

DOCUMENT RESUME

ED 353 376

CE 062 764

TITLE Lifelong Learning Trends: A Profile of Continuing Higher Education. Second Edition.

INSTITUTION National Univ. Continuing Education Association, Washington, DC.

PUB DATE Mar 92

NOTE 63p.; For an earlier version, see ED 319 961.

AVAILABLE FROM National University Continuing Education Association, Publications Office, One Dupont Circle, N.W., Suite 615, Washington, DC 20036-1168 (\$20 plus \$3 postage and handling; members--20% discount).

PUB TYPE Statistical Data (110) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS College Students; *Continuing Education; Corporate Support; Educational Finance; Enrollment Projections; Enrollment Rate; *Enrollment Trends; Fringe Benefits; Higher Education; *Lifelong Learning; Participant Characteristics; *Participation; Paying for College; School Business Relationship; *Student Characteristics; *Student Financial Aid; Teacher Supply and Demand; Trend Analysis; Veterans Education

ABSTRACT

This publication provides national data on trends and participation in continuing higher education. The charts have been derived from data collected by the National University Continuing Education Association and governmental and private organizations. Narrative accompanies each chart. Section I highlights factors contributing to growth: part-time students, composition of labor force, tuition costs, college graduates, high school graduates, educational requirements for jobs, real family income, state distance education systems, and population by age. Section II focuses on student characteristics: part-time students, factors in choosing an institution, preferred class times, independent study enrollments, and post-baccalaureate certificate awardees and enrollments. Section III contains data on financing study, including employee benefits, military participation, financial aid sources, and industry providers of tuition assistance. Data in Section IV concerns preparing for global economy: institutions granting credit for prior learning, formal training by gender and race, states requiring professional continuing education, projected demand for classroom teachers, wage growth, investment in employment and training programs, scientific literacy, and limited English proficient enrollments. Section V presents data on building a literate and informed society: growth in master of liberal studies programs, tuition waivers for adults over 60, summer sessions, and study abroad programs. A glossary is appended. (YLB)

* Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED353376

LIFELONG LEARNING TRENDS

a profile of continuing higher education

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. L. Brown

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



49062764

NATIONAL UNIVERSITY CONTINUING EDUCATION ASSOCIATION

BEST COPY AVAILABLE

LIFELONG LEARNING TRENDS

a profile of continuing higher education

Second Edition

NATIONAL UNIVERSITY CONTINUING EDUCATION ASSOCIATION

N U C E A Founded in 1915, the National University Continuing Education Association promotes expanded opportunities and high-quality continuing higher education. Association members include accredited, degree-granting higher education institutions and comparable non-profit organizations dedicated to postsecondary continuing higher education.

The Association collects and analyzes data to support its public policy activities and to assist its member institutions' planning efforts. The Association conducts three national surveys each year. In addition, NUCEA uses secondary data collected by public and private agencies to produce statistical analyses of relevance to the continuing higher education field.

TO ORDER Copies of this book may be ordered from the National University Continuing Education Association, Publications Office, One Dupont Circle, Suite 615, Washington, D.C. 20036-1168. The price is \$50.00 per copy, plus \$3.00 for postage and handling. Association members receive a 20 percent discount off the cover price.

NUCEA seeks to exemplify its commitment to ethnic, cultural and gender diversity and fairness in all of its forums, both public and private.

Credit: Cover photograph of the Johns Hopkins University Downtown Center is courtesy of Johns Hopkins University.

LIFELONG LEARNING TRENDS

Publication Date: March 1992

Copyright © 1992 by the National University Continuing Education Association

All Rights Reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the Publisher.

Library of Congress Catalog Number: 92-60201

Printed in the United States of America

F O R E W O R D

Lifelong Learning Trends represents an effort to gather in a single publication national data on trends and participation in continuing higher education. The charts contained in this publication have been derived from data collected by NUCEA, as well as by governmental and private organizations. This is the second edition of *Trends*, a book originally published by the Association in 1990.

Several of the charts contained in this publication have been adapted from *NUCEA News*, the Association's monthly newsletter, and "Lifelong Learning Trends: In Brief," a statistical series developed by NUCEA in 1991. Information has been revised and supplemented whenever possible with the most current information available.

J. Noah Brown, NUCEA's director of governmental relations and public affairs, developed the contents of this publication and served as its editor.

Kay J. Kohl
Executive Director
March 1992

C O N T E N T S

| | |
|---|-----|
| FOREWORD | iii |
| I. FACTORS CONTRIBUTING TO GROWTH | |
| part-time students in higher education | 3 |
| composition of U.S. civilian labor force | 4 |
| tuition costs | 6 |
| American college graduates | 7 |
| economic benefits of continuing higher education | 8 |
| a shrinking pool of traditional-age college students | 9 |
| access to instructional technology in American homes | 10 |
| the urbanization of America | 11 |
| growth of single-parent households | 12 |
| educational requirements for new jobs | 13 |
| growth of real family income | 14 |
| state distance education systems | 15 |
| expanding population of older adults | 16 |
| II. STUDENT CHARACTERISTICS | |
| part-time students are primarily older women | 19 |
| most part-time credit students seek degrees | 20 |
| part-time students in public two-year institutions | 21 |
| factors in choosing an institution | 22 |
| preferred class times | 23 |
| part-time baccalaureate students | 24 |
| part-time minority college students | 25 |
| independent study enrollments | 26 |
| certificate students' preferred programs of study | 27 |
| part-time master's degrees | 28 |
| III. FINANCING STUDY | |
| continuing education is most important benefit | 31 |
| military participation in continuing education | 32 |
| employer-provided tuition assistance | 33 |
| tuition assistance for part-time undergraduates | 34 |
| state financial-aid programs for part-time students | 35 |
| top industry providers of employee tuition assistance | 36 |
| company restrictions on tuition reimbursement | 37 |
| IV. PREPARING FOR THE GLOBAL ECONOMY | |
| immigrants with professional credentials | 41 |
| credit for prior learning | 42 |
| training opportunities for minorities | 43 |
| state-mandated continuing education for professionals | 44 |
| continuing education and school teachers | 45 |
| foreign workers' wages | 46 |
| other nations' investment in employment and training | 47 |
| American children exhibit low levels of scientific literacy | 48 |
| need for bilingual teachers | 49 |
| foreign language enrollments show diversity | 50 |

C O N T E N T S

V. BUILDING A LITERATE AND AN INFORMED SOCIETY

| | |
|---|----|
| master of liberal studies programs | 53 |
| continuing education for alumni | 54 |
| continuing education for adults of retirement age | 55 |
| summer schools | 56 |
| study-abroad programs | 57 |
| GLOSSARY | 61 |

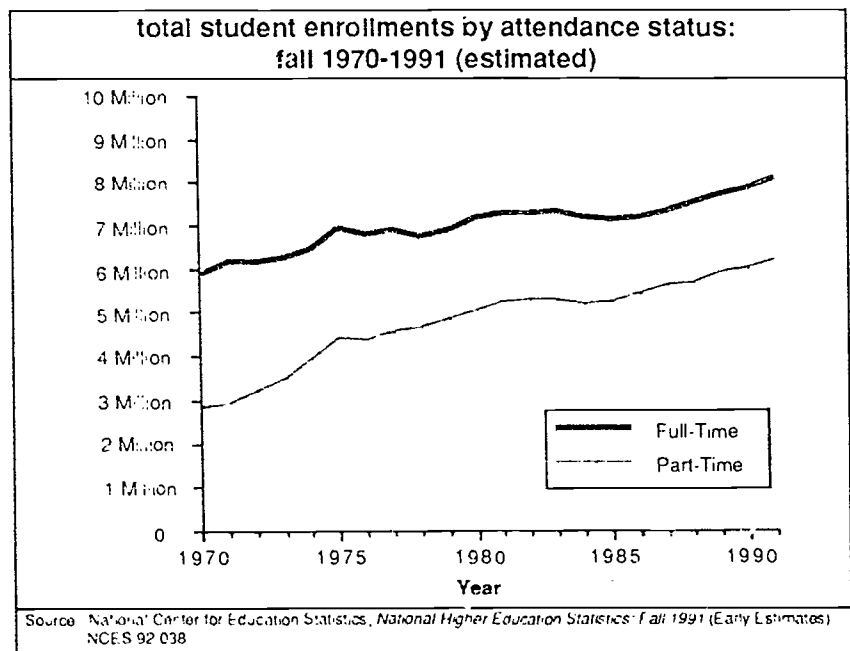
**FACTORS
CONTRIBUTING
TO GROWTH**

I. FACTORS CONTRIBUTING TO GROWTH

part-time students are the fastest growing population in higher education

Part-time students—those who take less than 75 percent of what a given institution considers a full-time credit load—represent the fastest growing population in higher education. This increase in the part-time cohort has fueled the growth of continuing higher education programs nationwide, as institutions have adapted to meet the needs of these students. Now nearly half of all students enrolled at all levels in higher education attend part-time.

- Between 1970 and 1991, the number of part-time student enrollments in American colleges and universities more than doubled, growing from just under 3 million to an estimated 6.1 million.
- One-third of all undergraduate-level and two-thirds of master's-level enrollments are part-time.
- Between 1970 and 1991 (estimated), part-time enrollments increased by 122 percent, compared with 38 percent for full-time enrollments.
- Part-time enrollments have helped keep higher education enrollments growing, despite a marked decline in the traditional college-age population (18 to 24 years old) since 1981.

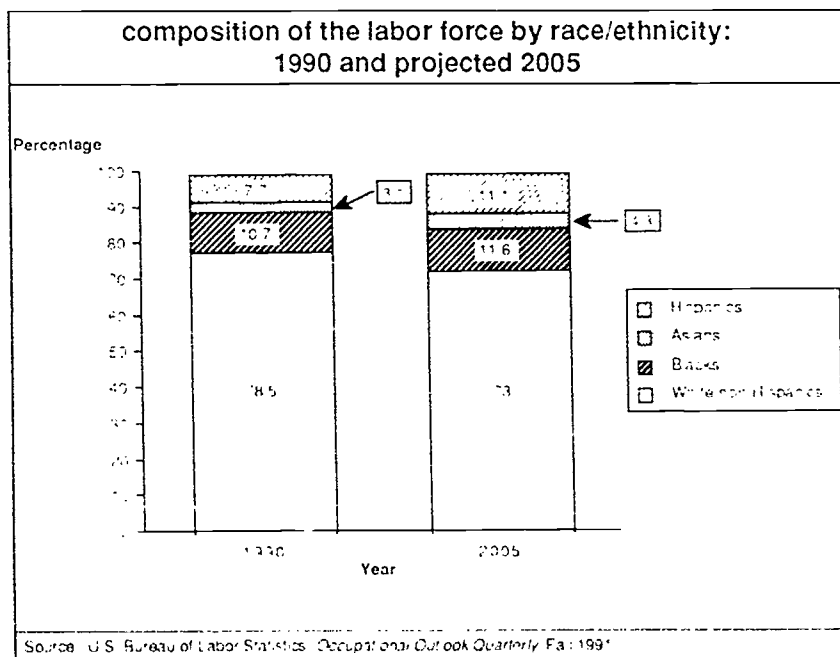


I. FACTORS CONTRIBUTING TO GROWTH

composition of U.S. civilian labor force will change dramatically by the year 2005 . . .

