itself. (Contains 65 references.) (MZ)

DIVERSITY

IN

AMERICAN HIGHER EDUCATION

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DIVERSITY IN AMERICAN HIGHER EDUCATION

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PREFACE

> American higher education has never been forced to conform to any one uniform pattern of organization, administration, or support. In the United States, there has been neither a national ministry of government nor a state church to impose norms of university procedure and control. The vast size of the country and the heterogeneous make-up of its population have made it difficult to establish uniformity in higher learning (Brubacher and Rudy, 1976:59).

In contrast to American higher education, many other countries have a centralized system of higher education governed by a "ministry of education" or an office similarly named. Government control has ranged from total as in the Soviet Union in 1971 to state control of a centralized system as in Australia, Canada and Germany (Burn, 1971).

Another difference in American higher education in contrast to other countries is the large private sector. "The Dartmouth College case of 1819 furthered this pluralistic trend by legalizing the existence of a great private sector in American higher education, immune from governmental interference" (Brubacher and Rudy, 1976:59). In the Soviet Union, all institutions are public, operated, financed, and administered by the state; in Great Britain, although the universities are autonomous and chartered corporations, the other institutions are public; in India and Japan, there are many private institutions in addition to the public ones (Burn, 1971).

Thus, the widespread diversity of higher education institutions in the United States has become one of its major distinctive characteristics. As a result the totality <u>is</u> "all things to all people" even though this is seldom true of any single institution. In this way one country with only four percent of the world's population to educate has contributed out of all proportion to recent world social, cultural, and economic development.

This monograph will examine diversity in American higher education, the

classification of this diverse system, the foundation and development of the different types of institutions which constitute the American higher education system, current influences on diversity, and the value of diversity.

CHAPTER I

What is Diversity?

From its beginnings and for well over a century higher education in the United States offered only limited institutional diversity. However, the de-centralized, democratic form of government which developed after the Revolutionary War allowed for variety and voluntarism in development of all types of social institutions, including higher education. When major changes were needed and the existing colleges were slow to change, new institutions were adopted from other countries or new institutional forms were created in the United States. Thus, the normal schools to educate teachers were copied from Germany and France in the 1830s and the graduate research university was adopted from Germany in the last half of the 19th century. Differing needs were met at this same time, however, by the creation of the land grant state university, followed at the turn of the century by the junior college. More recently, in the past quarter century the junior college has evolved into the community college and the normal school/teachers college has expanded into the comprehensive regional state college and university. In this process these diverse new or adopted institutions have replaced existing ones which did not make needed changes and lost their support base.

Recent social upheaval and demand for educational equity has placed great strains on our society, including the economy and the work force. Many non-traditional institutions, new methods of federal financing of students, and new delivery systems have sprung up. This has led to increasing concern and study of the great variety of institutions, their differing standards and educational quality. Accordingly, diversity of American higher education has been recently the focus of many individuals,

i.e., Birnbaum (1982); Pace (1974); Riesman (1980); and Stadtman (1980). The last three authors have written about the possible demise of diversity (Pace), marginal differentiation in institutions (Riesman), and concerns and suggestions regarding the survival of diversity in American higher education (Stadtman). Stadtman states that "diversity is prized in American higher education" (1980:98) and "remains one of the most distinctive and valuable features of American higher education" (1980:117). Birnbaum writes that "institutional diversity is one of the ideological pillars of American higher education" (1982:1).

What is diversity? Diverse can be defined as of a different kind, form, character; unlike; of various kinds of forms. The word different denotes unlikeness of qualities or characters; character is an aggregate of qualities; qualities are attributes. Therefore, diversity implies differences or unlikeness among several attributes or qualities.

Stadtman defines diversity as "a condition of having differences and in higher education it characterizes any system in which individual institutions or groups of institutions differ from one another in any way" (1980: 97). Diversity can also be considered as either internal or external.

> Internal diversity results when institutions seek to serve more than one goal or mission, to provide education for special groups within their constituencies, or to utilize more than one approach or technique to achieve their educational objectives . . . (and) from the work of special colleges or other discrete programs within an institution (Stadtman, 1980:98).

Stadtman provides the following definition for external diversity.

> External diversity, also often called <u>institutional</u> diversity, involves differentiation <u>among</u> colleges and universities. It may be associated with such factors as location, particular personnel and students, or a particular physical plan and environment. It may be structural and programmatic. It can involve types of control, special constituencies, institutional missions, or levels of selectivity of admissions requirements (1980:98).

Birnbaum demonstrates the contrast between internal and external diversity with the following statements:

> As institutions with previously distinctive characteristics become more internally diversified, they may tend to become somewhat more alike and less different from each other. . . . For this reason, internal diversity is not only different from institutional diversity, but may in fact be negatively correlated with it (1982:3).

Other authors have expressed concern regarding increases in internal diversity with a concomitant loss in external diversity. According to Pace, "As each institution expands the range of its own programs, it may increase the diversity of its own clientele but at the same time decrease the difference between it and other institutions" (1974:2). The following quotes reflect this concern that changes in the current types of institutions will effect "one of ideological pillars of American higher education" -- diversity (Birnbaum, 1982:1).

> The universities have a good idea what their job is, and the community colleges have carved out a niche for themselves. Our problem is with the state colleges. They occupy a no-man's land in the middle, with overlapping responsibilities for mass education with the community colleges and yet with ambitions for research and doctoral work that tread on the ground of the university (Dunham, 1969:52).

For the privately controlled college, "not the least of their values is their opportunity to intensify their pursuit of excellence through rigid selection of students and single-minded concentration on limited objectives;" these institutions "contribute essential values not readily attainable otherwise" (Wahlquist and Thornton, 1964:3).

> The most distinctive institutions, which means to some extent the institutions that are effective in achieving their purposes, are also the ones that enroll the fewest students, are in the most serious financial condition today, and whose long range future is least assured. . . . Further drift toward a least common denominator . . . may further reduce the pockets of excellence and distinction in higher education that still remain (Pace, 1974:131).

All these quotes describe diversity as a state which develops as a result of a combination of different types of institutions with distinct objectives or missions and conversely, the lack of diversity when 'a least common denominator' is selected for the institutions objectives. The next chapter examines systems of classification of American higher education institutions, systems which have varied in ability to adequately communicate the diversity in American higher education.

CHAPTER II

The Classification of Diversity

Institutional variety and change became so great in the nineteenth century that the Department of Education was empowered to list and classify those institutions considered "collegiate." From that data until the present evaluation, accreditation and classifying of higher education institutions has been a constant concern. A few efforts to describe and classify them are detailed below, from 1867 to the present.

Department of the Interior, Reports of the Commissioner of Education, 1867

The annual reports of the Commissioner of Education which were initiated in 1867 were the first efforts at classification of the diversity in American higher education. These annual reports presented statistical information about the public school systems of the United States and included statistics on normal schools, colleges and universities, and professional schools. The data is based upon the "replies to inquiries by the United States Bureau of Education" (The Report, 1887: 445). In the section of the report of 1910-1911 describing universities, colleges and theological schools, the following sentence details the criteria for inclusion:

> . . . the practical rule under which the list is made up is that an institution, in order to warrant its inclusion, must be authorized to give degrees; must have definite standards of admission; must give at least two years' work of standard college grade, and must have at least 20 students in college status (The Report, 1912:883-884).

Also if a college failed to return the forms for two years in succession, the college was dropped from the list (The Report, 1912).

One problem with the Reports of the Commissioner of Education appears to be lack of verification of data. No mention is made of ascertaining the

correctness of the information submitted in either Report (1887, 1912). The classification in the tables is by control and geographic region and subdivided by state and provides numbers of faculty, degrees conferred, and majors (The Report, 1912). These large groupings by control and geographic region provided some information but did not portray the wide range available in American higher education. Additionally, the classification groups universities, colleges, and technological schools together as one category and did so until 1948; normal schools, later teachers colleges, and junior colleges were separate categories.

Association of American Universities, Commission on Financing Higher Education

In 1951, the Commission on Financing Higher Education of the Association of American Universities published A Statistical Analysis of the Organization of Higher Education in the United States, 1948-1949 (1951). In the forward, John D. Millett states "it was apparent that some basic framework of classification of institutions and some understanding of their characteristics were indispensable" (1951:vii). Institutions were classified in the following categories:

1. universities
2. liberal arts colleges
    a. complex
    b. other
3. professional schools
4. junior colleges (Ostheimer, 1951).

Universities were defined as institutions offering "an undergraduate liberal arts curriculum, graduate study, and professional education" (Ostheimer, 1951:6). Graduate study was defined as post-baccalaureate work, although not necessarily including doctoral work in humanities, physical sciences, bio-

logical sciences, or social sciences. The designation of professional education required that an institution have at least three professional schools of which two must be professionally accredited programs in either law, engineering, medicine, teaching, or business or four professional schools of which one must be an accredited program in the aforementioned group. In either instance, the additional professional school or schools could be an unaccredtied school of either of the five mentioned or in either social work, architecture, agriculture, dentistry, or pharmacy (Ostheimer, 1951).

Complex liberal arts colleges were institutions similar to the university definition in that professional education or graduate study was offered in addition to liberal arts. Other liberal arts colleges were institutions offering basically liberal arts although some offered unaccredited professional or semi-professional work (Ostheimer, 1951). The category of professional schools consisted of teachers colleges, technical schools, theological schools, music schools, pharmacy schools, medical schools, law schools, optometry schools, osteopathy schools, dental schools, social work schools, and art schools. Junior colleges were defined as separate institutions (not affiliated with a university or college), not seminaries nor Bible institutes which offered two year liberal arts, general education or terminal-occupational programs. The Commission report utilized the 1948 Office of Education listing of junior colleges as the source of institutions. To be included in the Commission classification, a university, college or professional school must have been accredited by an appropriate agency (Ostheimer, 1951).

The function of the classification was to enable the Commission "to make characterizations and generalizations about institutions of higher

education" (Ostheimer, 1951:3), based upon a system of classifications "of institutional type with respect to the level of offering as well as with respect to the kind of educational program offered" (Ostheimer, 1951:34). The aim or aims of an institution determine the content and level of educational programs: "the more aims . . . the greater is the complexity of an organization. . . . " (Ostheimer, 1951:3).

Ostheimer states "that many of our distinctions must be arbitrary" (1951:3) and this is quite true. Precise definitions of institutional types were not available and were evolved by examining existing lists (i.e., membership in A.A.U.) and deriving "minimal criteria for a working definition" (Ostheimer, 1951:6). A certain bias is apparent when one starts with a product and works backward to determine criteria instead of working from criteria to product.

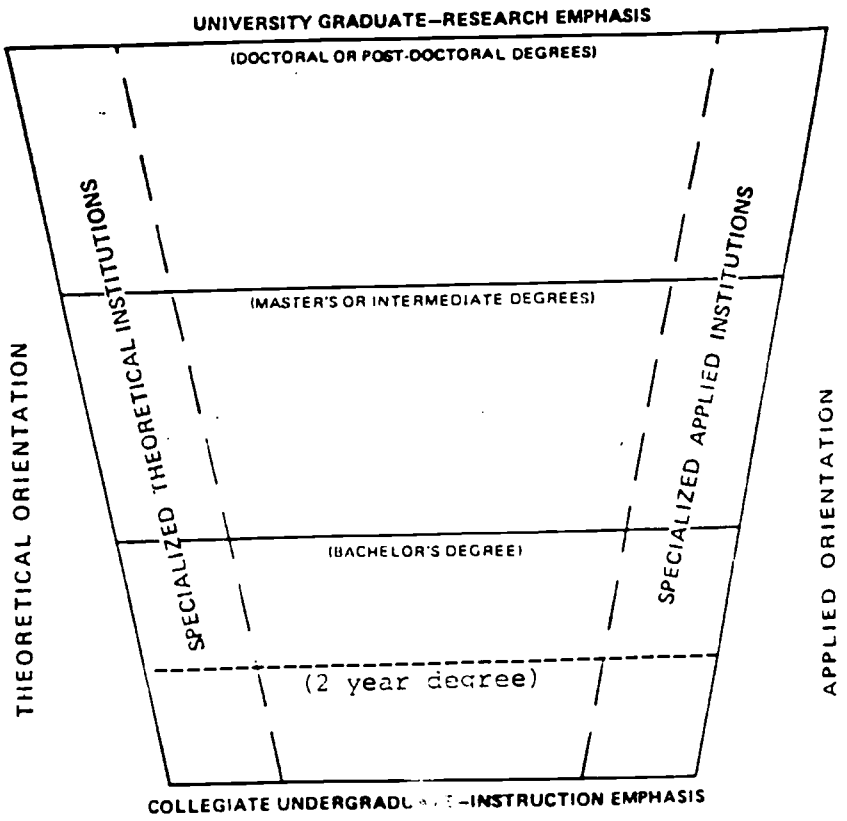
The Commission report was an improvement in classification for analytic purposes; the developed categories provided a means for differentiating between types of institutions based upon their respective aims. However, "many differences are in degree, not in kind . . . nevertheless, it is undoubtedly true that there is a much greater similarity among institutions within a single classification than among groups in different classifications" (Ostheimer, 1951:3).

A Two Dimensional Classification System

In 1969, Harcleroad, Sagen, and Molen presented a two-dimensional classification system in an effort to display the position and potential possibilities for classifing colleges and universities. The following table displays the two-dimensional framework:

TABLE VI-1

A Two-Dimensional Framework
for Classifying Higher Educational Institutions



(Harcleroad, Sagen and Molen, 1969: 104)

The vertical dimension is theoretical orientation. An applied orientation, on one side, would indicate an institutional emphasis on occupational, professional or applied fields whereas the opposite side of the horizontal dimension, the theoretical orientation, would indicate an institutional emphasis on theoretical knowledge and/or fundamental research. The horizontal dimension is the collegiate emphasis, ranging from an institutional emphasis on collegiate undergraduate instruction on the bottom of the framework to an institutional emphasis on university graduate research on the top of the framework. "The larger middle area represents comprehensiveness with an emphasis on both theory and its practical application" (Harcleroad, Sagen, and Molen, 1969: 103).

This classification system is useful in conceptualizing the interaction between the two dimensions; however, as the authors state the "system oversimplifies" (Harcleroad, Sagen, and Molen, 1969: 102). The two dimensions selected are important ones and the framework developed using the dimensions was useful in portraying an institution's position vis-a-vis these dimensions. However, there are other dimensions, i.e., size or control, which are important in classification. An additional problem is the larger middle area and the lack of specificity for placement therein. The two-dimensional framework, however, could be adapted and could prove to be a more accurate classification system.