Demographic shifts occurring in the civilian population will change dramatically the composition and age-distribution of the labor force by the year 2005. These shifts result from varying birth rates in population groups, changing immigration patterns, longer career spans and increasing numbers of women entering the workforce to supplement family incomes or support single-income households.

- In 1990, white, non-Hispanics accounted for 78.5 percent of the U.S. civilian labor force. In the same year, blacks accounted for 10.7 percent of the labor force; Hispanics 7.7 percent; and Asians the remaining 3.1 percent.
- By the year 2005, however, demographic shifts will reshape the American labor force. Minorities will capture a larger share of the jobs, while the percentage of white, non-Hispanic workers will fall to 73 percent of the total.
- By the year 2005, the number of Hispanic workers will virtually equal the number of black workers, while Asian workers will constitute 4.3 percent of the labor force.

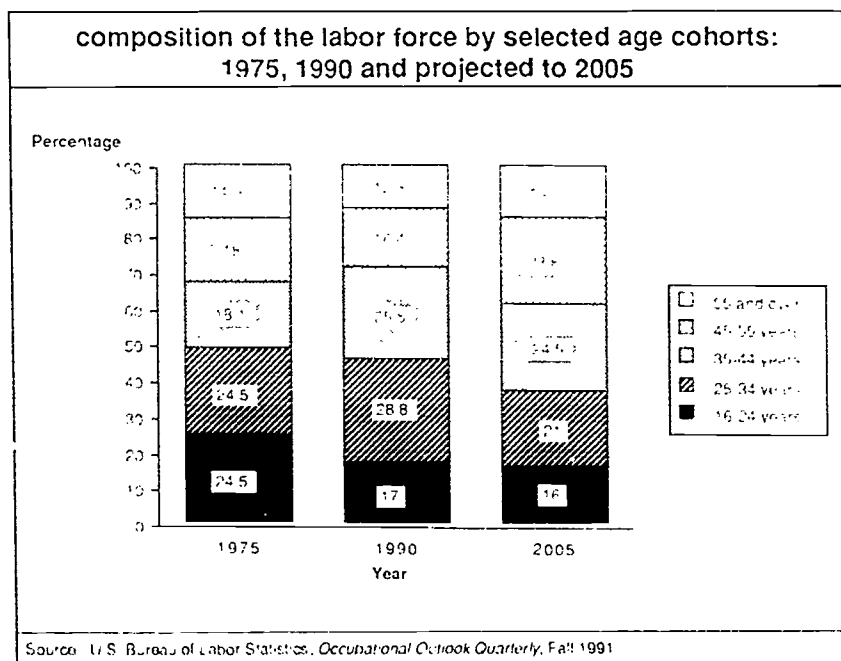


4. LIFELONG LEARNING TRENDS

I. FACTORS CONTRIBUTING TO GROWTH

... as will the age distribution of the labor force

- In 1975, workers 16-to-34-years-old comprised nearly half of the U.S. civilian labor force. By 2005, however, this age cohort will be eclipsed by the 35-to-55 age cohort, which will account for 48.3 percent of the labor force.
- Better health care and declining birth rates are contributing to lengthening Americans' career spans, allowing them to remain financially independent.
- The aging labor force will require new investments by the public and private sectors in education and training, in order to facilitate American economic growth and productivity.



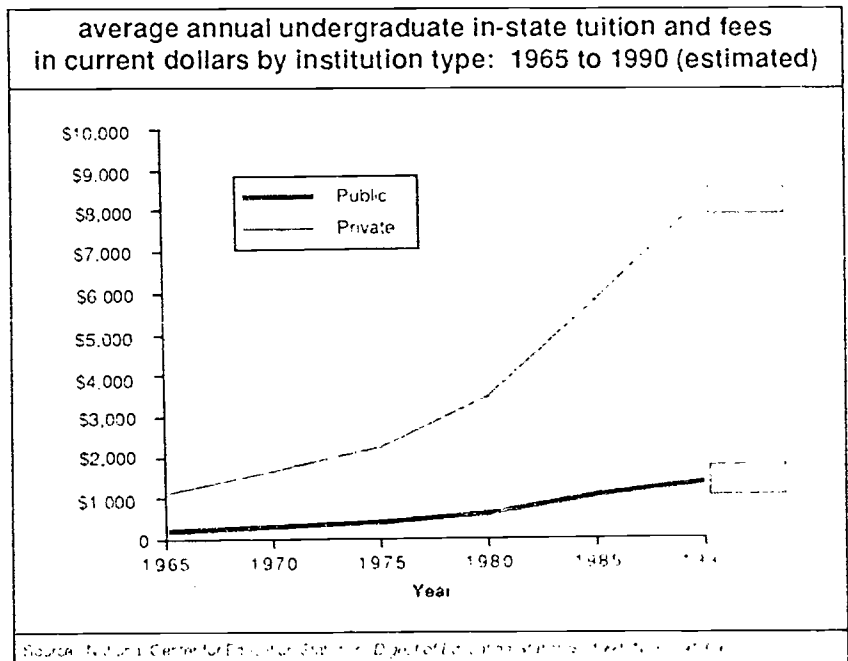
I. FACTORS CONTRIBUTING TO GROWTH

tuition costs continue to outpace inflation

Average annual undergraduate tuition and fees at American colleges and universities have risen steadily since 1965. Over the past 10 years, the average college tuition has risen faster than the annual inflation rate. The increases have been highest at private institutions.

Rising tuition costs and the decline in the purchasing power of student financial assistance have profound consequences for part-time students. The decision to attend postsecondary education is measured very often in economic terms.

- More than half of part-time students work full-time and attend classes during the morning or evening hours.
- Increases in tuition costs strain part-time students because of the scarcity of federal, state and institutional financial-aid resources available to them.
- The majority of part-time students attend public two-year and four-year institutions, where tuition and fees are lower.
- Many part-time students come from low-income families, and although they qualify for Pell Grants and other student-aid programs, they find the available monies are not sufficient to permit attendance on a full-time basis.



6 LIFELONG LEARNING TRENDS

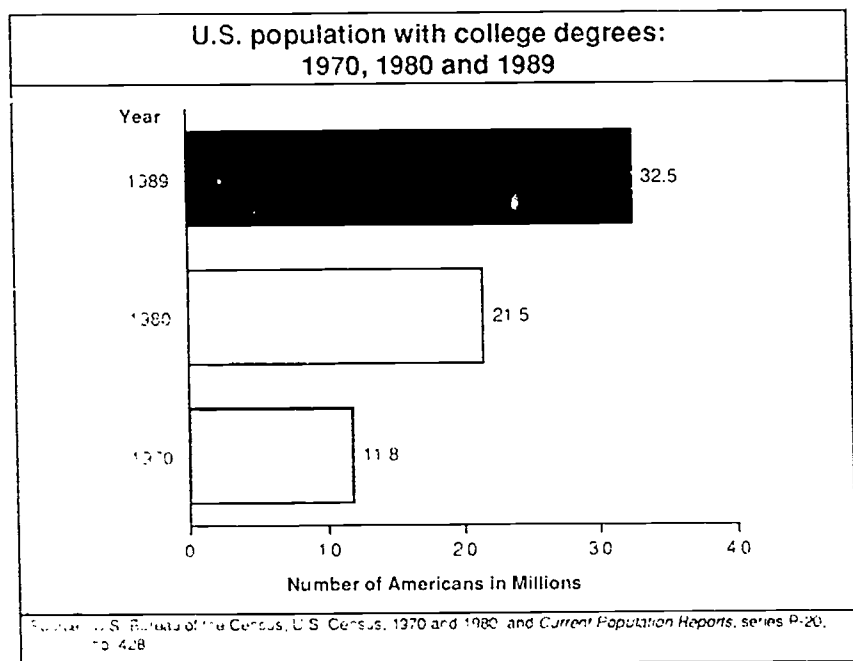
I. FACTORS CONTRIBUTING TO GROWTH

more Americans are college-educated than ever before

The dramatic rise in Americans' levels of educational attainment during the past two decades is apparent in the number of college graduates in the U.S. population.

The increase in the educational attainment of Americans is helping to spur the enrollments of part-time students at the pre- and post-baccalaureate levels. Research shows that there is a consistent relationship between level of educational attainment and the propensity to pursue continuing education opportunities during one's lifetime.

- In 1970, only 11.8 million Americans had a college degree. Nearly two decades later, 32.5 million had college degrees.
- 39 percent of pre-baccalaureate students attend part-time, and more than 65 percent of master's degree candidates are part-time students.
- It is estimated that three out of four jobs today require some postsecondary education.



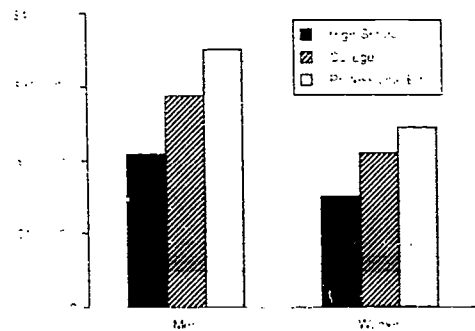
I. FACTORS CONTRIBUTING TO GROWTH

continuing education provides increased economic security for adults

Continuing education beyond high school is one of the smartest financial investments a person can make. Individuals who continue their education beyond high school earn higher salaries than those without postsecondary education. And this income gap continues to expand over a lifetime.

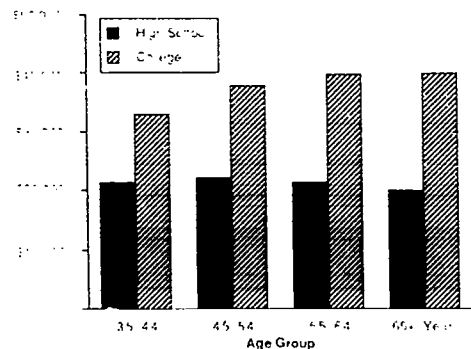
- Male college graduates between 25 and 34 years of age earn 27 percent more than male high school graduates of the same age.
- Female college graduates between 25 and 34 years of age earn 28 percent more than female high school graduates of the same age.
- The differences in income grow over time; college graduates between 35 and 44 earn 154 percent more than individuals with high school diplomas; the difference climbs to nearly 200 percent in the 65-and-over group.

median income for men and women aged 25 to 34 by education level



Source: *The Forgotten Half: Pathways to Success for America's Youth and Young Families*, Final Report of The William T. Grant Foundation Commission on Work, Family, and Citizenship, November 1988

median income by age group and education level



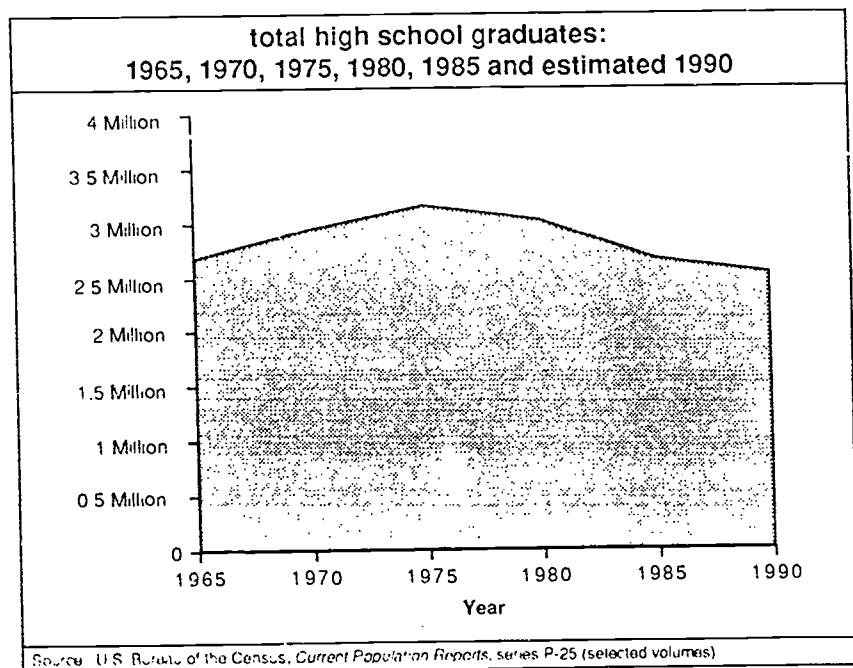
Source: *The Forgotten Half: Pathways to Success for America's Youth and Young Families*, Final Report of The William T. Grant Foundation Commission on Work, Family, and Citizenship, November 1988

I. FACTORS CONTRIBUTING TO GROWTH

a shrinking pool of traditional college-age students

Higher education enrollments increased steadily between 1975 and 1991, in spite of a significant decline in the college-age population (ages 18 to 24). Two major factors accounted for the expansion of higher education enrollments. First, a greater percentage of high-school graduates went on to college than at any time in the past. Second, the number of older, part-time students enrolling in higher education increased dramatically during the same period.

- The number of high school graduates each year has declined markedly since 1975. The all-time high was reached in 1976, when 3,155,000 students graduated from high schools nationwide.
- The number of high school graduates climbed from 2.6 million in 1965 to more than 3.1 million in 1975. Between 1975 and 1985, however, the number of high school graduates dropped again to 2.6 million per year, representing a complete reversal in a 10-year period.
- The number of high school graduates in 1990 was estimated to be more than 2.5 million.

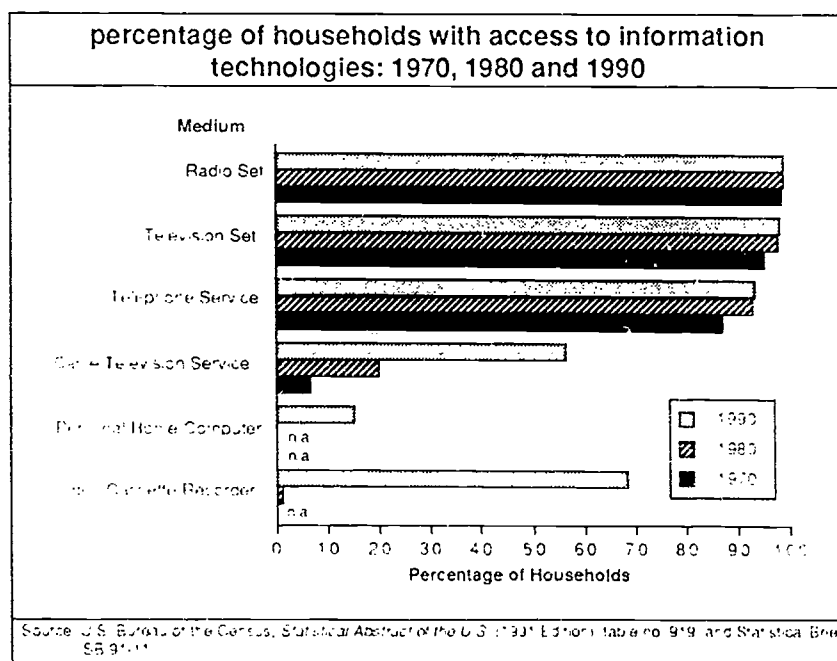


I. FACTORS CONTRIBUTING TO GROWTH

virtually every American home has access to instructional technology

With the continuing development and use of instructional technologies in higher education, more individuals have an opportunity to learn at home. Instructional technologies are most frequently used by individuals who reside some distance from a college campus or who have difficulty traveling regularly to campus for instruction. Most American homes today are technically equipped to receive such educational programs.

- Almost every American home, regardless of income, has a television set.
- More than half of homes in 1990 were served by cable television.
- Most homes have telephone service and at least one radio set.
- The penetration rates for video-cassette recorders is climbing to 70 percent.
- About one in six adults owns a home computer.



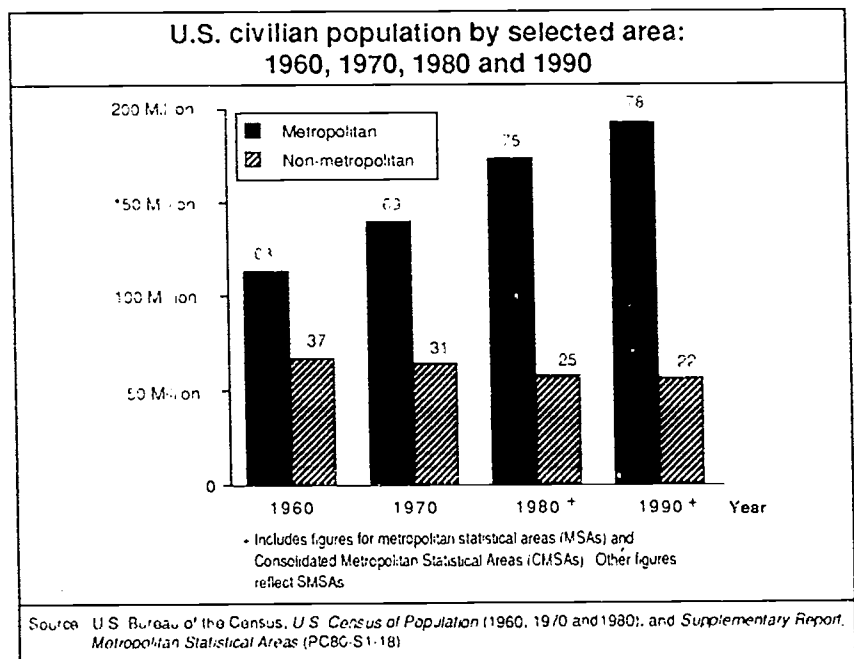
I. FACTORS CONTRIBUTING TO GROWTH

the urbanization of America

More Americans live in metropolitan areas than ever before. Population is measured in terms of standard metropolitan statistical areas (SMSA), or areas that contain at least one central city of 50,000 inhabitants or more.

The population shift from non-metropolitan areas to larger towns and cities has prompted many colleges and universities to develop off-campus learning centers in downtown and suburban locations, closer to prospective adult students. The increasing centralization of new jobs and workers in metropolitan areas has contributed to the growth of continuing education programs, as individuals re-train or prepare for newly created jobs. Jobs in the service sector are most affected by rapid growth of technologies and specialized knowledge areas.

- In 1960, 63 percent of the nation's population lived in metropolitan areas as defined by the U.S. Bureau of the Census.
- By 1990, that figure had risen to nearly 79 percent.
- Only 1.7 percent of the population were employed in agriculture, forestry and fisheries in 1990.



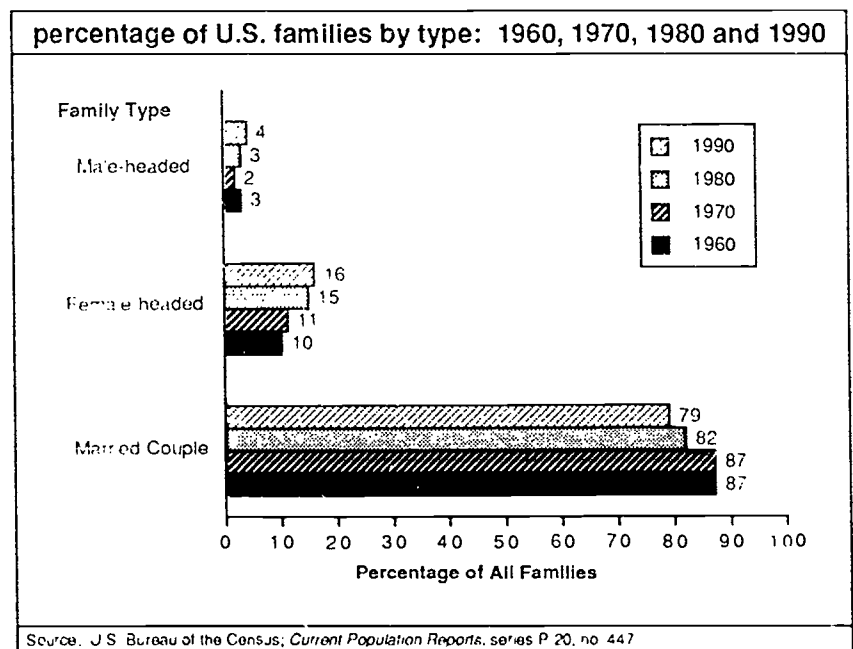
I. FACTORS CONTRIBUTING TO GROWTH

more households are headed by single parents

The number of American families headed by single parents has increased substantially since 1960. Unmarried teenagers head many of these families. Other single parent families are headed by divorced or widowed parents. Almost 80 percent of single-parent families are headed by women.

Single-parent families are often caught in a "double-bind" situation. These men and women must work to support families, yet a lack of education prevents many of them from qualifying for much more than minimum-wage jobs. This places many single-parent families at or below the poverty line. For working fathers and mothers with heavy family responsibilities, part-time study is often their only chance to prepare for higher paying jobs that promise a measure of economic security.

- Single-parent families account for more than 27 percent of all families with children under 18 years of age, more than twice the percentage in 1970.
- Sixteen percent of all families are headed by women; male single-head-of-households account for 4 percent.
- Among whites, 22 percent of all families are headed by single parents; among blacks, about 59 percent; and among Hispanics, 24 percent.