Carnegie Commission on Higher Education and the Academy for Educational Development, 1973

In 1970, both the Carnegie Commission on Higher Education and the Academy for Educational Development prepared and later published detailed and somewhat comparable systems for the Classification of Institutions (Irwin and Millett,

1973). However, the much wider distribution of the Carnegie publication led to its extensive use during the past decade. The 1973 Classification consisted of eighteen categories:

1.1 Research universities I

1.2 Research universities II

1.3 Doctoral granting universities I

1.4 Doctoral granting universities II

2.1 Comprehensive universities and colleges I

2.2 Comprehensive universities and colleges II

3.1 Liberal arts colleges I

3.2 Liberal arts colleges II

4 Two-year colleges and institutes

5 Professional schools and other specialized institutions

5.1 Theological seminaries, Bible colleges and other institutions offering degrees in religion

5.2 Medical schools and medical centers

5.3 Other separate helath professional schools

5.4 Schools of engineering and technology

5.5 Schools of business and management

5.6 Schools of art, music, and design

5.7 Schools of law

5.8 Teachers colleges

5.9 Other specialized institutions (Carnegie Commission on Higher Education, 1973). In 1976, a revised edition of the classification scheme was published with a nineteenth category, institutions for nontraditional study and with revisions in some of the descriptions of the original nineteen categories (Commission on Higher Education, 1973, 1976).

Makowski and Wulfsberg, in discussing the motivation for the NCES classification system, state

> . . . although the Carnegie Taxonomy provides a comprehensive, definitive classification of institutions, it is difficult to update because of its complexity, its utilization of a number of diverse data sources, and its use of subjective judgments in classifying institutions. Another criticism . . . (is) the large number of categories used . . . (1980: 2).

The Carnegie Classification is complex and does utilize a large number of categories. However, this is a problem inherent in all systems which attempt to classify diverse entities; as Ostheimer states "(the) diversity is so great in fact, that if one attempts to get perfectly homogeneous classifications, one approaches the absurdity of finding that the numbers of classifications equals the number of institutions to be classified" (1951: 3). A more significant criticism of the Carnegie Classification is the subjectivity of judgments. Institutions which do not meet a category criteria are, nevertheless, included. For example, in both the 1973 and 1976 editions, Rockefeller University did not meet the criteria for Research Universities I but "was included because of the high quality of its research and doctoral training" (1973, 1976) and some institutions that did not meet the criteria for Research Universities II were included because they "have graduate programs of high quality and with impressive promise for future development" (1973, 1976).

National Center for Education Statistics, U.S. Department of Education, 1982

Prior to 1982, the National Center for Education Statistics (NCES) classified institutions into three categories, either universities, other four-year institutions, or two-year institutions. In the early 1980s a new classification system was developed by the National Center for Higher Educa-

tion Management Systems (NCHEMS); this classification system uses five categories: doctoral, comprehensive, general baccalaureate, two-year, professional and specialized institutions. Within the five categories, subcategories were defined. Three numerical criteria were used to classify the institutions:

1. the number of degrees by level of degree;
2. the number of fields; and
3. the ratio of the number of degrees in a field to the total degree completion (Makowski and Wulfsberg, 1980).

Makowski and Wulfsberg state that the hope of developing a new classification system was to eliminate the weaknesses of prior systems. One criticism levied against the Carnegie classification system is the large number of categories, nineteen. However, the NCES system has seventeen, a slight improvement. Makowski and Wulfsberg state that another criticism of the Carnegie system is "its use of subjective judgments in classifying institutions" (1980: 2). The development of the three numerical criteria for classifying institutions and the utilization of the criteria to differentiate the five categories is described; however, the determination of the numbers of conferred degrees required for classification in a category is just as judgmental or arbitrary as the Carnegie classification system. To facilitate longitudinal analysis, a criterion to prevent "bounding" between categories was developed which monitored institutional category computation and assignment and transferred an institution's category assignment when the institution was placed in a new computed category for two consecutive years (Makowski and Wulfsberg, 1980).

The NCES classification system has seventeen categories:

a. Major doctoral-granting institutions

   a-1 major research institutions

a-2 other major doctoral institutions

b. Comprehensive institutions

c. General baccalaureate institutions

d. Professional and specialized institutions

d-1 divinity institutions

d-2 medical institutions

d-3 other health institutions

d-4 engineering schools

d-5 business and management schools

d-6 art, music, and design schools

d-7 law

d-8 education schools

d-9 U.S. service schools

d-10 other specialized or professional schools

e. Two-year institutions

e-1 comprehensive two-year institutions

e-2 academic two-year institutions

e-3 multiprogram occupational two-year institutions

The strength of the NCES classification in contrast to the Carnegie Classification is the consistent data source (Makowski and Wulfsberg, 1980). Unfortunately, "non-traditional" and "proprietary" are left out as classifications and data on these types of institutions may be difficult to chart in the future. However, this current NCES classification system could well become the present standard in this area of concern.

CHAPTER III

The Development of Diversity: Historical Perspective

The development from the colonial colleges of the seventeenth century, with their limited, highly structured curriculum to the great diversity of the twentieth century in American higher education represents a truly significant social change. The description of the many different types of institutions involved in this enormous effort document the development of the diverse higher education system in the United States of America.

The Colonial Colleges

Higher education in the United States began with the founding of Harvard in 1636 and the subsequent establishment of the other colonial colleges. Although these colleges have developed and modernized over the years, the history of their development and the philosophy which guided the development form an important part of the historical perspective of diversity in American higher education. The following time frames will be used to examine this development:

1. 1636-1776, The Classical Curriculum
2. 1776-1900, Beginnings of Diversification in the Classical Colleges
    a. 1776-1828, Modernization of the Classical Curriculum
    b. 1802-1868, Programs and Schools for Nonclassical Subjects
    c. 1874-1900, The Elective System

1. Classical Curriculum: 1636-1776

The colonial colleges (Harvard, 1636; William and Mary, 1693; Yale, 1701; University of Pennsylvania originally the College of Philadelphia, 1740; Princeton originally the College of New Jersey, 1746; Columbia originally King's College, 1754; Brown, 1764; and Dartmouth, 1669) were patterned

after the existing English colleges, in particular Oxford and Cambridge. This modeling occurred since the American colonist academicians had received their education in English institutions (Brubacher and Rudy, 1976). The curriculum of the colonial colleges had as its core the classical languages and literature and included the subjects of "Aramaic, Syriac, Hebrew, ethics, politics, physics, mathematics, botany, and divinity" (Brubacher and Rudy, 1976: 13). Brubacher and Rudy state one difference between the colonial college and English college curricula: the greater stress upon the learning of Hebrew in colonial colleges (1976: 13). The purpose of the colonial colleges was to prepare not only an educated clergy but also "leaders disciplined by knowledge and learning" (Rudolph, 1962: 7).

Slight variations in the colonial college curriculum occurred and by 1765, more mathematics, natural science, English language and literature, and modern foreign languages were included (Brubacher and Rudy, 1976). The American Revolution heralded more major reforms in the classical curriculum (Rudolph, 1962).

2. The Beginnings of Diversification in the Classical Colleges: 1776-1900

a. Modernization of the Classical Curriculum: 1776-1828

Brubacher and Rudy identified the following as a central issue in educational reforms occuring in the post-American Revolutionary period: "Should the American college remain predominantly religious in orientation, training for Christian piety and a broad liberal culture or should it become essentially secular, serving the interests utilitarianism, social efficiency, and scholarly research?" (1976: 100). Advocates of the former educational philosophy adhered to the classical. Proponents of curriculum change proposed a myriad of methods to modernize the classical curriculum.

In 1779, Thomas Jefferson unsuccessfully proposed changes for William

and Mary, changes which were later enacted at the University of Virginia in 1825 (Rudolph, 1962). These changes included 1) the establishment of separate schools with separate although required courses leading to a degree, "the parallel course scheme" and 2) the freedom to select any course by individuals not seeking a degree, "the partial course scheme" (Brubacher and Rudy, 1976). In 1825, George Ticknor, motivated not only by Jefferson and the Virginia reform, but also by his educational experience in a German university, influenced the reorganization of Harvard into departments of study and the institution of electives within departments (Brubacher and Rudy, 1976 and Rudolph, 1962). The use of electives and sectioning classes by ability was done in Ticknor's department but not in general at Harvard (Rudolph, 1962). Other reformers of the classical curriculum included Philip Lindsley of the University of Nashville, James Marsh of the University of Vermont, and Jacob Abbott of Amherst. According to Rudolph these educational reformers would "state the problems and . . . point the way toward solutions" (1962: 124).

Advocates of the classical curriculum received support for their position in the Yale Report of 1828 which states "Our prescribed course contains those subjects only which ought to be understood . . . by everyone who aims at a thorough education" (Rudolph, 1962: 133). Brubacher and Rudy called the Yale Report "probably the most influential publication in the whole history of American higher education between the Revolution and the Civil War" (1976: 104). Although the classical curriculum of 1636 had undergone changes by 1828 via the inclusion of subjects which had demonstrated usefulness for the profesisons, additional changes effecting "a more popular and practical education" would occur parallel to, rather than within, the classical curriculum (Rudolph, 1962).

b. Programs and Schools for Nonclassical Subjects: 1802-1868

Although scientific courses had been included in the curriculum since 1727 at Harvard in the form of mathematics and natural philosophy, according to Rudolph science gained entry into the classical curriculum "not as a course of vocational study but as the handmaiden of religion" (1962: 226). The advancement of applied science as a legitimate course of nonclassical collegiate study began with the establishment of the United States Military Academy at West Point (1802), the Rensselaer Polytechnic Institute at Troy (1824) (Rudolph, 1962), and the American Literary, Scientific, and Military Academy at Norwich, Vermont (1819) (Brubacher and Rudy, 1976). The curricula at these institutions was in marked deviation from the classical. West Point required French, mathematics, chemistry, drawing and civil engineering and Rensselaer utilized field and laboratory experiments (Rudolph, 1962).

In addition to separate institutions for the study of science, both separate schools and parallel courses at existing institutions were established. Parallel scientific courses were begun at Union College in 1827 and the University of Rochester in 1850 (Brubacher and Rudy, 1976). Separate scientific schools were begun at Harvard in 1847, the Lawrence Scientific School; at Yale in 1847, Sheffield Scientific School; and at Dartmouth in 1857, the Chandler School of Science and the Arts (Brubacher and Rudy, 1976). No academic degree was awarded at Union but rather a certificate of proficiency; Harvard awarded a Bachelor of Science degree and Yale a Bachelor of Philosophy degree. Distinct differences were maintained between the classical and scientific programs: lower admission standards and shorter programs for the scientific students and ultimately lower status (Rudolph, 1962). According to G.W. Pierson, vocational and technological training were "not raised to the status of honor and equality until the passage of the Morrill Act (1862),

the founding of Massachusetts Institute of Technology (1861) and Cornell (1865-1868), and the development of some of the western state universities" (1950: 76). Brubacher and Rudy would add to this list the Civil War (1976).

c. The Elective System: 1874-1900

Earlier educational reform by several individuals established the basis of the elective system instituted by Charles William Eliot at Harvard in 1874. To the work of Jefferson, Ticknor, Lindsley, Marsh, and Abbott must be added the efforts of Ralph Waldo Emerson and President Quincy at Harvard, Francis Wayland at Brown and Henry Philip Tappan at Michigan (Brubacher and Rudy, 1976). By 1869, when Eliot became President of Harvard, the substitution of science, modern languages, and history for classical subjects had been practiced for thirty years and the study of Latin and Greek had been optional since 1867 (Brubacher and Rudy, 1976).

Eliot's reforms were based on the belief in what a university college should give its students: "first, freedom of choice in studies; second, opportunity to win distinction in special lines of study; and finally, a system of discipline which imposes on the individual himself the main responsibility for guiding his conduct" (Brubacher and Rudy, 1976: 112). The elective system reformed the classical curriculum through the introduction of new subjects into the B.A. curriculum (Pierson, 1950). Rudolph stated that the elective system "was a device for bringing science and the other new disciplines into equality with the old subjects" (1962: 294).

The Harvard elective system expanded until by 1897 the only requirement was freshman rhetoric. Cornell was elective with its only requirement of physical training and hygiene. Rudolph cites a 1901 study of 97 representative colleges in which 34 institutions were 70 percent elective, 12 institutions between 50 and 70 percent elective, and 51 institutions less than

50 percent elective (1962). Changes had occurred in the elective system not only at Harvard but at other institutions; the system of unrestricted electives at Harvard has been replaced by one with controls over electives (Brubacher and Rudy, 1976). Rudolph concludes that "the elective principle was the instrument by which departments of knowledge were built, by which areas of scholarly interest were enlarged, and therefore it was the instrument that enabled colleges to become universities" (1962: 305).

The State Universities

Wahlquist and Thornton define the state university as "an institutional unit which offers programs leading to the doctor of philosophy or equivalent degree and has three or more professional schools as well as liberal arts and general programs, whether or not the word 'university' is found in its official name" (1964: 3). A college with the designation as a "land-grant college" that receives federal funds as a result of the 1962 Morrill Act is a subtype of a state university (Wahlquist and Thornton, 1964). According to Brubacher and Rudy, the late eighteenth century American state university was not of this form (1976). The following time frame adapted from Wahlquist and Thornton (1964) will be used to trace the development of the state universities:

1. prior to 1850, The Period of Establishment of the Principle;
2. 1850-1950, The Period of Expansion;
3. after 1920, The Period of Eminence

1. The Period of Establishment of the Principle: prior to 1850

Two philosophies during this period were important to the establishment of state universities: 1) that higher education institutions be more responsive to and related to the needs of the people, and 2) that higher education institutions be sponsored by the state rather than the church

(Tewksbury, 1965). The colonial colleges had been church sponsored and church controlled. Although some received state financial support, the classical curriculum was geared to the needs of the few, not the many.

Both Tewksbury (1965) and Wahlquist and Thornton (1964) have lists of state universities founded in this period; Tewksbury lists twenty-one, eighteen of which appear in the list of twenty-two institutions that Wahlquist and Thornton present. These descrepancies result from the criteria for inclusion. Although approximately twenty state institutions were founded during this period, they were not universities by today's standards; "the curriculum approximated a secondary level of instruction" (Wahlquist and Thornton, 1964: 4). The distribution pattern of establishment is quite interesting. Seven of the original thirteen states (New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey and Pennsylvania) did not establish state universities during this period; these seven had established colonial colleges. Virginia was the only state with a colonial college that did establish a state university; Virginia was one of six (Georgia, North Carolina, South Carolina, Maryland, Virginia and Delaware) of the original thirteen states that did establish a state university and without the aid of Congressional land grants. The fourteen new states (Vermont, Kentucky, Tennessee, Ohio, Louisiana, Indiana, Mississippi, Alabama, Missouri, Michigan, Iowa, Wisconsin, California, and Minnesota) did receive land grants to establish their institutions. Tewksbury states "that most of the state universities that were established in the ~~West~~ new states of the Union owed their very existence to the National government" (1965: 184). Seven new states (Illinois, Maine, Arkansas, Florida, Texas, Oregon, Kansas) did not establish state universities during the period although five (not Maine or Texas) had received Congressional land grants for this purpose

(Tewksbury, 1965). Brubacher and Rudy cite the extensive granting of public lands as "probably the most important stimulus to the establishment of state universities" (1976: 153).

2. Period of Expansion: 1850-1920

Between 1860 and 1880, the state universities established prior to 1850 expanded by the addition of sixteen new professional departments (Wahlquist and Thornton, 1964). The most significant expansion occurred as the result of the Morrill Federal Land Grant Acts of 1862 and 1890, cited by Brubacher and Rudy as "unquestionably the most improtant actions taken by the federal government in the field of higher education in the whole of the nineteenth century" (1976: 158). The 1862 Act

> . . . . provided that every state should receive 30,000 acres of public land for each senator and representative in Congress to which it was entitled by the apportionment of 1860; and in those states that lacked public lands, or lacked enough public land to attain their quota, the deficiency was to be made up by issued land-scrip titles to federal land, salable to private persons, the proceeds of which were to be used for educational purposes (Hofstadter, 1952: 39).

The 1862 Act stipulated that each state use the appropriation for

> . . . . the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, ... in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life (Brunner, 1962: 55).

Ten percent of the appropriation could be used for the purchase of land for a college site or experimental farm whereas ninety percent had to be maintained as a perpetual endowment earning at least five percent (Rudolph, 1962).

By 1900, as a result of the Morrill Act, "land grants had been assigned to 26 state universities, of which 16 were chartered after the passage of

the Morrill Act" (Wahlquist and Thornton, 1964: 10). According to Hofstadter, "the wisest disposition of the funds was made when established institutions were enlarged . . . . Elsewhere the predominant effect was to produce a number of struggling institutions of moderate size and varying calibre" (1952: 40). The second Morrill Act, passed in 1890, provided for regular annual appropriations for the land-grant colleges with the stipulation that "no appropriations would go to states that denied admission to the colleges on the basis of race unless they also set up separate but equal facilities," which seventeen states did (Rudolph, 1962: 254).

Other federal legislation that influenced the expansion of state universities was the Hatch Act of 1887 and the Smith-Lever Act of 1914. The Hatch Act created the federal experiment station system and the Smith-Lever a system of extension demonstrations of research results to farmers (Hofstadter, 1952). These acts helped establish the idea of the state university providing services to the needs of the community. The other "dominant idea" in the American public mind for which the state university stood was the "all purpose curriculum" (Brubacher and Rudy, 1976: 161).

3. The Period of Eminence: After 1920

According to Wahlquist and Thornton, the third stage of development of state universities "is one in which a growing number of state universities have attained eminence among the great universities of the world" (1964: 4). Of the 52 state universities, Wahlquist and Thornton stated "their professional schools were growing in number, in variety, in enrollments, and most important of all, in the quality of their faculties and in the scientific foundations of their instruction" (1964: 7). The American state university "has been the very embodiment of the new concept that the government should, and indeed must, give a free higher education to the people" (Brubacher and

Rudy, 1976: 170). Since 1950, much of the extensive federal funding for research has gone to these institutions, and in 1976 many of them are included in the 50 universities classified by the Carnegie Commission in group I.

Normal Schools and Teacher Colleges

The rapid growth of common or elementary schools in the United States created a need for teachers. The existing academies, seminaries and colleges were able to provide neither the number of teachers nor the type of education needed by elementary school teachers nor individuals committed to teaching as a lifetime profession. The American normal school was developed to rectify these latter problems and was inspired by existing European models (Borrowman, 1965). The following time frame, adopted from Harper (1939), will be used to trace the development of normal schools and teachers colleges in the United States:

1. Pre- 1839 The Period of Private Preparation and Discussion of Public Normals
2. 1839-1860 The Period of the Establishment of Eastern Normals
3. 1850-1875 The Period of the Establishment of Western Normals
4. 1860-1900 The Period of Development and Professionalization of Normal Schools
5. 1900-1926 The Period of Transition of State Teachers Colleges

1. The Period of Private Preparation and Discussion of Public Normals Schools, Pre-1839

Preparation for teaching prior to 1839 was in general haphazard and unorganized. Men who had attended the colonial colleges and women who had graduated from private academies, as well as individuals lacking any formal education, taught in the elementary schools. Some female academies had reputations for preparing women as teachers but the curriculum was not speci-

fically teacher preparation (Woody, 1929, Vol. I). Harper states that the teacher training courses at two private New York academies "consisted of the regular work of the academies plus a few lectures on the 'principles of teaching'" (1939: 40). In 1834, the New York Legislature subsidized private academies to prepare teachers and in 1835, the Legislature developed a curriculum guide for the academies. This system of teacher preparation was not successful due to the stigmata within the social class of individuals attending the private academies regarding the teachers' department and the teaching profession in general (Harper, 1929). Four of the eight academies had no students enrolled in the teachers' department at the end of the first year (Harper, 1929). In 1846, Horace Mann noted in a public speech that private academies and colleges had been unable to provide a "sufficiency of competent teachers" (Barnard, 1851: 198).

The establishment of private institutions for teacher training had begun earlier in the United States in 1823 when Reverend Samuel R. Hall opened a private academy in Concord, Vermont for teacher preparation. In addition to the academy, Hall established an elementary school for demonstration and practice teaching, a model school. Hall also wrote Lectures in Schoolkeeping which was later used as a text in normal schools. In 1830, he headed the normal department at Phillips Andover Academy, a private institution, in Massachusetts (Harper, 1939). In 1837, Hall became principal of Holmes Plymouth Academy, a teachers' seminary for men and women (Woody, 1929, Vol. I). Another private seminary for teacher training was opened in Lancaster, Massachusetts (1849) (Woody, 1929, Vol. I). These private seminaries had curricula that focused not only on course work in subject areas but also "lectures and discussions on the theory and practice of teaching" at Andover (Barnard, 1851: 113) or "lectures on the science and art of teaching with practice"

(Woody, 1929: Vol. I:470). Another private effort was the experimental institute established by Henry Barnard in Hartford, Connecticut in 1839 which consisted of lectures and discussions on educational topics and demonstrative visits by well-known educators to schools. The experimental institute ended when political interest waned (Harper, 1939).

Interest in public support for teacher training was first expressed in 1818 when a legislative act was passed in Philadelphia to establish a model school for teacher training and practice (Barnard, 1951). 1825 was, according to Harper, "an eventful twelve months for the cause of teacher education" (1939: 14). Publications and pronouncements during 1825 included 1) "Plan of a Seminary for the Education of the Instructors of Youth" by Rev. Thomas H. Gallaudet, The Connecticut Observer, January 4th; 2) "Essays on Popular Education," containing a particular examination of the Schools of Massachusetts, and an outline of an institution for the Education of Teachers, by James G. Carter, The Boston Patriot, February 10 and 15th; 3) "Observations on the Improvement of Seminaries of Learning" by Walter R. Johnson, a pamphlet published in Germantown, Pennsylvania; and 4) a message to the New York Legislature by Governor DeWitt Clinton regarding "the education of competent teachers" (Barnard, 1851: 7). During the period from 1825 to 1839, the date of the establishment of the first public normal school, other proponents of the public support for teacher training in special schools included Reverend Charles Brooks, Calvin E. Stone, Horace Mann, Daniel Webster, and John Quincy Adams.

2. The Developmental Period of the Eastern Normals, 1839-1860

The first public normal school in the United States opened in Lexington, Massachusetts on July 3, 1839 (Harper, 1939). In 1839, Governor Everett of Massachusetts discussed the selection of the title "Normal School" and stated

> . . . the institution . . . is devoted to the education of teachers of common schools. . . . the name NORMAL is derived from a Latin word which signifies a rule, standard, or law. Schools of this character were called normal schools, on their establishment in France, either because they were designed to serve in themselves as the model or rule by which other schools should be organized or instructed, or because their object was to teach the rules and methods of instructing and governing a achool. This name has been adapted . . . in Massachusetts because it is already in use . . . in Europe; because it applies exclusively to schools of this kind . . . and because it is short, and of convenient use (Barnard, 1851: 179).

Dunaham notes that a normal school was not a college and he states "The idea was to enroll elementary school graduates and to give them some professional work in pedagogy. . . . Yet the students were so lacking in fundamental background that much of the work of the normal school was a thorough grounding in the common school subjects themselves. . . ." (1969: 29). The curriculum of the first normal school at Lexington included "all the common branches," and more advanced studies including book-keeping and the area of teaching and practiced teaching experience in the model schools (Woody, 1929, Vol. I: 475).

Two additional normal schools were opened in Massachusetts: at Barre on September 4, 1839 and at Bridgewater on September 9, 1840. Other eastern normal schools were opened in Albany, New York (1844); Philadelphia, Pennsylvania (1848); New Britain, Connecticut (1850); Salem, Massachusetts (1854); Providence, Rhode Island (1854); Trenton, New Jersey (1855); and Millersville, Pennsylvania (1859) (Harper, 1939: 8).

During the period of 1839 to 1860, many normal schools were established and the importance of teacher preparation and normal schools gained acceptance. The normals established during this period had begun to make the transition to a professional education via the raising of admission standards and the raising

of course work to collegiate level (Harper, 1939: 70).

3. The Developmental Period of the Western Normals: 1850-1875

The establishment of western normal schools followed and overlapped with the establishment of the eastern normal schools. The first western normal was opened in Ypsilanti, Michigan on March 29, 1853, fourteen years after the first United States normal had been opened in Lexington, Massachusetts. The next western normal to open was the Illinois State Normal University which opened in 1857 followed by the normal schools in Winona, Minnesota (1860); Platteville, Wisconsin (1866); St. Cloud, Minnesota (1869); Emporia, Kansas (1865); Cedar Falls, Iowa (1876) (Harper, 1939).

Harper's Review of the Western Normal Schools concluded that the western normals added a prestige and an aggressiveness which was much needed to counterbalance the humble origin of the movement" (1939: 96). Harper referred to the higher admission standards; demarcation between teacher preparation for elementary and high schools; the collegiate status and standards of many western normal schools; and the establishment of the normal departments within a state university (1939). These changes began the professionalization of the normal schools.

4. The Period of Development and Professionalization of the Normal Schools, 1860-1900

The developments in the western normals heralded national trends in state normal schools. Private, county, and city normals were not, in general, of the same calibre as the state schools. There was concern for uniformity and standards as a means of controlling the quality of the normals. Debate continued over "appropriate" normal school curriculum; in the eastern schools, professional courses in methods and educational techniques and methods were taught, whereas in western schools academic subject matter was also included. However, the eastern normals also tended to focus on elementary school tea-

chers. By 1900, curricula, length of attendance, and degrees all reflected preparation for different teaching positions (Harper, 1939).

Harper identified seven trends in teacher education which emerged during this period as a result of the normals:

a. The transformation of teaching into a profession;

b. the responsiveness of the normals to public school and societal needs;

c. the establishment of inservice or follow-up work;

d. the development of the concept of professionalized subject matter;

e. the utilization of a practice phase in teacher evaluation;

f. the inclusion of speech, drama, and music (formerly, extracurricular activities) into the curriculum; and

g. the development of a programmatic and eclectic attitude toward curriculum content. (Harper, 1939: 113-121).

5. The Period of Transition to State Teachers Colleges: 1900-1926

"The development of the normal schools into teachers colleges was merely a phase of the general expansion of education in the first two decades of the twentieth century" (Harper, 1939: 129). Harper stated further that normal schools evolved into teachers colleges "not because they changed their fundamental nature, but because standardization and the resulting prominence of the degree for high school teachers forced the normal schools to secure the degree-granting privilege, conforming in certain particulars to the established college and university standards" (1939: 171). Dunham too cited the rapid development of the high school movement as a major factor in the evolution of normal schools to teachers colleges but also listed "the growth of teacher training in public state universities, the expansion of what constituted professional education, and growing pressures for higher standards from incipient accrediting agencies" (1969: 33).

Harper listed six problems involved in the transition to state teachers

colleges:

a. enrichment and extension of the curriculum;

b. attainment of financial and societal support;

c. attainment of legal right to grant degrees;

d. preparation of elementary as well as high and special teachers;

e. achievement of standards;

f. preservation of identity as and characteristics of preparatory institutions for teachers (1939: 130).

In summary, the major problem was retainment of the past while evolving to meet future demands. Dunham states that in 1910, 264 normal schools existed (1969). Harper states that in 1900, "at least four normals . . . might truly be called full-fledged teachers colleges" (1939: 133). Dunham's examination of the membership of the American Association of State Colleges and Universities (AASCU) revealed that 166 of 279 (59%) began as normal schools or teachers colleges (1969). These facts demonstrate the transition from normal schools to teachers colleges which began with the awarding of degrees for teacher preparation in 1880; progressed to conferring of degrees for four years of collegiate work in 1890; and culminated in the collegiate organization of normal schools (Harper, 1939).

Institutions for Women

To place the development of higher education for women in its proper perspective, one must understand the existing colonial societal views regarding the purpose of education, for the ministry or professions and therefore only for men; views regarding a woman's place in society, in the home; and views regarding the intellectual ability of women, weak minds and capabilities inferior to men. During the colonial period when higher education was beginning for men in the United States, the aforementioned views severely

restricted the educational opportunities for women.

The following time frame will be used to organize the development of higher education for women in the United States:

prior to 1700	The Period of Rudimentary Education
1700-1750	The Period of Development of Female Seminaries and Academies
1750-1825	The Period of Beginning Public Education for Girls
1825-1850	The Period of Advocacy of College for Women
1833-1870	The Period of Experimentation with Coeducation
1848-1900	The Period of Access to Graduate and Professional Education
1873-1893	The Period of Coordinate College Development
1893-1983	The Period of Developing Equality

1. The Period of Rudimentary Education: Prior to 1700

In his discussion of women's education in the early 1700's, Woody stated that "Their education seldom went beyond the merest rudiments, and many missed these" (1929, Vol. I: 96). In the seventeenth centuries, Dame schools, home based private schools which often received public support provided an educational opportunity to young girls. Their primary purpose, as stated by Woody, was "to give little boys the rudiments of English that they might enter the town schools" (1929, Vol. I: 138). Newcomer, in discussing girl's attendance at the dame schools stated "it was considered sufficient for them to read a little. Even writing was not considered as essential" (1959: 7).

2. The Period of Development of Female Seminaries and Academies: 1700-1750

According to Woody, female seminaries and academies began to develop in the second quarter of the eighteenth century (1929: Vol. I). "The education of the academies was more elaborate, of course, than that attempted by any of the town schools, aiming at a secondary grade of learning" (Woody, 1929,

Vol. I: 149). These private institutions were preceded by the adventure schools, an extremely versatile and variable institution, whose proprietor-master or mistress would teach anything desired, for a price (Woody, 1929, Vol. I). Woody states that these adventure schools were important "not only as supplements to other agencies of education, but as forerunners of the first recognized institutions for the higher education of girls--the female academy or seminary" (1929, Vol. I: 281).

Woody (1929) and Boas (1971) differ in their opinions about the significance of the names "academy" and "seminary." Woody states that academy was preferred in the early development and that later, seminary was more commonly used (1929, Vol. I). According to Boas, academy although not exclusively was generally used for boys' or coeducational schools whereas seminary was used for collegiate institutions (1972). Boas also states that "the term seminary in the pupular mind meant a school which was preparatory for life; perhaps a life as a teacher; certainly a life of usefulness" (1971: 9).