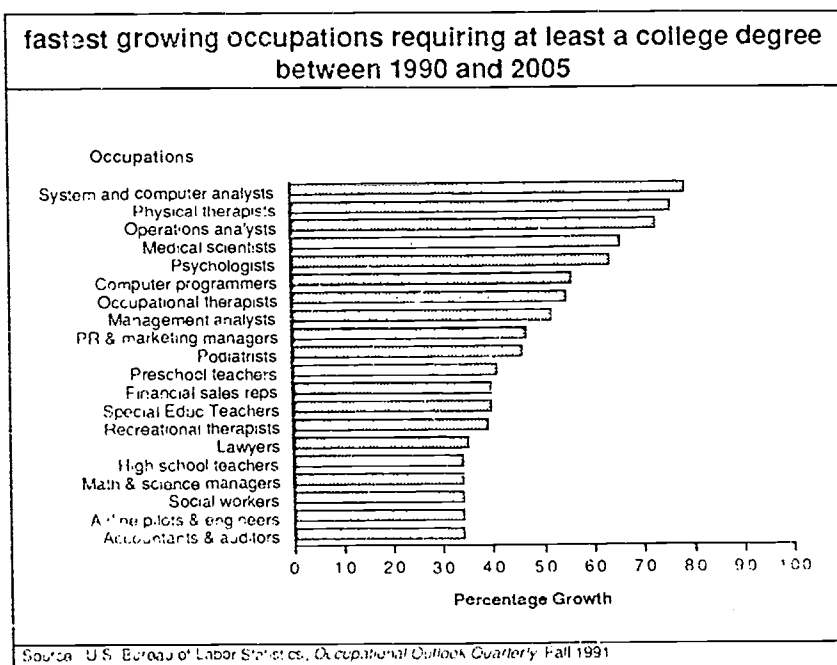


I. FACTORS CONTRIBUTING TO GROWTH

job growth is fastest in occupational groups requiring more education

Of the new jobs being created by the year 2005, managerial, professional and technical occupations will be among the fastest growing job categories, accounting for 28 percent of new job openings. These three occupational groups also have the highest proportion of workers with at least some postsecondary education, and in many cases a college degree. These three groups also earn on average, much higher salaries than do virtually all other occupational categories.

It is estimated that three out of four jobs require some postsecondary education. Those people already in the workforce, as well as new entrants, will need higher levels of education and training in order to compete effectively. Of the 20 fastest growing occupations requiring at least a college degree, the top seven are in the health services or computer industries.

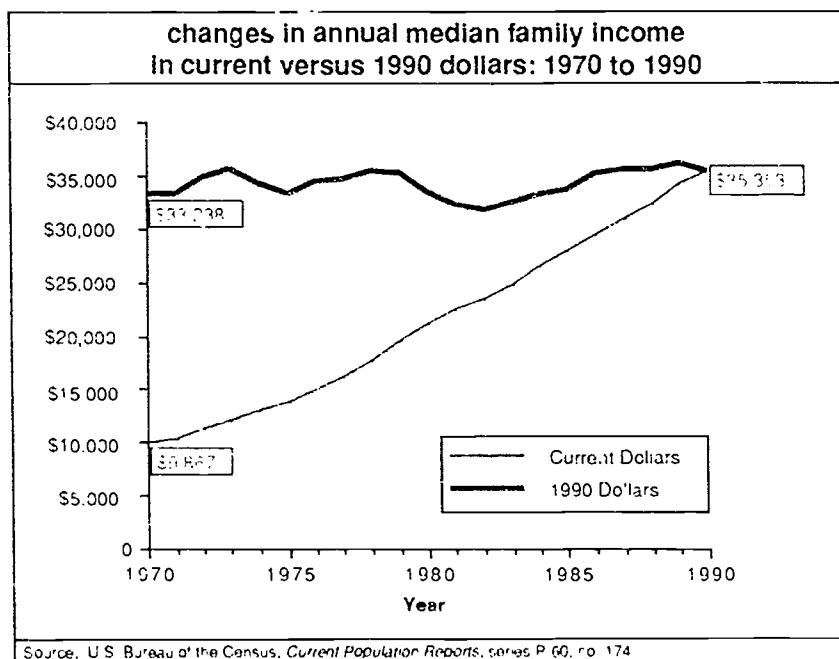


I. FACTORS CONTRIBUTING TO GROWTH

real family income has grown only slightly since 1970

While the average American family has seen its annual income triple since 1970, the figures are misleading. Median family income rose from \$9,867 per year in 1970 to \$35,353 in 1990. But when readjusted for inflation over the same period, median family income in 1970 was the equivalent of \$33,238 in 1990 dollars. Thus in terms of real purchasing power, the average family is only \$2,115 ahead of the average family in 1970.

The virtual non-growth in median family income since 1970 has resulted in a financial squeeze for many families as health care, housing costs and college tuition and fees have grown faster than the rate of inflation. As these costs continue to rise, continuing education is becoming more relevant for adults seeking to upgrade their skills and prepare for higher paying jobs.



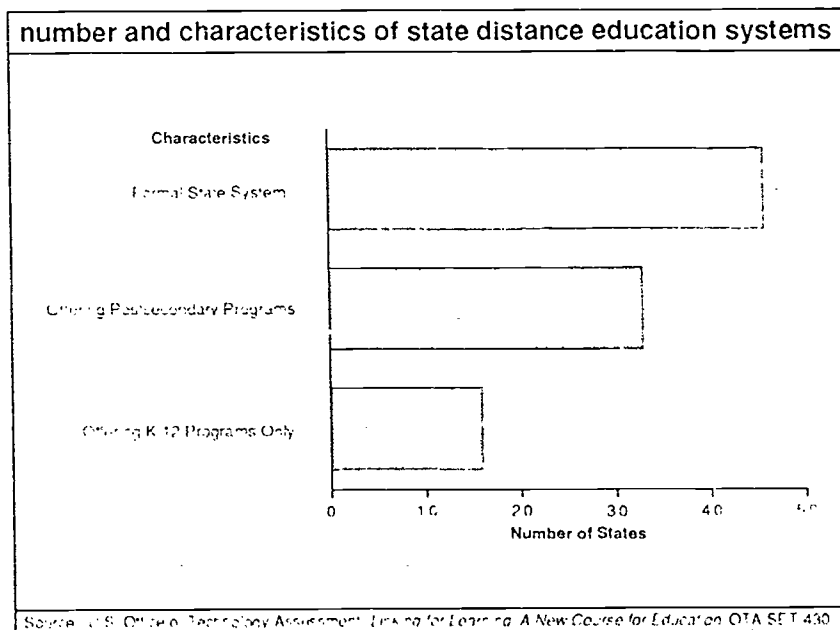
I. FACTORS CONTRIBUTING TO GROWTH

number of state distance education systems is growing

The proliferation of new and cheaper telecommunications technologies and the demand for new educational delivery formats are combining to create an education technology revolution.

Prior to 1988, fewer than 10 states reported significant involvement in or promotion of distance education. Today, virtually every state has jumped into the distance education business by creating statewide delivery systems, the majority of which can deliver higher education programs to adults using a variety of media. In addition, most states offer telecourses without using formal state networks.

The number of distance education programs has proliferated in recent years due to increasing demand from working adults for undergraduate- and graduate-level programs that can be delivered near or at the work place.

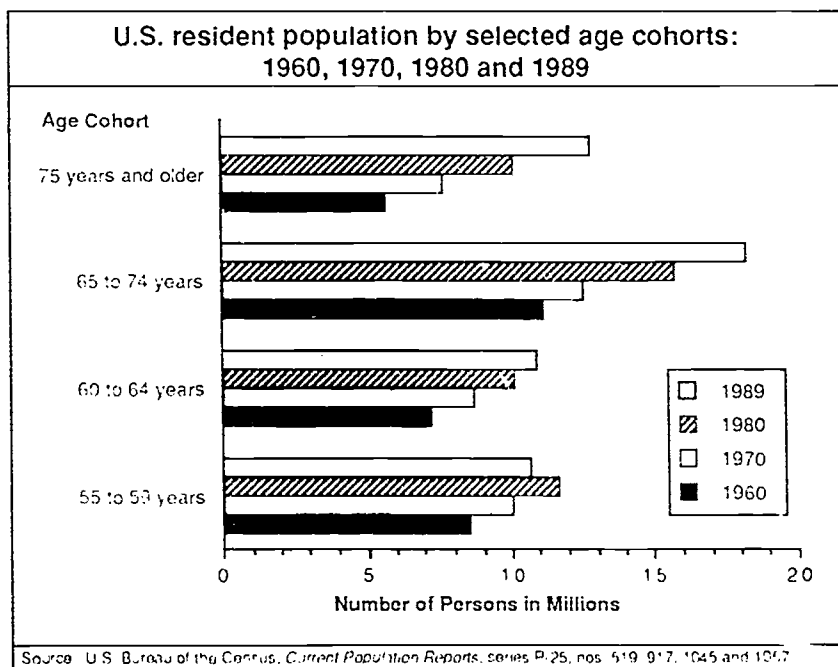


I. FACTORS CONTRIBUTING TO GROWTH

older adult population is expanding rapidly

In 1989, nearly 53 million Americans were age 55 or older. The number of older adults has increased markedly since 1960. Almost 21 million more adults age 55 and older have been added to the census rolls since 1960. Projections indicate that these trends will continue into the next century. As the "baby boomers" age, the ranks of the 55-and-older population are expected to continue to increase rapidly. This growth is affecting profoundly every aspect of American society, from the type of products being sold to how people spend their leisure time.

As older adults work longer and postpone retirement, many seek continuing education in order to stay abreast of new technologies and developments within professional disciplines. For those who do retire, retirement income, such as Social Security, personal savings and retirement funds, may help many to pursue learning in retirement programs and other educational pursuits.



STUDENT CHARACTERISTICS

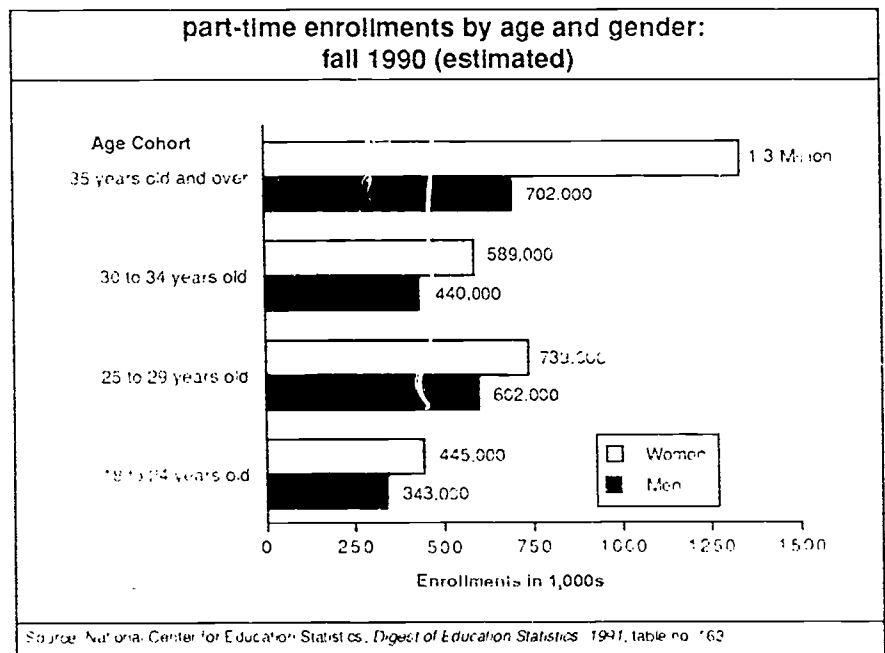
II. STUDENT CHARACTERISTICS

part-time students are primarily older women

Between 1970 and 1990, much of the growth in part-time enrollments derived from an increasing number of women pursuing postsecondary studies. During this period, the number of women enrolled part-time almost tripled, from 1.2 million to 3.6 million. For men, the growth was far less pronounced, from 1.5 million to 2.4 million.