Emma Willard, an early proponent of higher education for women, advanced two principles upon which female education in seminaries should be based: "studies must be selected either because they 'improve the faculties' or that they may be useful for future life" (Woody, 1929, Vol. I: 309).

Woody lists the earliest institution for girls in the United States as the Convent of the Ursuline Sisters established in 1727 in New Orleans (1929: 329). Other institutions were established in Lewis, Delaware; Germantown, Pennsylvania; Lititz, Pennsylvania; and in other cities (Woody, 1929, Vol. I). These early institutions provided the base from which the later more influential academies and seminaries of the nineteenth century developed. According to Woody, "In the nineteenth century, there arose many prominent, influential schools that soon eclipsed the meagre record of the eighteenth" (1929, Vol. I:

341).

3. The Period of Beginning Public Education: 1750-1825

The town schools, established for the educational preparation of boys, were opened to girls slowly. Newcomer lists 1769 in Ipswich as "the first clear record of girls attanding a masters' school with boys" (1959: 7) whereas Talbot lists Boston in 1769 (1910). Most authors agree that availability of education for girls in the town's public schools was slow to develop. Woody states that although equal provision for education in the town schools began in the latter half of the eighteenth century, the actuality of equal provision "was sometimes not made until well into the nineteenth century" (1929, Vol. I: 144). Newcomer concurs in the view and states "By the end of the eighteenth century, . . . there were a number of instances of girls being allowed to go to school" (1959: 7).

The first public high school for girls was not opened until 1824 in Worcester, Massachusetts. In 1826, high schools were opened in both New York City and Boston (Newcomer, 1959). The Boston school closed after two successful years. According to Boas, it ceased "because to the town fathers even a modest outlay of eleven dollars a pupil a year seemed a wholly unwarranted expense--when the number of pupils was so large" (1971: 14).

Although Talbot states that public education at elementary and secondary schools was established in "the few decades preceding the Civil War" (1910: 17), Boas states that in general "education beyond the common school was possible for girls only in private institutions" (1971: 15).

4. The Period of Advocacy of College for Women: 1825-1850

According to Newcomer, the majority of the academies and seminaries provided a high school education if that; however, a number of the more distinguished institutions provided collegiate level instruction: "Mount Holyoke

Seminary gave courses comparable to those offered at Amherst, using the same texts . . . the less well known Hudson Female Seminary had a collegiate department before the Civil War that offered three years of college work, judging by the names of the courses, the texts listed, and the ages of the students admitted" (1959: 11). Although collegiate level work was studied at these seminaries, the name "college" was not applied; according to Newcomer, Emma Willard "refrained from using the term 'college' for fear of ridicule" (1929: 11).

Several advocates of higher education for women emerged during this period: Emma Willard, Charles Burroughs, Thomas H. Gallaudet, William C. Woodbridge, Almira Phelps, and Catherine E. Beecher (Woody, 1929, Vol. I: 308-328). Although there was support of the advocates for better education of women, which lead to the establishment of several colleges for women, (i.e., Georgia Female College in 1836, and Mary Sharp College for Women in 1850) the seminary was "the dominant agency of women's advanced education" (Woody, 1929, Vol. I: 363) through three quarters of the nineteenth century. "After 1850, the college--first only nominally, then actually--became a competitor" (Woody, 1929, Vol. I: 363). After 1850, there was a rapid increase in the number of colleges for women: Auburn Female University in 1852, Oxford Female College and Vassar College in 1861, Wells College in 1868, Smith College in 1871, Wellesley College in 1875 and Bryn Mawr and Mills College in 1885. Woody states that "when secondary education became universally available in high school, academy, or seminary, the college was enabled to be more than a competitor of the latter, and offered collegiate instruction similar to, if not identical in all cases with, college education for men" (1929, Vol. I: 363).

5. The Period of Experimentation with Coeducation: 1833-1870

Coeducation began in 1833 when Oberlin College in Ohio was established; in 1837, four women enrolled and in 1841 three graduated with the degree of bachelor of arts. "These were the first American women to earn a regular A.B. degree by completion of a program of studies identical with that required of male candidates for the same degree" (Brubacher and Rudy, 1976: 66).

According to Brubacher and Rudy, "In the rich, populous northeastern states, the dominant pattern came to be that of the superior, but separate women's college. This was in accord with the reigning Genteel Tradition and moreover, it was inevitable since eastern colleges steadfastly refused to admit women" (1976: 66).

> In the western states, and in the newer institutions of the east, such as Cornell and Boston University, coeducation, rather than separation, came to be the pattern. At least a dozen small western denominational colleges and state universities followed in the footsteps of Oberlin, and established coeducation before 1860 (Brubacher and Rudy, 1976: 67),

for example Antioch in 1852, Iowa in 1856 and Wisconsin in 1860. Brubacher and Rudy cite the influence of the 1862 Morrill Act on the advancement of coeducation (1976: 67).

6. The Period of Access to Graduate and Professional Education: 1848-1900

The rapid development and expansion of the teaching profession provided women access to this profession when access to others was nonexistent. Woody states "long after women had attained the preliminary education, in seminary or college, that would prepare them adequately to pursue advanced professional study, it was impossible for them to do so" (1929, Vol. II: 321).

Initially, American women, as well as American men, pursued graduate education in Europe because of the prestige, and limited number of graduate departments and for women, lack of access. In 1885, Bryn Mawr College offered graduate work for women, as did the University of Pennsylvania. Other graduate

programs open to women college graduates were Columbia (1890), Yale (1891), Brown (1892), University of Chicago (1892), Harvard (1894), and Johns Hopkins (1907) (Woody, 1929, Vol. II: 334-337).

Education for the medical profession was more difficult to secure than graduate education. Elizabeth Blackwell, the first woman granted a medical degree (1849) had been refused admission from many schools; the first regularly incorporated women's medical college (Philadelphia, 1850) was publically discredited (Woody, 1929, Vol. II). In 1867, this institution, the Female Medical College of Pennsylvania was changed to Women's Medical College of Pennsylvania (Woody, 1929, Vol. II). In 1848, in Boston, another women's medical school had begun under the support of the Female Medical Education Society; in 1852, the Boston Female Medical School was renamed the New England Female Medical College. In 1874, the College was merged with Boston University "with the provision that the latter's medical school be opened to women on the same basis as to men" (Woody, 1929, Vol. II: 352-353).

Efforts similar to Boston and Philadelphia occurred in Cincinnati and New York. Harvard initially admitted a woman but then asked her to withdraw (Woody, 1919, Vol. II:356). Women were, however, admitted to the medical program at University of Michigan and Toland Medical School in 1874. In 1893 due to an endowment provision regarding equal education for women, Johns Hopkins admitted women (Woody, 1929, Vol. II). Woody states that the "admission to this great medical school marked the close of the experimental period of women's medical education in the United States (1929, Vol. II: 358).

Women seeking admission to the profession of law had even greater difficulty than women in medicine. The first woman law school graduate received a degree from Union College of Law in 1870. Another woman graduated from the Law School of Washington University in 1871. In both the 1870 and 1890 reports

regarding law schools, there was no mention of women students. Woody concludes that the number of women was "not considerable enough to be thought worthy of separate tabulation" (1929, Vol. II: 373-374). In an 1899-1900 report, 151 women were listed as students and in the 1901 report, 108 women had been granted law degrees to that time. Woody cites the establishment of education within a law school, not an office, as a factor in this increase (1929, Vol. II: 374-375). This is substantiated by the conclusion in an 1897-1898 report which stated that the majority of law schools were admitting women. Woody cites the exceptions of Harvard, Yale, Columbia, Washington and Lee and the University of Virginia. Women were admitted to Yale in 1918 and University of Virginia in 1920-1921 (Woody, 1929, Vol. II: 375). Admission to law school and graduation were not admission to the profession of law. Woody discusses the many difficulties women experienced in seeking admission to the bar (1929).

Woody states "the Christican ministry has long retained a hostility to the service of women" (1929, Vol. II: 363). The first woman to graduate from a theological school was in 1851 from Oberlin College. The next woman theological student was admitted in 1860 to St. Lawrence University. Progress was slow. In an 1871 report of theological schools, with 3,204 students, women were not listed separately; in 1901, only 181 of 8,009 were women students; in 1921-1922, 1,177 of 8,430 were women students and 12 of 752 women graduates. Woody cites a 1926 survey of theological schools ~~with~~ which demonstrated that difficulties still faced women pursuing this profession (1929, Vol. II).

7. The Period of Coordinate College Development: 1873-1893

Woody states "a third type of institution for the education of women--the coordinate college--arose, partly as a protest against the completely separate institution." The coordinate college was, therefore, a compromise between co-

education and the separate college (Woody, 1929, Vol. II: 304).

The first efforts at coordinate education, which was based upon English practice of examinations began in Cambridge in 1873 where women took preliminary or advanced examinations and received certificates from Harvard upon their successful completion. The examination system persisted although in 1870 an "annex" to Harvard was established in which instruction was provided by Harvard professors. Certificates, granted after four years of completion of requirements, stated that the work done was "equal to that of Harvard men" (Woody, 1929, Vol. II: 309). In 1893, the original corporate name, the Society for the Collegiate Instruction of Women was changed to Radcliffe College and Radcliffe began granting its own degrees in 1894. Similar efforts lead to the organization of Barnard College in New York (Columbia, 1889); Sophie Newcomb Memorial College in New Orleans (Tulane, 1887); Pembroke College in Providence (Brown, 1891); Jackson College in Medford (Tufts, 1910) (Woody, 1919, Vol. II).

8. The Period of Developing Equality: 1893-1983

In the past century, and particularly in the past twenty-five years, women have increased greatly in their attendance in all types of institutions and professional schools. The specialized women's colleges have varied greatly in attractiveness and enrollment particularly since World War II. As the opportunities for women at other institutions expanded, enrollment at women's colleges declined somewhat. Some of the coordinate women's colleges merged into coeducational institutions and some previously all women's colleges admitted male students. However, currently the separate women's colleges are experiencing a resurgence in popularity and continue to meet a definite need in American higher education. At the same time, women have been entering all types of institutions, including graduate and professional schools, in increasing numbers--and in recent years account for over half of the total

enrollments in accredited postsecondary institutions of all types.

Graduate Education

Prior to the development of a system of graduate education in the United States, a graduate degree, the Master of Arts, was awarded to graduates who qualified first by "staying alive and out of trouble for three years after graduating from college and by giving very modest evidence of intellectual attainments" (Storr, 1953: 1). At Harvard and Yale, the practice was to award the M.A. "as a matter of course (i.e., for five dollars and keeping out of jail for three years)" (Pierson, 1950: 74). Although residence as a student was not required, some "resident graduates" did remain; however, an organized curriculum was not available (Storr, 1953: 1). "Serious and organized study in some field of concentration was possible only to those who were entering the professions and not to those who wished to pursue knowlege for its own sake" (Hofstadter, 1952: 61). Eventually, true graduate education in the United States was developed by academicians who had been influenced by the German universities, "with their stress on research, their ideal of academic freedom, and their concept of service to the state" (Hofstadter, 1952: 62). The development of graduate education in the United States will be traced using the following time frame:

1. Pre-Civil War: The Period of Imitation
2. 1865-1890: The Development of Graduate Divisions
3. 1865-1890: The Development of Graduate Universities

1. The Period of Imitation: Pre-Civil War

Among the earliest efforts for graduate education in the United States was a "Plan for a University" proposed by Dr. Ezra Stiles of Yale which "would add the four advanced schools of law, medicine, divinity and the arts

and sciences;" the plan was not supported (Pierson, 1950: 74). The initiator of the legislative activity resulting in the University of Virginia was Charles Fenton Mercer, not an academician but a legislator; the University of Virginia was originally conceived as a graduate university by both Mercer and Thomas Jefferson who was instrumental in its establishment. However, "the university would in practice rise to the level of continental institutions only if students asked for the highest instruction and were prepared to receive it" (Storr, 1953: 13). According to Storr, there was a "vast difference between need as felt by a few academic leaders and demand as evidenced by actual appearance of students" (Pierson, 1950: 74).

In addition to the efforts at Yale and University of Virginia, efforts in graduate education were attempted at Western Reserve College in 1847; the University of Albany in 1851; Union College and the University of Pennsylvania in 1852; and the University of Michigan in 1857 (Storrs, 1953). However, Storr details the efforts prior to the Civil War as follows: "no great American university materialized; and no established college could claim to be a strong competitor of the European universities" (1953: 129). The efforts at Yale were to be the most successful beginning with a program in the Department of Philosophy and Arts in 1847; the program was "more highly organized than the studies of former resident graduates with the result that advanced students acquired a position of their own in the university" (Storr, 1953: 56). In 1860, approval was granted for a proposal for the Ph.D. "for high attainment in mathematics, philosophy, or such other branches as might be taught in the Department of Philosophy and the Arts" (Storr, 1953: 57). In 1861, the first three earned American doctorates were granted by Yale (Wahlquist and Thornton, 1964). In the following, Storr summarizes the accomplishments in graduate education in this period: "The prewar reformers left a great deal

of unfinished business, but they set the agenda for change" (1953: 134).

2. The Development of Graduate Divisions: 1865-1890

In 1872, a graduate department of philosophy and arts was established at Yale and a graduate department was founded at Harvard (Hofstadter, 1952). A new graduate faculty was established at Columbia in 1880 and at Princeton in 1877 (Brubacher and Rudy, 1976). Although these graduate divisions and older professional schools did exist on the campuses, "these institutions were not yet integrated universities by continental European standards. They might better be described as multiple-faculty institutions" (Brubacher and Rudy, 1976: 182). The establishment of Johns Hopkins influenced the establishment of graduate divisions. "By 1900, the number of unmistakable universities had grown again. . . . But even these were for the most part one-sided and unbalanced institutions, differing from each other and from what they would become" (Pierson, 1950: 62).

3. The Development of Graduate Universities: 1865-1890

"After the Civil War a new situation began to emerge as American society became more industrialized, urban, specialized, and secular. A demand arose for a new kind of higher education" (Brubacher and Rudy, 1976: 177). "Reliance upon Europe became hateful as the absolute number of Americans attending foreign institutions increased. Patriotism demanded an American university. . . ." (Storr, 1953: 130). The demand for graduate education was met in two ways: the development of independent graduate universities in addition to the development of graduate divisions within existing institutions. The development of an independent graduate university was initiated with the organization of Johns Hopkins in 1876. The organization was successful "in part because of the eminence of the individuals Gilman imported to Baltimore, in part because of the spectacular salaries he was able to pay, in part because

of the visiting lectureships he set up, in part because of the royal fellowships he was able to offer our brightest young men" (Pierson, 1950: 75). There were, however, some undergraduate students at Hopkins: in 1876, there were 35 undergraduates vs. 54 graduate students; in 1880-1881, 37 to 102, in 1885-1886, 96 to 184; and in 1895-1896, 149 to 406 (Brubacher and Rudy, 1976). Gilman "tolerated a college but put his whole emphasis on graduate studies and research" (Pierson, 1950: 71).