An important segment of these expanding part-time enrollments were women aged 35 years and older. Enrollments for this group more than quadrupled between 1970 and 1990.

- Women have entered the labor force in record numbers during the past 25 years.
- More women must be both bread-winner and care-giver, making full-time attendance virtually impossible.
- The rise in the number of two-income families has prompted many women to seek additional educational credentials.
- During the 1980s, women narrowed the wage gap with men by 10 percent.

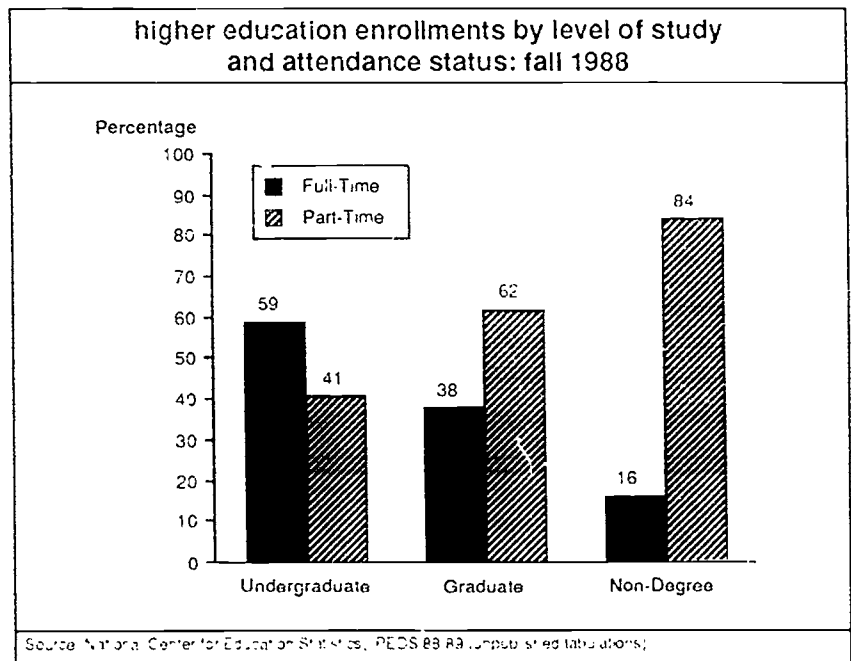


II. STUDENT CHARACTERISTICS

most part-time credit students seek degrees

Most part-time students enrolled in credit programs seek degrees. In 1988, non-degree student enrollments accounted for only 9 percent of all student enrollments. These students are studying for credit, either at the pre-baccalaureate or post-baccalaureate levels, but are not pursuing degrees. Many non-degree students take classes to complement job skills or to satisfy certification or professional requirements. Others making the transition to higher education use these courses to prepare themselves for later degree study. These students represent an important population in continuing higher education and account for a share of all credit offerings at colleges and universities.

- Eighty-four percent of non-degree student enrollments at the pre-baccalaureate level were part-time.
- Many adults seek professional certificate programs that are comprised of credit courses, and many opt to obtain graduate degrees later on.
- State teacher-certification programs typically require adults to take credit courses at regular intervals in order to stay abreast of new knowledge.

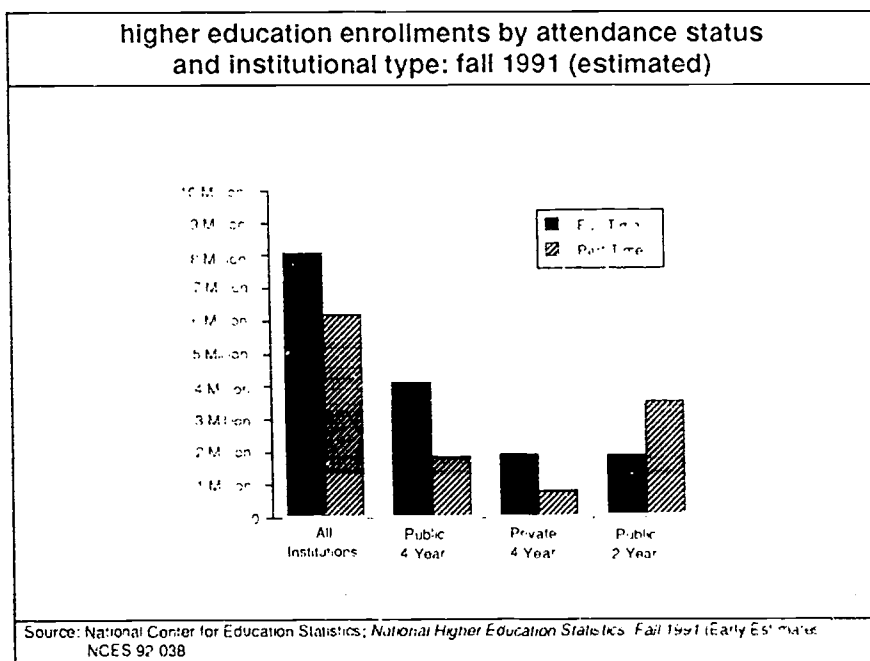


II. STUDENT CHARACTERISTICS

most part-time students attend public two-year institutions

During 1991, almost 14.2 million student enrollments were reported by the nation's higher education institutions. Part-time student enrollments totaled an estimated 6.1 million, or more than 43 percent of all higher education enrollments.

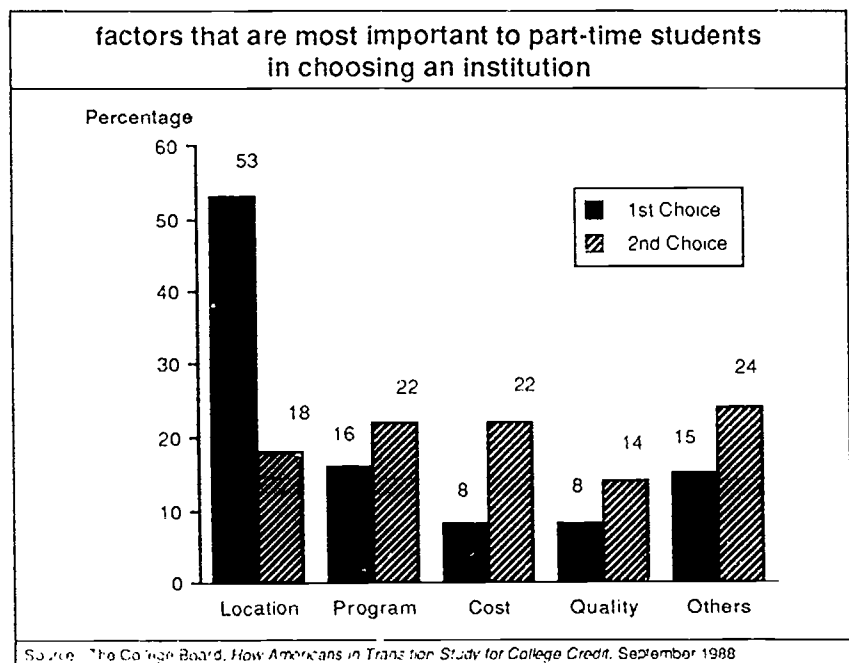
- The majority of part-time student enrollments (57 percent) were in public two-year institutions.
- Total part-time student enrollments at two-year institutions surpassed full-time enrollments by nearly two to one.
- Forty-two percent of the part-time student enrollments were in four-year institutions.



II. STUDENT CHARACTERISTICS

factors influencing a part-time student's choice of institution

More than half of adult, part-time students surveyed by The College Board in 1986 considered location to be the most important factor influencing their choice of institution. Eighteen percent ranked location as the second most important factor in choosing an institution. About 40 percent of students pointed to the curriculum as their first or second most important determinant; 30 percent cited cost; and 20 percent identified academic quality as the prime consideration in selecting an institution.

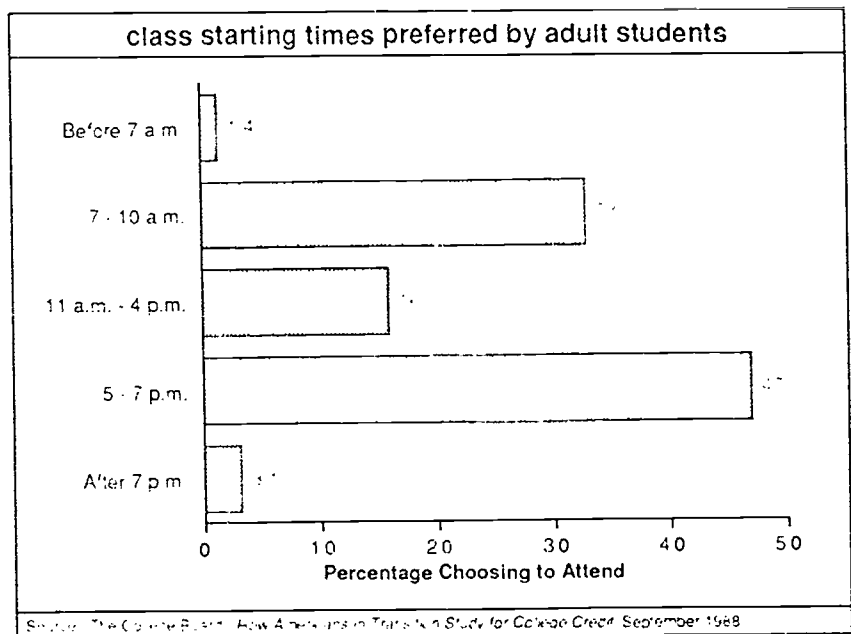


III. STUDENT CHARACTERISTICS

adult students prefer early morning or evening classes

Accommodating busy schedules plays a critical role when adult students select classes. More than one-third of adult students surveyed by The College Board in 1986 chose classes that began between 7 a.m. and 10 a.m. Nearly one-half of adult students, however, chose classes that started between 5 p.m. and 7 p.m. Few students chose to take classes that started at mid-day or after 7 p.m.

The fact that most adults prefer classes in the morning and late afternoon implies that these students fit their class time around work and family schedules.