Three other institutions were founded as graduate universities during this period: both Clark University and the Catholic University of America opened in 1889 and the University of Chicago opened in 1892 (Brubacher and Rudy, 1976). Graduate enrollments were used by Hofstadter as a measure of growth of the universities, "in the academic year beginning in 1871, graduate enrollment stood at 198; by 1890 it was 2,382; and by 1910 it was 9,370" (1952: 64). The development of graduate divisions also influenced the number of graduate enrollments. For the past century the graduate schools have continued to grow in importance and to achieve pre-eminence as the standard setter for most other types of colleges and universities.

Religious Affiliated Colleges and Universities

1. Protestant Affiliated Institutions

Pace, in describing a Protestant college, states the following:

> Protestants have established well over 1,000 colleges. Some of them have not survived. Others have been transformed into private nonsectarian institutions, and some have even become state universities. Among those that have technically disengaged from a Protestant denomination, some still have a Christian emphasis or recognition. . . . Some colleges are also strongly evangelical or fundamentalist but are classified in directories . . . as private or nonsectarian. . . . So a Protestant college is not necessarily a denominational college; it may be one that relates itself to all evangelical Christianity (Pace, 1972: 1).

The colonial colleges were founded by several Protestant denominations, although during the latter part of the eighteenth century there was a decline in morals and religion (Pace, 1972) and the modernization of the classical curriculum occurred, with a shift toward more secular subjects (Brubacher and Rudy, 1976). In the nineteenth century following the "Great Awakening" interest in new colleges with religious affiliation lead to the founding of Denison by the Baptist; Oberlin and Western Reserve by the Congregationalists; Antioch and Hiram by the Disciples; Kenyon by the Episcopalians. "Of 180 denominational colleges in the west in 1860, 144 or so were founded and maintained by the more evangelistic denominations" (Pace, 1972: 11).

"From the mid-seventeenth century to the mid-twentieth century, higher education was mainly private and mainly Protestant" (Pace, 1972: 14). In 1972 when Pace wrote there were close to 600 colleges associated with Protestant Christianity. Pace categorizes Protestant institutions into four types:

1. institutions no longer Protestant but which had Protestant roots;
2. institutions nominally related to but on the verge of disengagement from Protestantism;
3. institutions established by and retaining a connection to one of the major Protestant denominations; and
4. institutions associated with the evangelical, fundamentalist, and interdenominational Christian churches (1972).

In recent years a number of Protestant colleges in groups one and two have moved closer to their denominations for renewed support, both financial and in enrollments.

2. Roman Catholic Affiliated Institutions

Power, in writing about the Roman Catholic church in colonial America, makes the following statement: "The Church, determining to gain a doctrinal foothold in the new world, and especially in English America with its inherent

hostility to Catholocism, preferred to subordinate education to religious goals" (1972: 3). The Roman Catholic church established educational institutions in order to preserve their religion. The first Roman Catholic college founded in the United States was Georgetown University in Washington, D.C. in 1789 (Greeley, 1969). Power, in discussing the difficulty of determining when a college was founded, states that 1789 is the year land which subsequently became the site of the college was deeded; however, students were not admitted until 1791 nor was the college chartered until 1815 (1972). The chartering date was often long after the existence of a college and its students; "for reasons they must have considered sufficient, state legislators sometimes refused charters to Catholic colleges" (Power, 1972: 41).

The establishment of higher education institutions affiliated with the Roman Catholic church was not, however, hindered. Between 1786 and 1849, forty-two Catholic colleges were founded; from 1850 to 1900, an additional one hundred and fifty-seven institutions were established; from 1901 to 1955, another one hundred sixty-four were founded; and from 1956 to 1970, an additional twenty-one were established (Power, 1972). Of the total three hundred eighty-four institutions established, 350 have survived. The initial institutions established were for men only; not until 1896 was the first Roman Catholic higher education institution for women founded when the College of Notre Dame in Maryland was established (Power, 1972).

Although these three hundred fifty institutions are affiliated with the American Roman Catholic church, "there is neither organizational nor ideological unity within Catholic higher education" (Greeley, 1969: 2). There exist vast differences in size, academic quality, reputation, liberalism, faculty, students and religious emphasis among these institutions (Greeley, 1969).

"The future of Catholic higher learning depends mainly, the lessons of history teach, on the colleges' determination to be true to their past, that is, genuinely cultivate the religious and cultural perspective they are heir to" (Power, 1972: 472).

3. Jewish Affiliated Institutions

In addition to the institutions to train rabbis and teachers founded by each of the three Jewish denominations, there are two higher education institutions in the United States which were founded by Jews. In 1945, Yeshiva University, the first university in American under Jewish auspices, was developed from Yeshiva College which was originally the Rabbi Isaac Elchanan Theological Seminary (Klaperman, 1969), thus following "the usual American pattern of expanding their institution for teachers and preachers" (Jencks and Riesman, 1968: 318). Yeshiva University consists of a theological seminary, undergraduate colleges, a teachers college, graduate schools and a medical school (Klaperman, 1969).

Brandeis University, which Jencks and Riesman call "ambivalently Jewish" (1968: 166), was founded as "a by-product of the wave of self-consciousness provoked by the Hitler massacres and the founding of Israel" (1968: 319). Brandeis is "avowedly non-sectarian, it places no special emphasis on either Jewish religion or the Jewish secular radical tradition. It aimed for precisely the same kind of academic and professional distinction as the leading Gentile universities" (Jencks and Riesman, 1968: 319).

Higher Education Institutions for Ethnic/Racial Groups

1. Institutions for Black Americans

Although the colleges that were founded and exist primarily for the education for blacks differ widely from one another, in various ways, these

colleges are as a group distinct "because they have maintained very close identity with the struggle of blacks for survival, advancement, and equality in American society" (Thompson, 1978: 183). Pifer (1973) has delineated the following time frame which will be used to trace historically the development of educational institutions of blacks:

a. 1619-1863

b. 1863-1896

c. 1896-1933

d. 1933-1965

e. 1965- current status

From 1619 to 1863, the period spanning the arrival of the first black to the signing of the Emancipation Proclamation during the Civil War, educational opportunities for free blacks were very limited and legislation, or "Black Codes," restricted education of black slaves. In addition to the "Black Codes," segregated schooling, or the separate but equal doctrine, was legislated in Boston in 1849 (Pifer, 1973). In this period, the religious missionary movement for education of free blacks was initiated with the establishment of three colleges:

1. In 1839, a secondary vocational school, now Cheyney State College, in Pennsylvania (Quaker).

2. In 1854, Ashmun Institute, renamed Lincoln University in 1866, in Pennsylvania (Presbyterian) (Pifer, 1973: 10).

3. In 1847, Union Seminary, Ohio (African Methodist Episcopal Church) which was combined in 1863 with Wilberforce University, founded in 1856 by the Methodist Episcopal Church (Jones, 1969: 683).

As was typical of other early educational efforts, these institutions provided more secondary than postsecondary education.

The northern religious missionary movement continued during the post-Emancipation Proclamation reconstruction period with the founding of additional

educational institutions for blacks; for example, the Baptists established Shaw University at Raleigh in 1865 and Morehouse at Atlanta in 1867; the Methodist Episcopals established Walden at Nashville in 1865 and Claflin at Orangeburg in 1869; the American Missionary Association established Fisk University at Nashville in 1867, Hampton Institute in Virginia in 1868, and Tougaloo in Mississippi in 1869 (Jones, 1969: 253). The above institutions and their religious affilations are good examples but are not exhaustive of this period of development.

The United States Government influenced the movement for education of blacks in four ways during this period:

a. the chartering of Howard University in 1867, "designed for all who might wish to study there" (Jones, 1969: 253), but with special provision for blacks;

b. withdrawal of federal troops from the southern states in 1877 which heralded a period of repressiveness for blacks via laws and policies aimed to limit educational and social advancement;

c. the second Morrill Act of 1890, specifying an "equitable preparation "for blacks which lead to the establishment of separate schools for blacks in each of the seventeen southern states; and

d. the Supreme Court decision, in 1896, in the case of Plessy vs. Ferguson, which confirmed by law the right to establish separate but equal public institutions for blacks and whites (Browning and Williams, 1978: 72).

The combined effect of the southern policy to limit the level of educational attainment of blacks and the Morrill Act of 1890 was the rapid expansion of vocational/industrial education for blacks; Hampton (1968) and Tuskegee (1881) are examples of industrial institutes of this period. Pifer, in his discussion of the "so-called industrial education experiment," stated that the outcome of the focus on "training in the simpler crafts and trades that would equip him for his place in society" was decreased funding for black colleges providing a liberal arts education and relatively more generous support for

industrial institutions (1973: 14-15).

By 1900, approximately thirty-five public and private black colleges had been founded (Browning and Williams, 1978). The debate between liberal or industrial education continued with W.E.B. DuBois the ardent proponent of the former and Booker T. Washington the advocate for industrial education (Browning and Williams, 1978). During the time period of 1896-1933, racial segregation was effectively extended from public institutions, legislated by the Plessy vs. Ferguson decision in 1896, to all educational institutions by the 1927 Gung Lum vs. Rice decision (Browning and Williams, 1978).

According to Pifer, the period of 1933-1965 was characterized by the revival of integrationist ideals of American society. The activity of the National Association for the Advancement of Colored People (NAACP) and in particular the Legal Defense and Educational Fund of that organization was notable during this period, focusing during 1933-1945 upon the "equal" aspect and challenging during 1945-1954 the "separate" aspects of the "separate but equal" doctrine. The gradual invalidation of legalized, or de jure, segregation, culminated in the Brown vs. the Board of Education decision in 1954 (Pifer, 1973). The other significant legislation during this period was the Civil Rights Act of 1964 barring "discrimination in the use of public facilities and in employment wherever the Federal Government has authority to regulate such matters" (Pifer, 1973: 25). Pifer stated two common views of whites regarding institutions for blacks during this period: 1) that these institutions were "'anachronistic vestiges' of an earlier age and should be allowed to quietly die," and 2) "the tendency to lump all negro colleges together and make sweeping judgments about poor academic quality" (1973: 30).

From 1965 to the present time, attitudes regarding institutions for

blacks have changed. Two comprehensive studies, one by Earl McGrath (former U.S. Commissioner on Higher Education (1971), recommended the preservation and strengthening of these institutions (Pifer, 1973). There are currently 105 predominantly black colleges and universities, including 35 publicly supported and 50 private four-year institutions and four public and 16 private two-year colleges that are a part of the continuing diversity in American higher education (Pifer, 1973: 31).

2. Institutions for Native American Indians

"Evidence of early interest in the matter of Indian education is found in Harvard's Charter of 1650, which dedicated the college to 'the education of English and Indian youths'" (Lindquist, 1923). William and Mary was established to "propagate the Christian faith among the Indians" (Brubacher and Rudy, 1976: 8). A few Indians were also educated at Princeton in the eighteenth century (Lindquist, 1923) and a few attended Hamilton Oneida Academy in Clinton, New York (Rincon, 1982).

The greatest number of Indians have been educated at two institutions: Roanoke College (1842) in Virginia and Bacone College (1880) in Oklahoma. Although Roanoke was not originally founded to educate Indians, "it may have enrolled more than Dartmouth and certainly more than Harvard and Hamilton" (Rincon, 1982: 217). According to Rincon (1982) the majority of the 8,000 alumni of Bacone College have been Indians. "Bacone was the only college which served Indians from all tribes during its first eighty-nine years of existence" (Rincon, 1982: 217-218).

Other institutions for the education of Native Americans founded during the later nineteenth century were of an industrial nature. The Carlisle Indian School was founded in 1879 after a group of Indians had been brought to Hampton Institute in 1878. "The idea of giving Indians an industrial

education at Hampton was an experiment, but the results were so gratifying as to justify its continuation" (Lindquist, 1923: 427). Other institutions of this type were in Lawrence, Kansas; Sherman Institute in Riverside, California; and the Chemawa School in Salem, Oregon (Brubacher and Rudy, 1976).

Bacone College, in Muskogee, Oklahoma, noted for its contribution to the higher education of Native Americans, has been proposed as the first Indian university by its president, Dean Chavers. To date, no Indian university has been established, although D-Q University founded in 1970, was established to provide for both Native and Hispanic American students (Rincon, 1982).

The Navajo Community College, chartered in 1969 by the Navajo Tribe, "was established as the first tribally controlled collegiate institution in the United States" (Rincon, 1982: 234). Twenty-five other colleges, following the model of Navajo Community College, now enroll almost one-third of the total Native American population seeking higher education. The passage of the Tribally Controlled Community College Assistance Act in 1978 has influenced this development (Rincon, 1982).

3. Institutions for Hispanic Americans

"Activities related to the founding and development of private higher education institutions by Hispanic Americans have come within approximately the last twelve years" (Rincon, 1982: 297). Rincon attempted to study ten institutions which seemed to have higher education purposes for Hispanic Americans. These institutions are located in the southwest states of California, Colorado, New Mexico and Texas. Unfortunately, limited information was available and Rincon concludes that some of "the institutions may no longer be in existence" (1982: 252).

Rincon presents information on three institutions: D-Q University in

Davis, California, founded in 1970; Colegio Jacinto Trevino in San Antonio, Texas, founded in 1971; and La Academia de la Nueva Raza in Dexan, New Mexico, founded in 1971 (1982). D-Q University was established to provide educational opportunities for both Hispanic and Native Americans with a separate college to focus on traditional education; a college to focus on trades, agriculture, fordstry and business administration; a college to focus on Indian concerns; a college to focus on a Chicano studies curriculum; and a college to focus on the education of paramedics and nurses (Rincon, 1982). Colegio Jacinto Trevino offers bachelors and masters degree programs in a bilingual, bi-cultural center. La Academia de la Nueva Raza is a non-traditional institution, "more of a philosophical enterprise than a higher education institution. . . . It has no student body as such and offers neither certificates nor grades" (Rincon, 1982: 296). In addition Colegio Cesar Chavez, in Oregon, was developed for Hispanic Americans in the 1970s from Mt. Angel College, formerly a Roman Catholic Institution. The one common goal of these institutions for Hispanic Americans is to "establish or preserve important cultural values" (Rincon, 1982: 298).

Two-Year Institutions

The category of two-year institutions consists of private junior colleges, public community colleges, and technical institutes; university branches or divisions which offer only the first two years of academic work are not included but are considered a part of the main campus. Private junior colleges are those two-year institutions under private control offering two years of collegiate instruction, closely patterned after the first two years in the traditional four-year college, to a student body drawn from beyond the community in which it resides. In contrast, a public community college offers to a specific community two years of low cost (to students)

publically subsidized education beyond high school; educational offerings range from the first two years of a four-year college program, thereby facilitating transfer, to terminal programs and remedial, adult and continuing education. Technical institutes, both public and private, offer two years of training for specific technical careers.

Hillway has divided the development of two year institutions into the following four time periods:

1. 1850-1900 The preparatory Period
2. 1900-1920 The Formative Period
3. 1920-1940 The Period of Diversification
4. 1940-1983 The Period of the Community College (Hillway, 1958: 40-42).

1. The Preparatory Period: 1850-1900

During the fifty years of the Preparatory Period of development of the two-year institution, the American universities felt the reorganizing influence of the German university system. Proponents of the German model, in which students enter the university for professional training and research after completing fourteen grades instead of twelve, urged restructure of American high schools (Hillway, 1958). Advocates of this reform included William Rainey Harper of the University of Chicago (Hillway, 1958), Henry P. Tappan of the University of Michigan, Edmund J. James of the University of Illinois, William Watts Folwell of the University of Minnesota, and Alexis F. Lange of the University of California (Bogue, 1950). The philosophy advanced was that the freshman and sophomore years of the American university were "secondary work" which James, in his inaugural address in 1905, defined as "work which is necessary as a preliminary preparation for the pursuit of special professional, that is scientific work" (Monroe, 1972: 8). Four-year colleges

advocated the education of the person, not the specialist and according to Fields "the history of the junior college movement has been to some extent the story of the struggle between these two conceptions of the primary function of the early years of higher education" (1962: 16).

Two private junior colleges were established in Illinois as a result of William Rainey Harper's advocacy: Bradley Institute (1897) and Lewis Institute (1896) (Monroe, 1972). In 1892, Harper also influenced the division of the University of Chicago into a "academic college" (freshman and sophomore years) and "university college" (junior and senior years; the names were changed to "junior" and "senior" in 1896 (Fields, 1962: 18). 1896 was also the year in which the University of California "instituted a 'junior certificate' as an admission requirement for upper-division work" (Fields, 1962: 15).

2. The Formative Period: 1900-1920

During the Formative Period, two year junior colleges were established in one of the three following ways:

a. "extensions of work in the high schools or academies, or

b. new institutions formed by reducing some four-year colleges to two-year colleges, or

c. entirely separate two-year colleges" (Hillway, 1958: 41).

Examples of the first group include Joliet, Illinois, often cited as the first public junior college, which developed from offering post-high school courses in 1901 to the accreditation of Joliet Junior College by the North Central Association of Colleges and Secondary Schools in 1917 (Fields, 1962). California and Michigan (Saginaw) provide additional examples of the extension of public high schools (Bogue, 1950), as do Colorado (Greeley) and Indiana (Goshen) (Brick, 1963). Bogue, in discussing "the extension of edu-

cation from the bottom upwards" stated that "the majority of junior colleges in New England . . . have resulted from gradual evolutionary changes from private academies into junior colleges" (1950: 85).

William Rainey Harper was the ardent proponent of the formation of the second group of junior colleges. In 1899, he "recommended the curtailment of the work of smaller, weaker senior colleges and suggested they concentrate on freshman and sophomore work" (Brick, 1963: 21). In 1900, citing financial, educational and humanitarian reasons for the reduction of small four-year colleges, Harper stated that there were "at least 200 colleges that could render far better service by becoming junior colleges" (Bogue, 1950: 90-91). Although Bogue references a study of 203 small four-year colleges which demonstrated that 15% became junior colleges, no specific colleges are mentioned (1950). Hillway cites three Baptist colleges in Texas and the state of Missouri which followed Harper's "decapitation" suggestion for junior college development (1958: 38).

The development of the largest number of examples of the third group, the entirely separate two-year college, occurred in California where legislation in 1917 provided state and county financial support for junior college students (Brick, 1963). New York, Oklahoma, and Mississippi were other states that established state-supported public junior colleges (Medsker and Tillery, 1971).

3. The Period of Diversification: 1920-1940

Hillway discusses two new characteristics of these institutions during this period:

a. The publicly supported junior colleges took a commanding lead in student enrollment, and

b. Many institutions that specialized in vocational and adult education entered the field (1958).

Although the private junior colleges outnumbered the public institutions in

1922, the enrollment in the latter exceeded the former. This trend continued and still continues. Publicly supported junior colleges developed in not only the states previously cited but also Illinois, Michigan, Minnesota, Kansas, Iowa, Missouri, and Texas. Several states also supported vocational and agricultural colleges, i.e., Oklahoma, Mississippi and New York (Monroe, 1972). The Smith-Hughes Act (1917), supporting vocational education in secondary schools and vocational teacher training as well as other acts of federal legislation had their impact on this development.

4. The Period of the Community College: 1940-1983

Hillway states that during this period "the community-serving function of the two-year college was widely recognized and accepted (1958: 42). Monroe dates the expansion of community colleges to the Depression with the number of community colleges increasing from "403 in 1929 to 584 in 1945" (1972: 13). "By 1970, the number of two-year colleges had grown to over 1,000, of which 850 are public with an enrollment of 'approximately two million'" (Monroe, 1972: 13). In the past decade, the number of two-year institutions has grown to close to 1200 institutions, two-thirds under public control, with an enrollment of almost five million students.

Institutions for the Professions

1. Ministry

The colonial colleges were founded by various Protestant denominations to educate leaders but primarily to educate the cleargy. Harvard (1636), Yale (1701), and Dartmouth (1769 were founded by Congregationalists; William and Mary (1693), the University Pennsylvania (1746), and Columbia (1754), were founded by Anglicans; Princeton (1746) was founded by Presbyterians; and Brown (1764) was founded by the Baptists (Brubacher and Rudy, 1976 and Jenchs and Riesman, 1968). The classical curriculum consisted of "subjects

contributing directly toward the professional education of a clergyman" (Gambrell, 1967: 71). The changes in the classical curriculum in the later half of the eighteenth century reflected the idea that "theology, once considered knowledge essential to the educated man whether layman or clergyman, had become but one of several learned professions" (Gambrell, 1967: 72). The success of the colonial colleges in preparation of clergymen is demonstrated by the fact that only 25 of 250 ministers ordained to Congregational churches in America between 1640 and 1740 did not have a degree (Gambrell, 1967). Apprenticeship with a practicing clergyman, sometimes called "school of the prophets," was common in some other churches (Hughes and DeBaggis, 1973).

Gambrell states that during the period between 1735-1740 a series of religious revivals called the "Great Awakening" occurred, and these influenced theological education (1967: 21). Hughes and DeBaggis date the first effort to reform theological education significantly to the late eighteenth and early nineteenth century and cite two influencing factors: "increasing concern for the quality of professional education in general . . . (and) the need for denominations to establish separate schools in order to conserve purity of doctrine" (1973: 170). Gambrell discusses the graduate study of divinity at the colleges and states that at Yale "no formal course of lectures was given specifically to the graduates" (1967: 89) and at Harvard, there was "a review of undergraduate lecutres, and more or less independent reading" (1967: 91).

The first separate theological seminary in the United States was founded during this period by the Dutch Reformed Church (1784) adjacent to Rutgers (then Queens College) which had been founded in 1766 (Jencks and Riesman, 1968). The first Roman Catholic seminary was founded in Baltimore in 1791 (Hughes and DeBaggis, 1973). The Andover Theological Seminary (1808) was

founded by Congregationalists (Gambrell, 1967: 5). Hughes and DeBaggis state "as denominational Protestants became increasingly fragmented, the number of theological schools multiplied" (1973: 171). Jencks and Riesman conclude "the use of separate seminaries also reflects . . . a greater degree of professionalization in the Protestant clergy" (1968: 208-209).

Although the first Jews came to the United States in 1654, at the beginning of the eighteenth century there were only about 3,000 Jews in this country. Between 1881 and 1905, more than a million Jews immigrated to this country, the majority fleeing from discrimination in Eastern Europe (Klaperman, 1969). Honor (1948) cites this rapid increase in the Jewish population and the need for additional spiritual leaders, rabbis and teachers as the impetus for the establishment of Jewish theological institutes. Hebrew Union College in Cincinnati, established in 1875, was the first rabbinical college in America which prepared rabbis for "the new reform Jewish ritual born out of American needs" (Klaperman, 1969: 36). A second rabbinical college, the Jewish Theological Seminary, was founded in 1886. This rabbinical college was founded "as a direct reaction to the threat of reform . . . (by) sympathizers of the new Conservative movement (Klaperman, 1969: 38). Two rabbinical colleges were established later to train rabbis for Othrodox congregations: The Rabbi Isaac Elchanan Theological Seminary in New York City was incorporated in 1897 and the Hebrew Theological College was established in Chicago (Honor, 1948). In 1915, the Elchanan Theological Seminary merged with Yeshiva and Etz Chaim, a religious day school which had been founded in 1886, to form the Rabbinical College of America. In 1928, this was developed into the Yeshiva College, "the first college of liberal arts and sciences in the world under Jewish auspices" (Klaperman, 1969: 161). Other rabbinical institutes include the Dropsie College for Hebrew and Cognate Learning (1909)

and the Jewish Institute of Religion (1922) (Honor, 1948).

Protestant clergymen also receive different educational preparation dependent upon their denomination: Anglican, Presbyterian, Congregational, Methodist, Baptist, Lutheran and Reformed traditional clergymen receive post-baccalaureate education leading to a bachelor of divinity at denominational seminaries. Bible colleges provide preparation of clergymen for the denominations of the Assembly of God, the Church of God, Holiness churches, Christian and Missionary Alliance. "Many who enter the ministry in these Bible churches do so without academic preparation. They may then enter a Bible college, but without the preparation or the time to take a full sequence of college and seminary study" (Hughes and DeBaggis, 1973: 177). Some Bible colleges grant a three year diploma, some a four-year baccalaureate degree (Hughes and DeBaggis, 1973).

Roman Catholic priests are prepared in seminaries of three types:

1. Major seminaries providing a six-year program starting with the junior year of undergraduate study through four years of graduate study focusing on philosophy and theology;

2. Minor seminaries providing high school or junior college education; and

3. Combined minor-major seminaries (Hughes and DeBaggis, 1973).

Each religion practiced in the United States has developed a distinct educational system to prepare its clergy. All told, in 1976, the Carnegie Commission classified two hundred and seventy institutions, all private, as theological schools, Bible colleges, and other specialized institutions offering degrees in religion. Forty of the fifty states had at least one such institution while New York state had 56 of them. Their total enrollments exceeded 70,000 students, close to 1% of all higher education students at that time (Carnegie Commission, 1976).

2. Law

In colonial America, there were five methods of preparation for law:

a. attendance at one of the few colleges;

b. self study;

c. work in a court of record;

d. serve as an apprentice in a law office; and

e. enter one of the four Inns of Court in London (Chroust, 1965).

After the Revolution, method four became most common. Apprenticeship rarely involved formal instruction or systematic study. College courses available focused on ethics, politics and principles of law and government. However, Chroust concludes that "it is doubtful whether these scattered attempts at introducing in the colonial colleges some familiarity with the law had anything to do with professional training and preparation for the practice of law" (1965: 176). In 1779, Thomas Jefferson introduced the first systematic instruction in the law at William and Mary by creating the first distinctive law professorship. This stimulated the organization of similar law school professorships at the College of Philadelphia in 1789, Columbia in 1794 and others. The focus of the courses was largely theoretical and not of great value to the practitioner (Chroust, 1965).

In addition to the college courses and law professorships, private schools, offering practical aspects of law training, were opened. These private local law schools, extensions of the apprenticeship system, were located in a practicing lawyer's office. Many of these private schools, the most famous was Litchfield Law School, were absorbed later by university law schools (Chroust, 1965). The conflict between theoretical and practical preparation was bridged first by Harvard Law School in 1819 which in "combining the English idea of the Inns of Court and of appren-

ticeship training with the continental idea of academic law teaching . . . established the first university school of law in any common law country" (Chroust, 1965: 197). In 1870, Harvard Law School also introduced reforms which altered American legal education: "the case method of instruction (geared toward the principles of law rather than the details of practice), the requirement that entering students have at least three years of college and three years as a uniform time of law study" (Hughes et al, 1973: 103).

These reforms were adopted by other law schools although proprietary, commercial, corresponsence, and part-time schools with lower standards have continued even though most states require law school attendance as a prerequisite for taking the bar examination. State bar requirements vary "from a minimum of two years of college (allowed by about one-fifth of the states and by a few unaccredited schools) to a bachelor's degree (required by seven state bars and by over three-fourths of all accredited schools)" (Hughes et al, 1973: 109). "Since the 1920s legal education has settled into a uniform pattern: the sequence of college plus a homogeneous three years of law school and a set of courses, texts, and a style of teaching which vary little from school to school . . ." (Hughes et al, 1973: 110).

In 1976, the Carnegie Commission listed sixteen separate, free-standing law schools, 15 private and one public (Hasting's College of Law). They enrolled over 17,000 students and were available in only nine states (Carnegie Commission, 1976).

3. Military

Systematic training by the federal government of American military officers in a military school was debated as early as 1793 by President Washington and his Cabinet. Although the rank of cadet was created in 1794 it was not until 1799 that detailed plans of military instruction were formulated; some

instruction of cadets began in 1800. The motivating factor for military instruction was the need for qualified engineers. On March 16, 1802, Congress enacted legislation authorizing the organization and establishment of the corps of engineers consisting of officers and cadets to be stationed at West Point, a key American Revolutionary military fortress. The United States Military Academy began that year with a class of twelve cadets (Forman, 1950).

Some original plans for West Point called for the inclusion of midshipmen and earlier plans proposed a military university for both the Army and the Navy (Frrman, 1950). Successive naval secretaries had been advocating an on-shore academy since 1814 but congressional support was lacking (Lovell, 1979). Training for the Navy continued in an apprenticeship system until 1845. In 1845, Secretary of the Navy, George Bancroft, "by a virtual slight of hand" (Lovell, 1979: 28), utilized a variety of powers and procedures to establish a naval school in Annapolis at a fort which he had had transferred from the War Department to the Navy Department. Bancroft concluded all arrangements and the naval school was functioning prior to the reconvening of Congress which had been against its establishment. In 1850, the name of the naval school was changed to the United States Naval Academy and in 1851 a continuous four year course of study was adopted (Crane and Kielly, 1945). The four year curriculum demonstrated the influence of West Point graduates on the Naval Academy's Academic Board and faculty (Lovell, 1979).

"In the twentieth century, the principle of the national service academy, as represented by West Point and Annapolis, was so generally accepted in America that it was extended to other branches of the federal service" (Brubacher and Rudy, 1976: 224). The Coast Guard, originally known as the Revenue Service, was the next branch of the military to organize formal education of

its future officers. The Revenue-Marine was established "to police the customs and to enforce neavigation laws" (Lovell, 1979: 35). The first instructional efforts for Revenue-Marine cadets began in 1876, "the date still cited in Coast Guard publications as that of the founding of their academy," when a two-year period of instruction was legislated (Lovell, 1979: 35). The two-year instruction was "little more than a two-year apprenticeship supplemented by tutoring in technical subjects . . . conducted primarily at sea" (Lovell, 1979: 35). In 1900, on-land instruction began; in 1903, a third year of instruction was added for future line officers; in 1915, the coast Guard was created by the merger of the Revenue Service with the Life Saving Service. The Revenue Cutter Academy became the United States Coast Guard Academy. "Congress encouraged the trend toward emulation of the other academies in 1926 when it authorized a four-year course of instruction at the Coast Guard Academy" which was implemented in 1931 (Lovell, 1979: 36). Lovell cites two factors which influenced the development of the distinctive character of the Coast Guard Academy: its miniscule size and the unique responsibilities of the Coast Guard. "Yet despite this distinctive emphasis on the Coast Guard and Coast Guard Academy subcultures, there was never any doubt that the school at New London, like those at West Point and Annapolis, was a military academy" (Lovell, 1979: 37).