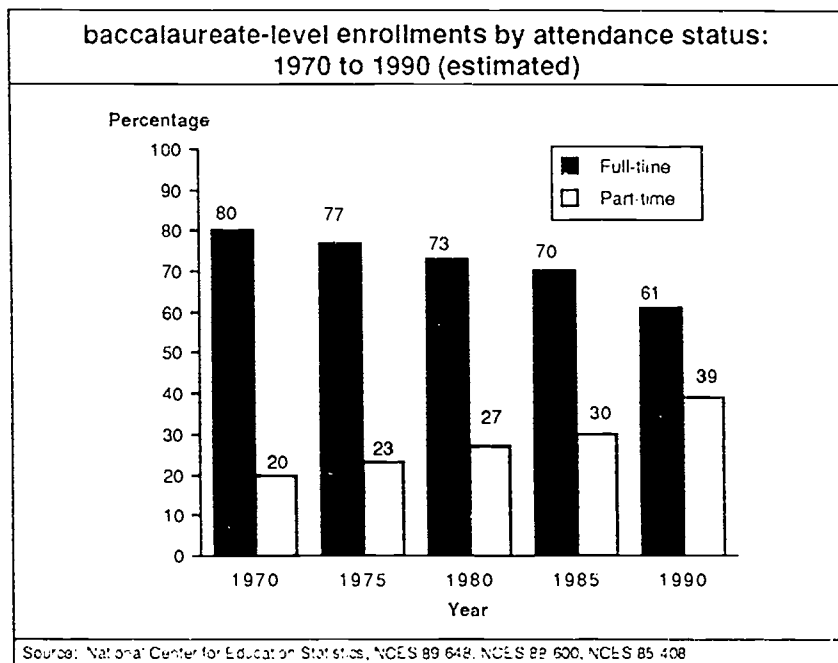


II. STUDENT CHARACTERISTICS

increasing numbers of baccalaureate students are part-time

The number of part-time students working toward their baccalaureate degree has risen steadily since 1970. Greater numbers of women and minorities are enrolling in baccalaureate programs. Many of these students are choosing part-time baccalaureate degree programs. Employers often execute contracts with universities to provide on-site degree programs for their employees.

- In 1970, full-time baccalaureate enrollments outnumbered part-time enrollments by four to one.
- Currently, it is estimated that 39 percent of all baccalaureate-level enrollments are part-time. This figure represents a 19 percent increase in the ratio of part-time students to full-time students since 1970.

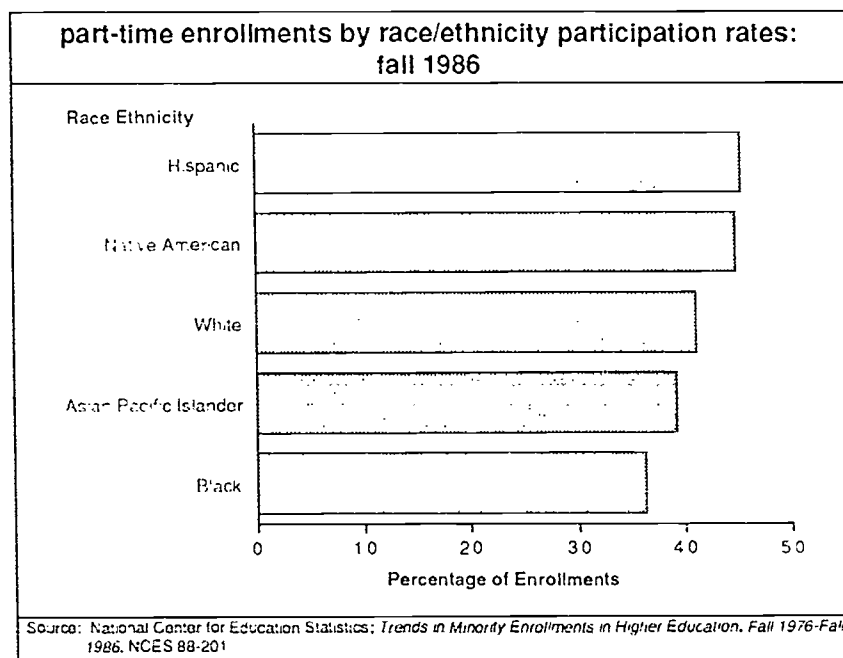


II. STUDENT CHARACTERISTICS

nearly half of all minority college students enroll part-time

Enrollment patterns of minority students closely resemble those of white students. There are slight differences, however, in the enrollment patterns of different racial/ethnic groups.

- Forty-five percent of Native Americans and Hispanics were enrolled part-time in 1986.
- Nearly 40 percent of Asians and Pacific Islanders were enrolled part-time.
- Some 37 percent of black enrollments were part-time.
- Forty-one percent of white enrollments were part-time in 1986.



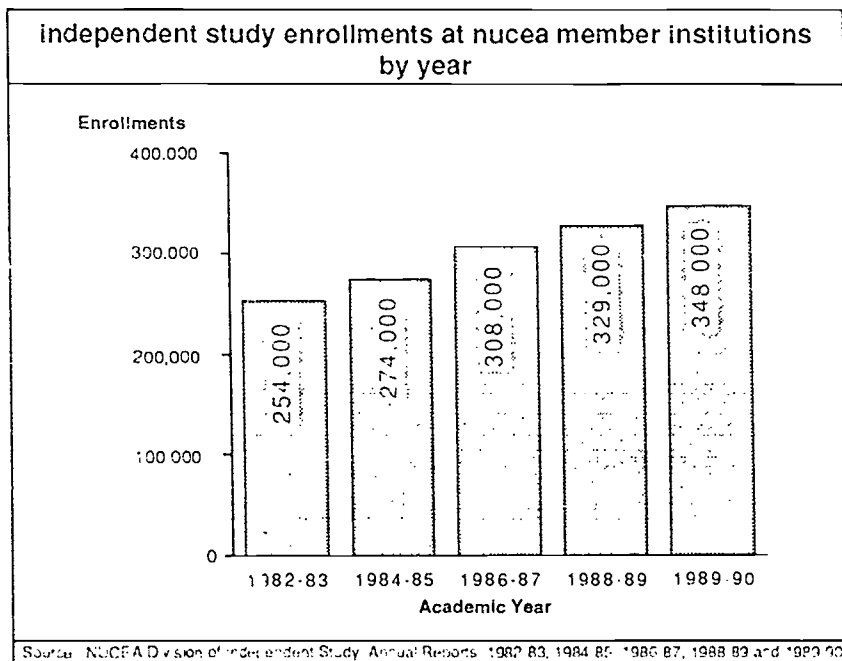
II. STUDENT CHARACTERISTICS

independent study enrollments are increasing

Independent study programs at four-year higher education institutions showed remarkable growth during the 1980s. These programs offer college level credit and non-credit courses, as well as high school diploma programs by correspondence. A number of institutions also offer external degrees, which can be completed with a minimum of time on campus.

Independent study is recognized as an indispensable part of American higher education. Such study is usually defined as an educational process in which a student is able to complete a course of study where and when the student chooses, instead of attending regularly scheduled classes. Students engaged in independent study use not only correspondence instruction, but also television, audio cassette tapes, and computer-assisted learning. Independent study opportunities are sought by diverse student constituencies. Military personnel stationed in remote locations find independent study to be a viable option, as do students in small, rural high schools seeking advanced courses, and students who are homebound for various reasons. For students who hold full-time jobs that require frequent re-location and/or travel, independent study offers a means to earn degree-credit and to advance their careers.

- Independent study enrollments at NUCEA institutions grew by more than 37 percent overall between 1982-83 and 1989-90.



II. STUDENT CHARACTERISTICS

certificate students prefer business and education programs

American colleges and universities awarded nearly 11,000 certificates to students with baccalaureate degrees in 1986-87. Certificates are awarded to students who have acquired certain proficiencies in a specialized area of study through an educational program. Depending on the subject area, certificate programs generally include a number of required courses and a few electives. Some programs also require a practicum or internship.

- Sixty percent of certificates were awarded to students with baccalaureate degrees, and 40 percent to students with master's degrees.
- Roughly 74 percent of certificate programs beyond the baccalaureate level were in business management or education programs.
- Many certificate programs consist of clusters of graduate-level courses that can subsequently be applied toward a master's degree.

| college/university post-baccalaureate certificate awardees: 1986 to 1987 | | | | | | |
|---|------------------------------------|-------|-------|-------|-------|---------|
| Rank | Program Category | Total | Men | % Men | Women | % Women |
| 1 | Business and Management | 4,647 | 3,989 | 85 | 658 | 15 |
| 2 | Education | 3,596 | 1,228 | 34 | 2,341 | 66 |
| 3 | Theology | 504 | 353 | 70 | 151 | 30 |
| 4 | Health Sciences | 264 | 117 | 44 | 147 | 56 |
| 5 | Liberal General Studies | 205 | 109 | 53 | 96 | 47 |
| 6 | Social Sciences | 187 | 117 | 62 | 70 | 38 |
| 7 | Multi-Interdisciplinary Studies | 135 | 81 | 60 | 54 | 40 |
| 7 | Psychology | 135 | 40 | 29 | 95 | 71 |
| 9 | Computer Information Sciences | 133 | 63 | 47 | 74 | 53 |
| 10 | Law | 126 | 52 | 41 | 74 | 59 |

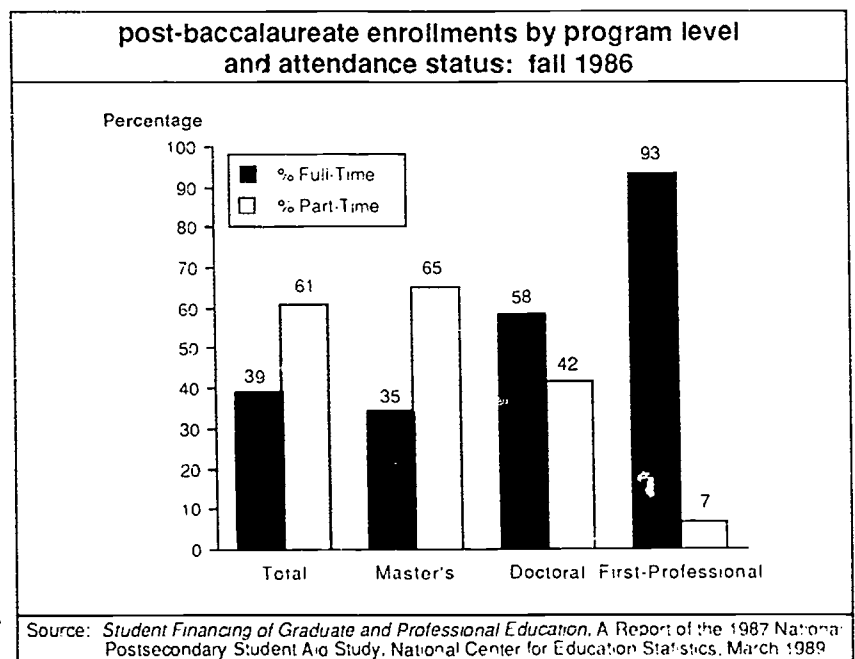
Source: National Center for Education Statistics, *Conditions in the Field of Higher Education, 1986-87*, NCES
97-001, Table 2.1

II. STUDENT CHARACTERISTICS

majority of master's degree candidates are part-time graduate students

Of the more than 2.3 million post-baccalaureate degree enrollments during 1989-90, 58 percent were at the master's degree level. It is estimated that two-thirds of the master's degree enrollments during 1989-90 were part-time. Increasingly, greater numbers of adults are going back to school to earn master's degrees, especially in professional fields. The value of post-baccalaureate-level study is increasing every year as a greater number of new jobs require higher level knowledge and skills.

- Sixty-five percent of master's candidates attended part-time in the fall of 1986 (the latest data available).
- Forty-two percent of all doctoral candidates were part-time students in the fall of 1986.
- Virtually all professional-degree-seeking students attend full-time.