In 1948, just one year after the Department of the Air Force was established, the Air Force prepared plans for an academy. The Air Force Chief of Staff rejected earlier suggestions that the academy provide just the final three of five years and directed a planning board to "plan a four-year course of instruction along the lines of the other service academies and without provision for pilot training" (Lovell, 1979: 61). In March, 1954, legislation was passed authorizing creation of the Air Force Academy; the Secretary of the

Air Force selected Colorado Springs as the site for the Academy and the Air Force Academy began in 1955 in temporary quarters in Denver, Colorado (Lovell, 1979). The majority of the initial Air Force Academy faculty or administration were either graduates of West Point, had taught there, or both, thus the "emulation at the Air Force Academy of West Point practices and traditions" (Lovell, 1979: 63). Some differences, however, were evident: "the totally prescribed curriculum was abandoned, academic majors were instituted, and cadets were given credit for college-level course work taken elsewhere" (Lovell, 1979: 59).

In addition to the four armed services academies, a fifth federal academy, the Merchant Marine Academy was founded in 1938; instruction began in 1942. The graduates of the Merchant Marine Academy enter a variety of maritime-related careers, most in private industry. The graduates of the four other academies unless medically disqualified, are commissioned into the armed forces (Lovell, 1979).

Although the service academies were created to provide appropriate education preparation for the future officers of the respective branch of the armed forces, "a service academy exists first and foremost to instill discipline and to provide military training, and only secondarily to provide a college education" (Lovell, 1979: 81). If the service academies become more "civilianized," the education provided at the academies that was so distinctive that it could not be replicated at a civilian institution will be lost and the academies could "lose the advantage of product differentiation" (Lovell, 1979: 279). The Carnegie Commission, in 1976, listed a few other specialized military service schools offering degrees, for a total of seven institutions, enrolling almost 18,000 students. A few private military schools, such as the Citadel and Virginia Military Institute, also provide

this very specialized type of higher education.

4. Medicine

The early American settlers received little or very poor medical care; few physicians emigrated to the "New World" and those who did "were poorly trained and unsuccessful in their medical practices at home" (Kaufman, 1976: 5). The apprenticeship system developed:

> The likely youth of that period, destined to a medical career, was at an early age indentured to some reputable practitioner, to whom his service was successively menial, pharmaceutical, and professional: he ran his master's errands, washed the bottles, mixed the drugs, spread the plasters, and finally, as the stipulated term drew towards its close, actually took part in the daily practice of his preceptor--bleeding his patients, pulling their teeth, and obeying a hurried summons in the night (Flexner, 1910: 3).

The term of apprenticeship was generally from five to seven years but in order to be considered a "physician," one had to graduate from a university (Kaufman, 1976). Since, however, most apprentices studied and learned with someone who was educated by apprenticeships themselves, "it can be assumed that for most apprentices medical training was sketchy at best" (Kaufman, 1976: 7). Some European physicians did emigrate and in 1730, of the 3,500 practitioners in the colonies 5% did have degrees, although only approximately 400 had formal training (Thorne, 1973). Kaufman contrasts the apprenticship training received under well tranined European educated physicians with apprenticeship under those trained themselves through apprenticeship (1976). The former apprentices "often boarded ship for Europe, where they completed their education at leading universities" (Kaufman, 1976: 9). These individuals on returning to the colonies would "share. . . the rich experience gained as the 'walked the hospitals' of the old world in footsteps of Cullen, Munro and the Hunters" (Flexner, 1910: 3). These early lectures were the beginnings of the American medical school.

In 1865, two Americans returning from medical education in Edinburgh established the first medical college in America at the College of Philadelphia for students who had completed apprenticeships. The medical college reviewed "the various branches of medical science" and combined "the work of several preceptors, each of whom would theoretically be an expert in a specific field of medical science" (Kaufman, 1980:9). A second medical school was established at Columbia (then King's College) in 1767 and another at Harvard in 1782 and others followed; "thus by the beginning of the nineteenth century there were five medical colleges in the United States, all connected with colleges of arts and science" (Kaufman, 1980: 10). "The sound start of these early schools was not long maintained. . . . with the foundation early in the nineteenth century at Baltimore of a proprietary school, the so-called medical department of the so-called University of Maryland, a harmful precedent was established" (Flexner, 1910: 5). Prior to this proprietary establishment, the earlier schools had followed the continental-Scottish tradition of affiliation with a liberal-arts college (Thorne, 1973). After the War of 1812, most medical schools established were proprietary, "generally established by local physicians who wanted to add to their prestige by being professors at a local medical school, to supplement their income by dividing student fees, and to achieve a competitive advantage by being able to advertise a college connection" (Kaufman, 1980: 10). Kaufman (1976) disputes traditional historians who cite the proprietary colleges as the cause of the reduction of standards, "necessary because of conditions in frontier America," preceded the establishment of proprietary institutions (1976: 39). Reductions occurred in admission standards previously requiring the traditional classical curriculum and in requirements for the M.D. degree; "in 1792 the University of

Pennsylvania abolished the Bachelor of Medicine degree and substantially reduced the requirements for the Doctor of Medicine degree" (Kaufman, 1976: 39). It had previously taken seven years of practice after a bachelor's degree and the defending of a thesis to receive the Doctor of Medicine degree (Kaufman, 1976).

Rapid expansion in the number of medical schools occurred with twenty-six new schools being established between 1810 and 1840 and forty-six between 1840 and 1877, with a total of eighty by 1876 of which sixty-four still were functioning (Kaufman, 1980). Standards were further reduced as existing schools lowered the length of courses and requirements in order to compete for students and their fees; "there were too many colleges . . . instead of competing to provide the best training, they competed to provide the fastest, cheapest and easiest education" (Kaufman, 1976: 42).

In 1846, the American Medical Association (A.M.A.) was established, "committed to two propositions, wiz, that it is desirable 'that young men received as tudents of medicine should have acquired a suitable preliminary education' and 'that a uniform elevated standard of requirements for the degree of M.D. should be adopted by all medical schools in the United States'" (Flexner, 1910: 10). Educational reforms were recommended and adopted by a few schools, which later returned to the traditional lower standards (Kaufman, 1980). Early state licensing laws did not require examinations of medical graduates, merely a degree, a fact which encouraged "the growth of diploma mills." By the 1890's the state examining board standards influenced "the colleges to increase their terms to the six months required by the licnesing agencies, to develop a three year and then a four year curriculum, to teach the special subjects as part of the regular program, to require dissection and to assure that their students had an adequate preliminary

education" (Kaufman, 1980: 18).

The establishment of the Association of American Medical Colleges in 1890 furthered the development of medical school standards as did the AMA committee on education established in 1903, later known as the Council on Medical Education, which "inspected and evaluated the Colleges" (Kaufman, 1980: 19). The Carnegie Foundation for the Advancement of Teaching sponsored The Flexner Report on Medical Education in the United States and Canada (1910) at the request of the Council on Medical Education. The Report documented the existence of poor medical education in the United States (Flexner, 1910). The AMA Council on Medical Education and the AAMC continued to examine and rate medical colleges following the Flexner Report. These examinations and the state licensing requirements lead to the closing of the poorer schools: from 155 in 1910 to 85 in 1920 and 71 in 1941 (Kaufman, 1980).

Reforms in medical education continued with the addition by the 1930s of the internship and the residence for specialized training (Thorne, 1973). The curriculum within medical school was standardized, so much so that Kaufman comments that "schools were in a strait jacket composed of specific and detailed requirements" (1980: 24). Programs did change and a 1964 study found "more elective time and greater integration of the basic and clinical courses" (Kaufman, 1980: 27). Medical education had evolved from an apprenticeship system to an academic discipline. Although many medical schools are part of multi-purpose universities, the Carnegie Commission, in 1976, classified 51 of them as free standing medical schools and centers, 32 of them public and 19 private. They were located in twenty-eight states or dependencies, and enrolled over 66,000 students. In addition a significant number of "other separate health professional schools were classified and listed by the Commision (such as, Texas Chiropractic College, Brooklyn College of Pharmacy, and

the Pennsylvania College of Podiatric Medicine). Twenty-six such institutions, in thirteen states, enrolled over 16,000 students. Thus, in 1976, almost 90,000 students were attending these diverse, varied free-standing institutions specializing in some aspect of health care.

5. Scientific/Engineering Schools

The first separate schools for the legitimate study of science or engineering were the United States Military Academy at Norwich, Vermont (1819) and the Rensselaer Polytechnic Institute at Troy (1924) (Brubacher and Rudy, 1976). Most other technical programs at that time were within liberal arts colleges (Jencks and Riesman, 1968), e.g., the Lawrence Scientific School at Harvard or the Sheffield Scientific School at Yale. The Morrill Federal Land Grant Act of 1862 influenced the establishment of science within higher education. The Massachusetts Institute of Technology (1861) and Cornell (1805-1863) received funds and many new public institutions were established (Jencks and Riesman, 1963).

Although the support from the Morrill Act of 1862 was for the "agriculture and mechanical arts," over the years the distinctions between these institutions and traditional colleges have blurred as the engineering colleges offered more courses for a broader education and preparation for their students and branched into other sciences and as the traditional colleges began offering engineering courses (Jencks and Riesman, 1968). Jencks and Riesman state that "while engineering has by no means become a predominantly graduate profession, it is beginning to show the same tendency to upward mobility that long ago affected theology, medicine, and law" (1968: 229).

Over the years additional separate schools have developed, offering specialized degree programs in these fields. In 1976, the Carnegie Commission listed forty-six such institutions (such as Wentworth College of Technology in Massachusetts, Colorado School of Mines, Georgia Institute of Technology and

the Missouri Institute of Technology). All told, the list included forty-six institutions, of which eight are public and thirty-eight are private. Located in twenty-six states, they enrolled almost seventy thousand students.

Higher Education Institutes for the Arts

> The rise of the arts on the American campus is the result of a long and constant, if not consistent, battle of the natural inclination of human beings to sing, play, draw, paint, sculpt, write, and dance against the forces of puritanism, the work ethic, and the narrow scholasticism of the colonies and later of the United States (Morrison, 1973: 1).

Morrison's review of the arts in higher education includes theater, dance, film, creative writing, music, visual arts, art museums, architecture, fine arts centers and the concert series and traces the development of the arts and inclusion in higher education.

Theater first appeared in American higher education as extracurricular activities, drama in the form of "academical exercises" and playwriting for commencements and "dialogues" (Morrison, 1972: 8). Although professionals were invited to lecture in the 1870s, the first course in "living theatre" was not taught until 1904 and this was a playwriting course (Morrison, 1972). Departments of drama were established at Carnegie Institute of Technology in 1904 and Yale University in 1925 and acting was often taught elsewhere under Public Speaking or Speech (Morrison, 1972). The organization of several organizations, the American Theatre Association in 1936, and the National Theatre Conference in 1931, are cited by Morrison as important to the establishment of theatre in higher education. "At the midpoint of the twentieth century, the theatre in colleges and universities may be said to have established itself on its own terms" (Morrison, 1972: 10).

Dance, "the newest of the arts in higher education" (Morrison, 1972: 15), first appeared in higher education as a form of gymnastic arts or within

physical education. Not until 1917 at the University of Wisconsin was "the first program in dance as an art experience offered" (Morrison, 1972: 14). In 1926 the first major dance curriculum was approved again at Wisconsin. A 1969 study reported that a major or concentration in dance was offered in dance was offered in 110 institutions: "22 were in separate departments, 6 in theatre, 5 in fine arts, and 77 in physical education--the trend being away from physical education toward identification of dance as such" (Morrison, 1972: 14). The master's degree was offered at forty-two institutions and the doctoral degree at six. The first Ph.D. for choreography as a performing art was awarded in 1962 (Morrison, 1972). Morrison states that both dance and film are "forms which are strongly contributing to the revitalization of the arts on campus today" (1972: 15).

University film courses began in the 1920s as introductory courses in a format of art appreciation. In 1932, the first major in film was offered by the University of Southern California and graduate work was offered in 1935 at the master's level and later at the doctoral level. In 1970, New York University established "the first full-fledged scholarly film program with a Ph.D." (Morrison, 1972: 15). Morrison cites a 1971 study of film programs and "47 offered degrees in film, ranging from the A.A. to the Ph.D." (Morrison, 1972: 16). Morrison classifies film offerings into four categories:

1. appreciation/history/general/introduction/film and . . . courses . . .
2. elementary production, usually with film as a studio art . . . ,
3. professional production . . . , and
4. scholarly courses. (1972: 17-18).

Identifying creative or poetic writing as an art is an academic development of the 1960s. In 1968, a Directory of Creative Writing Programs in the Univted States and Canada was published. In the 1970 edition, 37 institutions

offered undergraduate programs, fifty-eight offered graduate programs and four offered Ph.D. programs in creative writing within the English departments of four-year institutions.

Music appeared in colonial colleges in the form of musical societies, singing societies, and musical clubs but not as part of the curriculum until vocal music instruction was offered in the normal schools in 1835. Also in 1835, Oberlin had a professor of music and in 1865 established a conservatory (Morrison, 1972). Lectures in music were offered at Harvard by 1862 and courses for credit were offered in 1870; Vassar offered music courses earlier, starting in 1867. Conservatories developed as early as 1859 (East Greenwich); in 1865 at Oberlin; and in 1867, two in Boston, one in Chicago and one in Cincinnati (Morrison, 1972).

> By 1915, music as an academic discipline had been accepted by colleges and universities across the United States. Departments, schools, and colleges of music had evolved into established units within private and public institutions of higher education" (Morrison, 1972: 25).

Formal education in the visual arts began in the United States with the establishment in 1806 of the Pennsyvlania Academy of Fine Arts. Additional art schools were established in 1826 (Maryland Institute); in 1866 (School of the Art Institute of Chicago); in 1873 (The Massachusetts College of Art and in 1876 (School of the Boston Museum of Art) (Morrison, 1972). Similar separate art institutes were established in other cities. Collegiate art programs were begun at Yale (1869), at Syracuse (1873), and University of Illinois (1876) and "the invasion of the colleges by artists was an inevitable consequence, and art programs proliferated after 1900" (Morrison, 1972: 27). Until the 1930s, the separate art institutes and the collegiate art programs differed; however, in the 1930s, "Professional art schools began the difficult process of moving into the charmed circle of the accredited

schools (the colleges) through sporadic efforts to qualify for membership in the regional associations and thus gain inclusion in an acceptable 'list'" (Morrison, 1972: 28). A 1970 study cited by Morrison lists 605 four-year institutions offering a major in art. Other degree programs are offered by art schools in partnership with a university (Morrison, 1972).

Architecture first appeared in collegiate curriculum in isolated courses at West Point in 1802; at the University of Virginia in 1826; and at Harvard in the Lawrence Scientific School in 1847. However, architecture was not offered as a professional course until 1868 when the Massachusetts Institute of Technology began its architecture program. Cornell established its program in 1871 and the University of Illinois in 1873. Nine programs in all were established by the end of the nineteenth century: seven were within engineering departments and two within fine arts. "Most architecture departments, however, found that being a subdivision of engineering was constructive to the development of a well-balanced program in architecture and struggled to become independent units" (Morrison, 1972: 34). Since architecture encompasses a wide range of concerns and interests, "architecture in higher education has faced the problem of integrating the various components of the discipline into a balanced and meaningful program of instruction and professional practice" (Morrison, 1972: 34). Morrison concludes that of all the arts in higher education, architecture faces the most difficult problems (1972). Morrison includes art museums, fine arts centers, and the concert series as important aspects of the rise of arts in higher education (1972).

As these programs developed within multi-purpose institutions a large number of institutions grew up to offer specialized degree programs in the various arts (such as the Juilliard School, Kansas City Art Institute and Cranbrook Academy of Art). In 1976, the Carnegie Commission classified and

listed fifty-five such institutions, five public and fifty private, with over forty-three thousand students (1976).

Proprietary Institutions

Proprietary institutions providing education at all levels (primary, elementary, secondary, and postsecondary) have existed from the very early decades of this country. The entrepreneurial spirit has existed and been encouraged, along with parallel voluntary nonprofit efforts. As needs for various forms of education have developed, both proprietary and nonprofit institutions have come into being.

For example, correspondence education in the form of current modern home study institutions began in Boston in 1728. In that year, Caleb Phillips offered a course in "shorthand by mail" and advertised it in the Boston Gazette. A century later, the developing need for elementary teachers led to the establishment of proprietary normal schools. Toward the end of the nineteenth century, in 1890, a correspondence course in "mine safety" was the beginning of the International Correspondence Schools. The developing need for secondary school education led to the establishment of the American School in 1897. Both the International Correspondence Schools and the American School are still in operation, almost a century later, both offering postsecondary education coursework, and in the case of the International Correspondence Schools, accredited degree programs at the baccalaureate level. A current example of proprietary institutions moving to meet existing needs took place in April, 1983. In Rhode Island, Bryant College and the University of Rhode Island announced the discontinuance of their programs in business teacher education. The Johnson and Wales institution, a proprietary senior college accredited in the business area, began offering a baccalaureate degree in teacher education to fill this void. An analysis of current offerings of private technical and

business schools in one state (over 200 schools in Arizona) indicated instruction in approximately 60 separate fields such as 1) acting, dance, photography and broadcasting; 2) art, floral design and interior design; 3) automotive, diesel and motorcycle mechanics; 4) languages and speed reading; 5) electronics, solar technology, and optics; 6) business, fashion merchandising, and modeling; and 7) paralegal, medical or dental technology.

Propretary education has been plagued somewhat by the fact that those schools which operated with ethical practices were not always separated in the public mind from those who did not. As a consequence, many efforts have been made during the past century to weed out unethical, diploma-mill type schools and accredit those performing a vital and satisfactory public service. The Carnegie Commission in the first decade and the third decade of the twentieth century made explicit efforts to study medical education and correspondence education in order to spotlight acceptable schools and expose poor and unethical ones. Abraham Flexner and N.P. Colwell studied medical education and John S. Noffsinger studied the field of correspondence education. The studies led to the development of accreditation by the American Medical Association and the establishment of the National Home Study Council in 1926. These examples are illustrative of other efforts which have taken place during the last half century to eliminate poor and unethical proprietary institutions and to strengthen, encourage and support those that remain. In the education amendments of 1972, the federal government officially recognized proprietary institutions in Section 1202 (requiring that they be a part of statewide planning for postsecondary education in order to qualify for federal funds), and also extended federal student support to students attending accredited proprietary institutions.

Currently, it is estimated that there are 7500-8000 proprietary institu-

tions offering some form of postsecondary education. California alone is known to have 2600. Of this estimated national group, 2600 are accredtied by one of the four national accrediting associations listed and approved by the United States Department of Education; the National Home Study Council, the National Association of Trade and Technical Schools, the Association of Independent Colleges and Schools (mostly business oriented institutions), and the Cosmetology Accrediting Commission. The following table lists the number of accredited institutions, those offering degrees, the estimate of enrolled students in 1982 and the estimated number of other unaccredited schools in each group.

Type	Number of Accredited Institutions	Institutions Offering Degree	Enrolled Students	Others not Accredited
NHSC	70	45	2,000,000	300
NATTS	640	100	250,000	3,000 (approx.)
AICS	571	75	600,000	350 ?
Cosmetology	1,300	--	300,000	1,400 ?
Totals	2,600	180	3,150,000	5,000 ?

Summary

The total number of postsecondary education institutions in the United States in 1983 is approximately 11,000. The Department of Education through its Division of Eligibility and Agency Evaluation, lists over 9,000 institutions which are eligible for participation in federal programs, with approximately 6,000 nondegree institutions and programs and close to 3,500 offering degrees. No one actually knows how many unaccredited proprietary postsecondary education institutions exist. Nevertheless, some estimates are possible. The

12.5 million students reported in the Fall of 1982 must be increased to around 15 million when all students at accredited proprietary institutions are included. Although many of the 5,000 unaccredited proprietary institutions are small, it is reasonable to estimate an additional million students, for a grand total of 16 million students attending approximately 11,000 institutions. The recent inclusion of the proprietary sector in federal programs of student aid and statewide planning has changed completely the spectrum of postsecondary education in the United States and thus contributed to the continually expanding diversity of institutions in this country.

CHAPTER IV

Current Influences on Diversity

Currently, the diversity in American higher education is impacted upon by varying influences. Certainly, (1) state and federal governments affect institutions as they treat them differently and emphasize differing social goals. Also, (2) classification systems have an impact on students, faculty, and institutions. Finally, (3) many external agencies both use and enforce diversity through their activities

Governments and Their Effects

State governments have an affect on diversity within a state through legislative appropriations as well as the power legislated to institutions vs. statewide coordinating or governing boards. Centralized systems which exercise institutional autonomy may be cost effective but can be deterrents to creative innovations. Increased costs of attending private institutions favor the growth in enrollments at public institutions.

Millett cites three objectives of state government planning for higher education between 1950 and 1980: 1) access for all high school graduates; 2) expansion of enrollment opportunities for youths and adults in major urban areas; and 3) expansion of programs in technical, needed professional and graduate programs and maintenance of research capabilities at selected universities (1981). The objectives adopted by a state government will influence greatly the institutions of that state.

State support for the private sector of higher education varies with some states utilizing a direct subsidy to independent institutions (Pennsylvania, New York, Illinois); state subsidized private institution student financial assistance programs; and restrictions on state institution's enrollment and

program offerings (Millett, 1981). Carter states "the private institutions are facing increased financial difficulties" primarily because of pricing decisions made in the public sector, not because of any inherent inadequacies in the private colleges and universities" (1972: 146).

The federal government "has been the catalyst for development of the nation's public higher education system, the massive expansion of the basic and applied research capability of colleges and universities, and the commitment of higher education to equal access and opportunity" (McGuinness, 1981: 157). Federal land grants prior to and including the Morrill Acts of 1862 and 1890 provided land and money for many of the nation's 'flag ship' universities. The federal government's support of the experimental farms were the first of many research subsidies. The federal government has had a significant impact via equal access legislation.

The Serviceman's Readjustment Act of 1944 (the G.I. Bill) paid student's tuition at the institution of the student's choice thus indirectly favoring lower costing institutions (i.e., state colleges, junior colleges) since the veterans received a flat stipend (Riesman, 1980: 349). Student fluidity of movement has been increased, however, by federal aid and student choice has been a factor affecting the diversity in American higher education. The G.I. Bill, federal direct student aid and state education assistance in the form of vouchers for private institutions are all aspects of greater student freedom in institution selection. There is less social stigma in "dropping out" for a year or two, in changing majors or in changing institutions.

Discrimination against individuals 'because of race, religion, creed, color, or national origin' has been judged illegal. The affect of universal access on diversity is discussed by Gardner and he states "the notion that so-called quality education and so-called mass education are mutually exclusive

is woefully out of date" (1961: 90). Universal access has, however, placed demands upon the institutions in increased enrollments, particularly in the public sector. The rapid expansion of some public institutions, notably the transformation of teacher's colleges to state colleges and universities, is cited as a prime example.

Additional legislation effecting higher education were the acts establishing 1) the National Science Foundation in 1950 to provide support for research; 2) the National Defense Education Act of 1958 to provide support for science, mathematics, engineering, and modern foreign language teachers; 3) the Higher Education Facilities Act of 1963 to provide support for construction in both public and private institutions; 4) the Higher Education Act of 1965 to provide a program of scholarships to students; and 5) the Education Amendments of 1972 which provide the Basic Educational Opportunity Grants (McGuinness, 1981). The federal government's use of accreditation as a criterion of institutional eligibility for federal funds has had a significant impact on institutional diversity.

Classification Systems

In a Commentary in Alan Dunham's book, Colleges of the Forgotten Americans, David Riesman states

> Dunham criticizes (this attitude) . . . that there is only one monolithic model of academic success based on those leading universities which emphasize research and graduate training. . . . what he is saying . . . is that we have enormous apparent diversity in American higher education, but little genuine pluralism of esteem (1969: 175).

Classification systems create a hierarchy of institutions; for example, the AAU Commission on Financing Higher Education systems uses the categories "Complex Liberal Arts Colleges" vs. "Other Liberal Arts Colleges" (Ostheimer, 1951) and the Carnegie Classification system defines Research Universities I

as "the 50 leading universities in terms of federal support . . ." (1973, 1976).

"Some students may know these batting averages" (Riesman, 1958: 34-35) and "vote with their feet" for a more prestigious institution. If students are unaware, most faculty are not. Faculty educated at a Research University I or II or Doctoral-granting University I or II are socialized during their graduate education to the values of scholarly research and productivity and these values are reflective of the classification hierarchy. Doctorally prepared faculty often want "to turn this essentially teaching institution into a carbon copy of the research institutions which they just left as graduate students" (Dunham, 1969: 103). Riesman, in discussing this isomorphism, states that people "bring with them an image of what a proper university should look like" (1958: 36).

Institutions may use "the prestige of other institutions" (Riesman, 1958: 39) as a debating point or as a yardstick against which to measure themselves instead of using their specific mission and achievements as a measure of success. Mayhew states that "For too long the concept of academic excellence has been elaborated in the language of the catalogs of the elite schools" (1973: 164).

> As things now stand, the word excellence is all too often reserved for the dozen or two dozen institutions which stand at the very zenith of our higher education in terms of faculty distinction, selectivity of students and difficulty of curriculum . . . we must develop a point of view that permits each kind of institution to achieve excellence in terms of its own objectives (Gardner, 1961: 99-100).

External Agencies

Among the several external agencies accrediting organizations and associations and private foundations have particular importance. The accreditation

process, whether institutional or programmatic, is concerned with the determination of achievement of established standards or criteria. The establishment of standards for institutions or programs affects the diversity or differences in American higher education institutions. Since accreditation is now a basis for determining eligibility for federal assistance (Harcleroad, 1980), institutions or programs have a stroang incentive to conform to established standards. Another example of the impact of accreditation on an institution is the withdrawal or transfer of students from non-accredited programs or schools (Harcleroad, 1981).

Private foundations affect diversity most importantly through selective gifts.

> Great philanthropic foundations working in the educational field, such as the Carnegie, Rockefeller, and Ford foundations, have by means of their donations been enabled to impel important and beneficial changes in both the administration and the course of study of American colleges and universities, while at the same time inducing a trend toward standardization at a higher level of efficiency in these fields (Brubacher and Rudy, 1976: 407).

Harcleroad makes the following statement about the impact of private foundations: "by their choice of the area they will finance they entice supposedly autonomous colleges to do things they might not do otherwise" (1981: 202).

In addition to these three major forces on institutional diversity, it is important to note that the demands of students for career and professional education have oft times had an adverse effect on diversity. In discussing The Invisible Colleges, and such demands, Astin and Lee state that "instead of remaining distinctive in their educational roles, the church-related liberal arts colleges and the nonsectari · vocational college have become more alike and have increasingly competed for the same students" (1972: 21). External diversity has decreased as internal diversity increases.

In such a diverse system it is possible to have quality and excellence.

According to John Gardner

> If we are to do justice to individual differences, if we are to provide suitable education for each of the young men and women who crowd into our colleges and universities, then we must cultivate diversity in our higher educational system to correspond to the diversity of the clientele (1961: 98).

But we must also refine our concept of excellence: "we must develop a point of view that permits each kind of institution to achieve excellence <u>in terms of its own objectives</u>" (Gardner, 1961: 100). Quality and diversity can and do exist.

CHAPTER V

Value of Diversity

> If we are to do justice to individual differences, if we are to provide suitable education for each of the young men and women who crowd into our colleges and universities, then we must cultivate diversity in our higher education system to correspond to the diversity of the clientele. There is no other way to handle within one system the enormously disparate human capacities, levels of preparedness and motivations which flow into our colleges and universities (Gardner, 1961: 97-98).

In this quote, Gardner demonstrates one of the reasons for diversity: individual needs or differences. Consumer choice is a frequently cited reason for diversity. Stadtman lists the following six reasons why diversity is "prized" in American higher education:

1. Increases the range of choices available to learners.
2. Makes higher education available to virtually everyone, despite differences among individuals.
3. Matches education to the needs, goals, learning styles, speed, and abilities of individual students.
4. Enables institutions to select their own missions and confine their activities to those that are consistent with their location, resources, level of institution, and clienteles.
5. Responds to the pressures of a society that is itself characterized by great complexity and diversity.
6. Becomes a precondition of college and university freedom and autonomy because the greater the differences are among institutions, the more difficult it is for a central authority to convert them into instruments of indoctrination rather than of education (1980: 98-99).

The pattern of diversity in American education has changed. As institutions have changed, "the effect of change has been to blur the distinctions between the various types of institutions" (Pace, 1974: 2). Women's and men's

colleges have become coeducational institutions; teachers colleges have become state colleges and later state universities; junior or two year colleges have become four year colleges; and many private institutions have closed or come under public control. Indeed, the shift in enrollments from the private sector to the public sector is noted by both Pace (1974) and Riesman (1980) as a major factor in decreasing diversity. Riesman (1980) details why the public sector is unable to be as distinctive as the private sector. Pace concludes that "about the same amount of diversity still exists in the system despite some loss of distinctiveness in certain types of institutions" (1974: 130).

What of the future of diversity in American higher education? The historical section described the need for each type of institution as it was established. Perhaps as our country has developed since the establishment of these institutions, certain needs or reasons for which distinctive colleges were developed are now less evident in American society. However, diversity will remain in American higher education, in those institutions which respond to the changing needs of the American people for higher education.

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