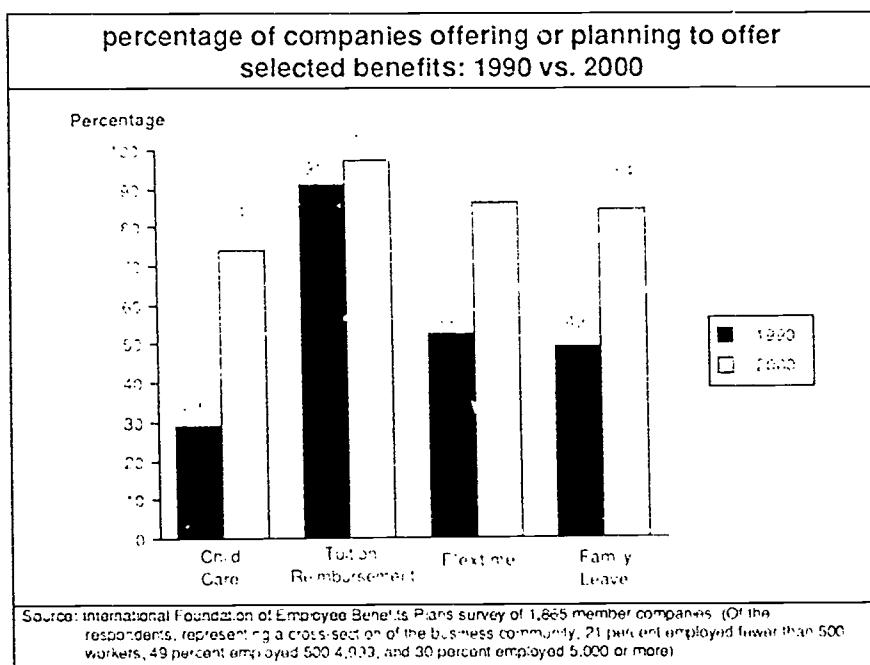
FINANACING STUDY

continuing education is considered most important employee benefit

As America's population continues to slow in growth, diversify and grow older, employers are increasingly turning to employee benefits to attract and retain workers.

Among the many benefits offered to their employees, continuing education is considered the most important and, not surprisingly, among the most prevalent.

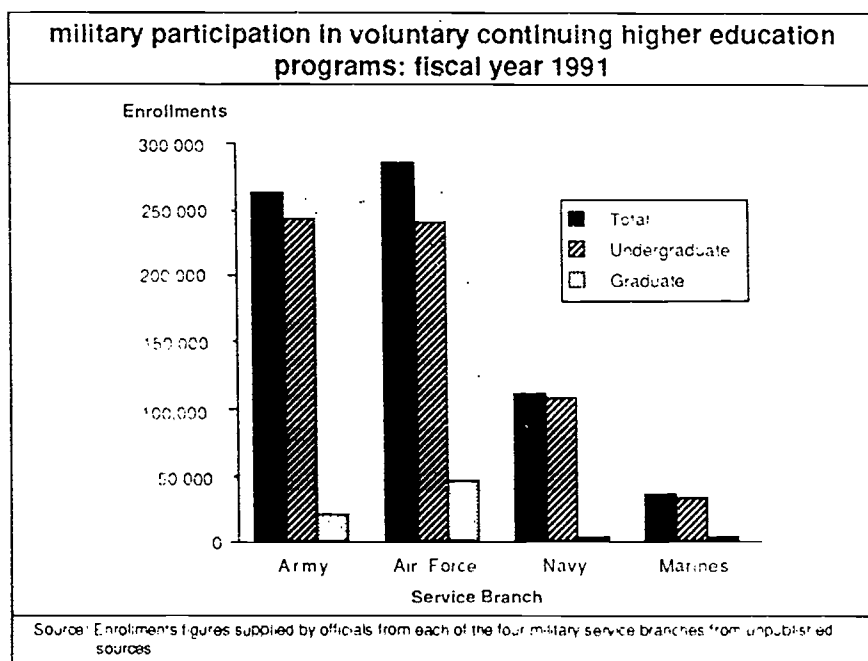
- More than 90 percent of companies currently offer continuing education as an employee benefit, and 97 percent plan to offer their employees this benefit by the year 2000.
- Continuing education ranks above child care, flextime and family leave benefits, considered among the most popular for employees.



military enrollments in voluntary continuing education programs represent a significant population

The Montgomery GI Bill and other tuition incentives have induced more members of the armed forces, both active and reserve, to enroll in college classes and degree programs. During Fiscal Year 1991, active military personnel took more than 690,000 courses. A vast international network supports voluntary continuing education programs for the military. There are more than 475 installations around the world offering education programs to service members. More than 600 U.S. colleges and universities are involved in offering specialized educational programs to military personnel.

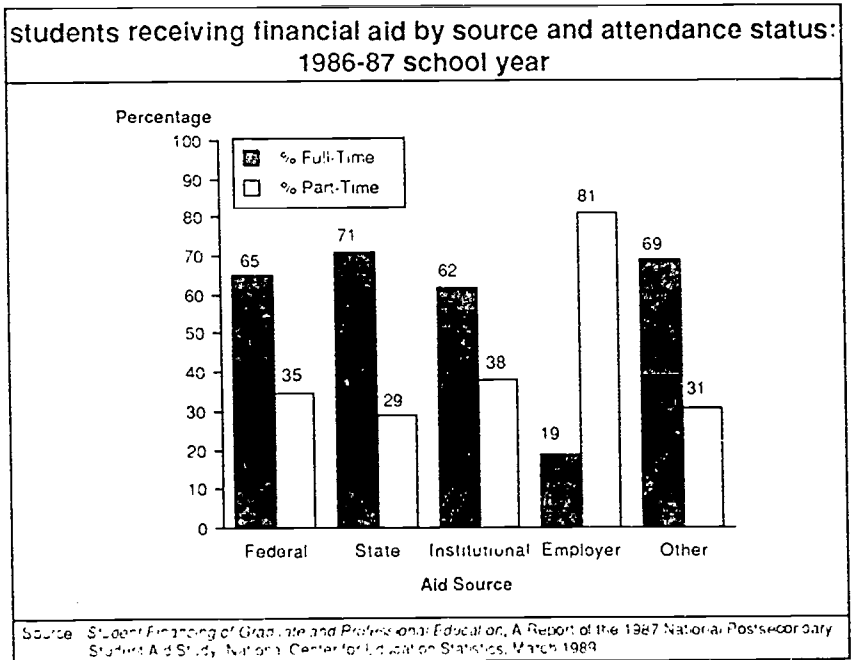
- In 1991, Air Force personnel accounted for nearly 285,000 total enrollments in higher education programs, the highest for all military service branches.
- The Army registered more than 260,000 total enrollments in higher education programs.
- The Navy accounted for some 110,000 enrollments.
- The Marines registered just over 35,000 total enrollments.



part-time students rely heavily on employer-provided tuition assistance

The nation's part-time students rely extensively on their employers for tuition assistance to pursue their postsecondary studies. Of all the students who reported receiving assistance from their employers, 81 percent were enrolled on a part-time basis. Only one-third of all part-time students during the 1986-87 school year reported receiving aid from other sources.

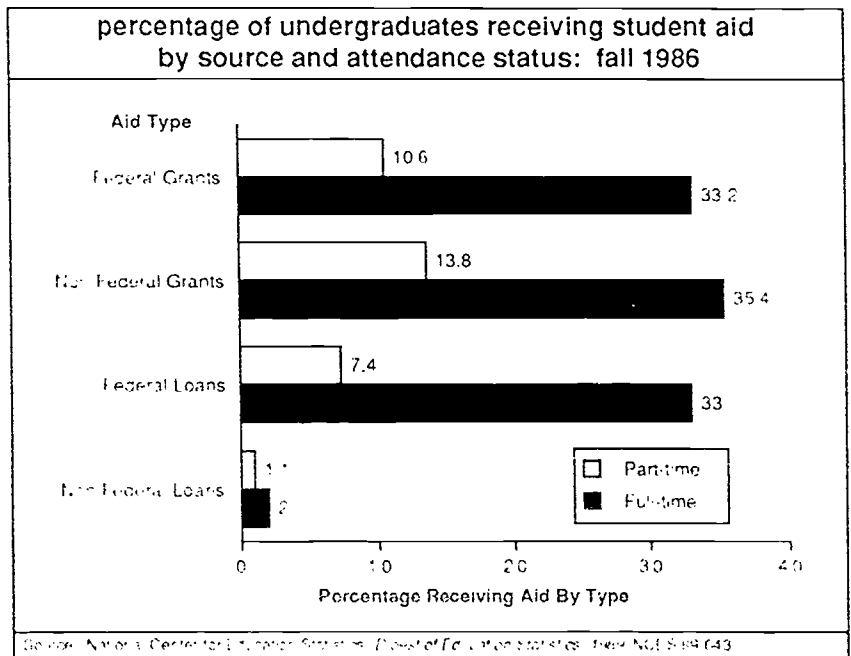
- Only 35 percent of all part-time students receive aid of any kind from federal student-aid programs.
- State-based tuition aid is awarded to only 29 percent of all part-time students.



part-time undergraduates receive little tuition assistance

The majority of part-time undergraduate students use their own financial resources to pay for college. In many instances, part-time students are ineligible to receive aid at the state and institutional level. While part-time students are eligible for federal aid, few students actually receive any help from federal grants or loans.

- Slightly more than 10 percent of part-time undergraduates received federal grant assistance in 1986.
- The situation was only marginally better for non-federal grants, with almost 14 percent of part-time undergraduates receiving assistance.
- Few part-time undergraduates take out loans for college in comparison to full-time students.

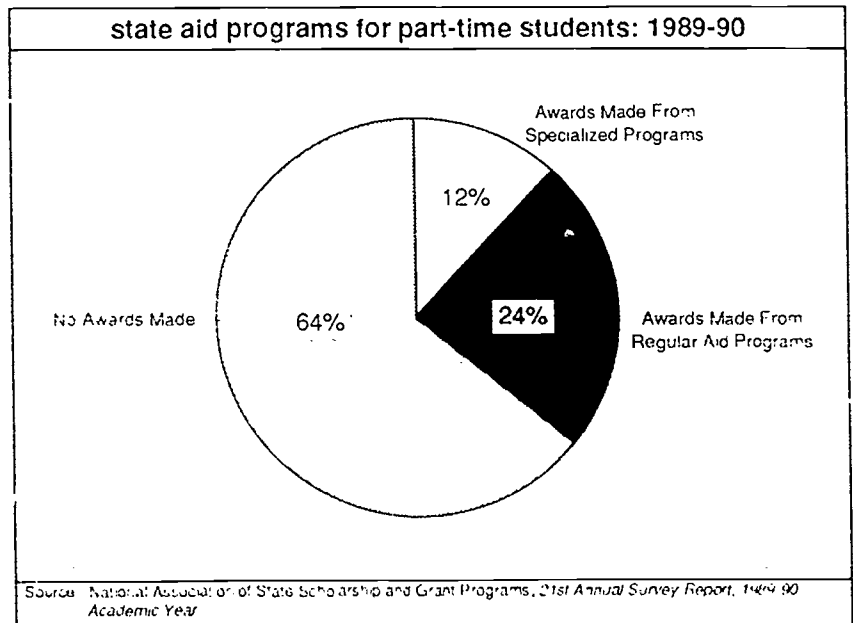


states implement financial aid programs for part-time students

In the late 1980s, some states enacted significant financial aid programs specifically targeted for part-time students. Currently, six states (Connecticut, Massachusetts, Michigan, Minnesota, New York and Vermont) offer such special financial aid programs for part-time students. By comparison, only two states offered such programs in 1986.

Eighteen states reported giving part-time students tuition assistance during 1989-90 year. Despite these gains, only a small percentage of the part-time students receive state aid to help defray their college costs.

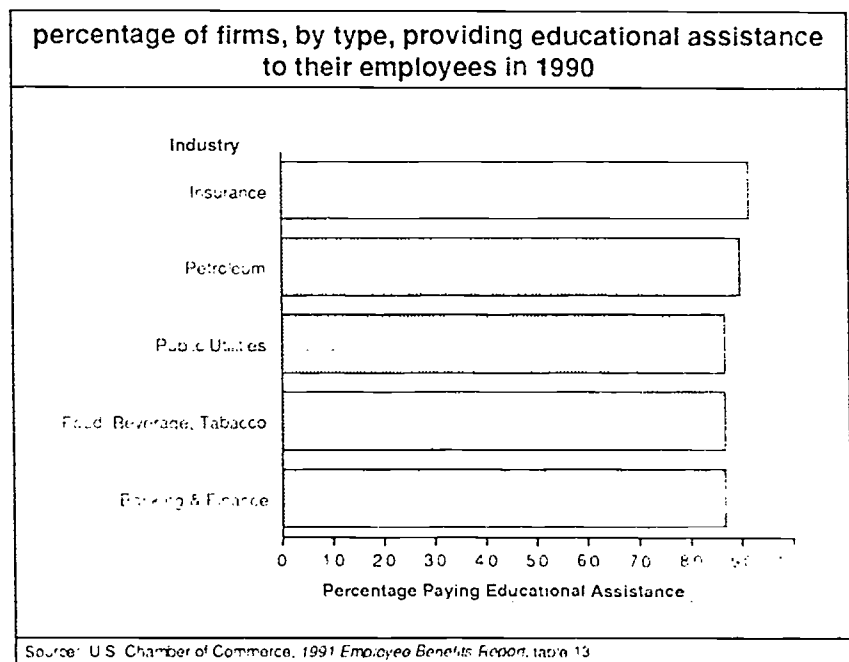
- Sixty-four percent of states had no reported aid program for part-time students.
- Twenty-four percent of the states provided part-time students tuition aid from regular state programs.
- Twelve percent of the states provided assistance to part-time students through programs designed specifically to assist needy, part-time students.



top five industry providers of employee tuition assistance

Employee educational assistance is a benefit provided by 86 percent of the manufacturing industry and 76 percent of the non-manufacturing industry. Ninety-two percent of insurance firms reported providing educational assistance to their employees, while better than 80 percent of the food, beverage and tobacco, petroleum, instrument, public utilities and banking and finance firms reported providing such assistance.

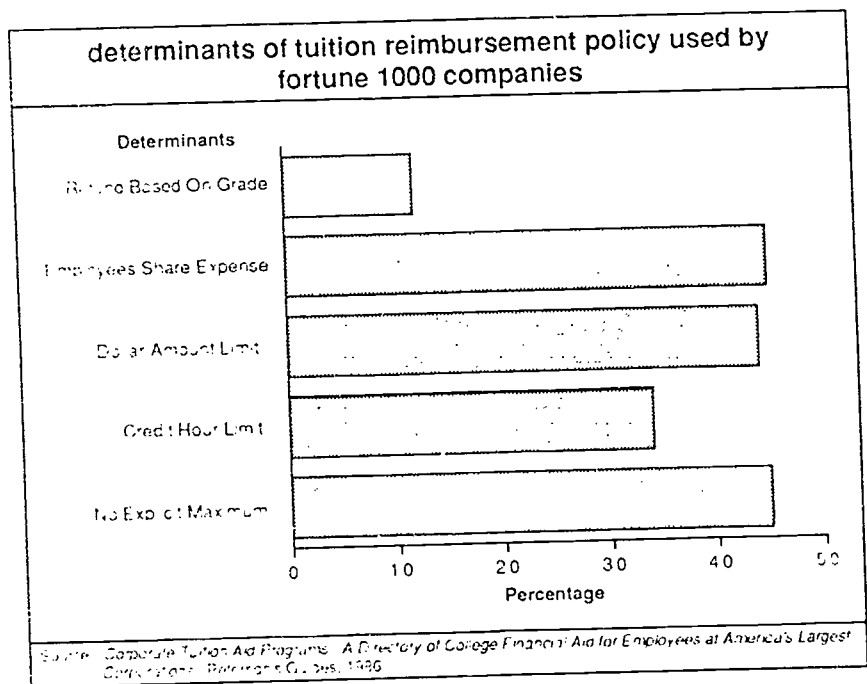
These data suggest where some of the demand for continuing education may come from in the future. Employees receiving aid from these industries may pursue course work in concentrated areas, such as business, chemical engineering, health administration, financial planning, and a dozen or more related fields. Working part-time students rely extensively on employer-provided tuition aid in order to pursue their postsecondary studies.



most companies provide tuition reimbursement with few restrictions

Recent studies indicate that employer-provided tuition assistance programs are relatively free of restrictions. This is important because employees receiving tuition assistance from their employers constitute the greatest proportion of part-time students receiving aid of any kind.

- Forty-five percent of the companies have no explicit maximum reimbursement amount for employees.
- Employees in 34 percent of the companies are subject to total credit hour restrictions.
- Forty-four percent of the companies set dollar amounts for tuition reimbursement.
- Employees share tuition costs at 45 percent of the companies
- Only 12 percent of the companies set minimum grade point averages as a condition of tuition reimbursement.

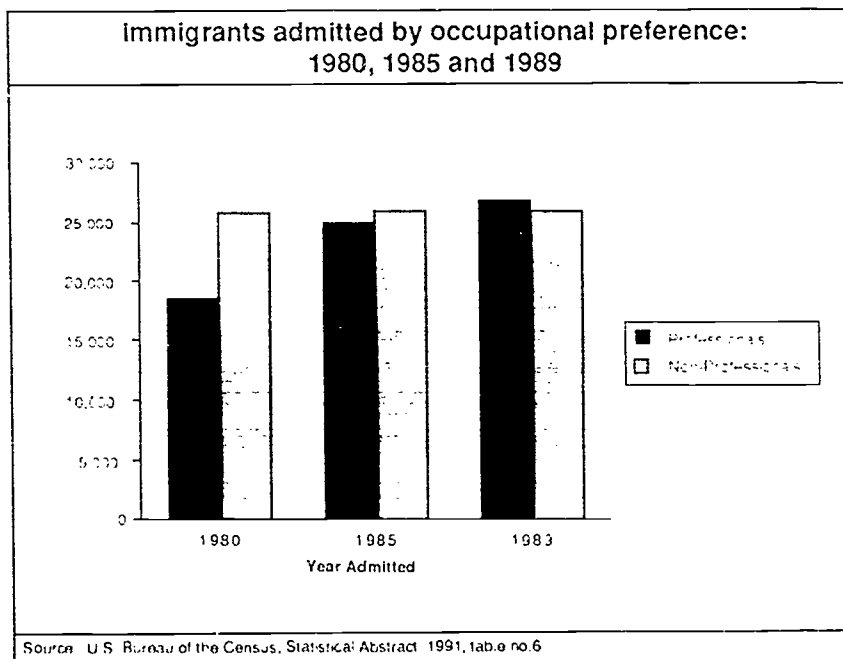


**PREPARING
FOR
THE GLOBAL ECONOMY**

more immigrants with professional credentials are being admitted to the United States

In 1989, more than one million immigrants were granted admission to the United States. That figure represents slightly more than a 106 percent increase over 1980. Of the immigrants admitted in 1989, 52,755 were given preference because they were classified as "professional or highly skilled," or "needed skilled or unskilled" workers. Slightly more immigrants in the professional or highly skilled category as opposed to the "needed skilled or unskilled" category were admitted in 1989. This trend will continue through the middle of this decade, due to the immigration law adopted by the U.S. in 1990.

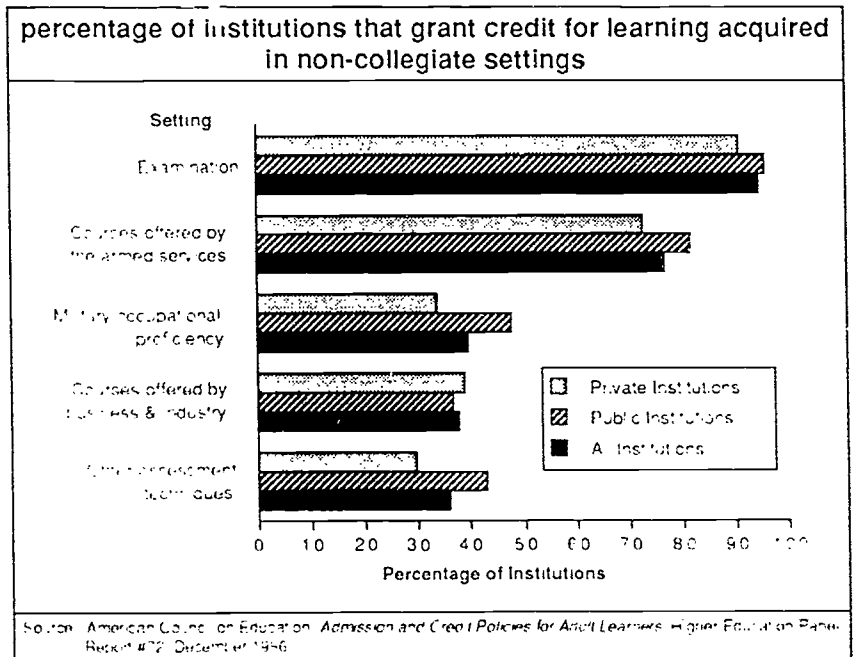
Nearly one-third of immigrants in 1989 were given preference because they had family in the United States or were political refugees. More than 478,814 immigrants took advantage of amnesty granted under the 1986 Immigration Reform and Control Act. Some 43 percent of the immigrants admitted to the U.S. came from Asian countries, primarily from the Philippines and South Korea. North Americans (including Mexicans) accounted for 36 percent; Europeans, 10 percent; South Americans, 7 percent; Africans, 3 percent; and other nationalities accounted for less than 1 percent.



most institutions use examinations in awarding credit for prior learning

Recognizing the value of today's diverse learning opportunities, 97 percent of the nation's higher education institutions have developed policies to award credit for learning acquired in non-collegiate settings. During 1984-85 (the latest data available), more than 166,000 students were granted credit for extra-institutional learning at approximately 3,100 colleges and universities.

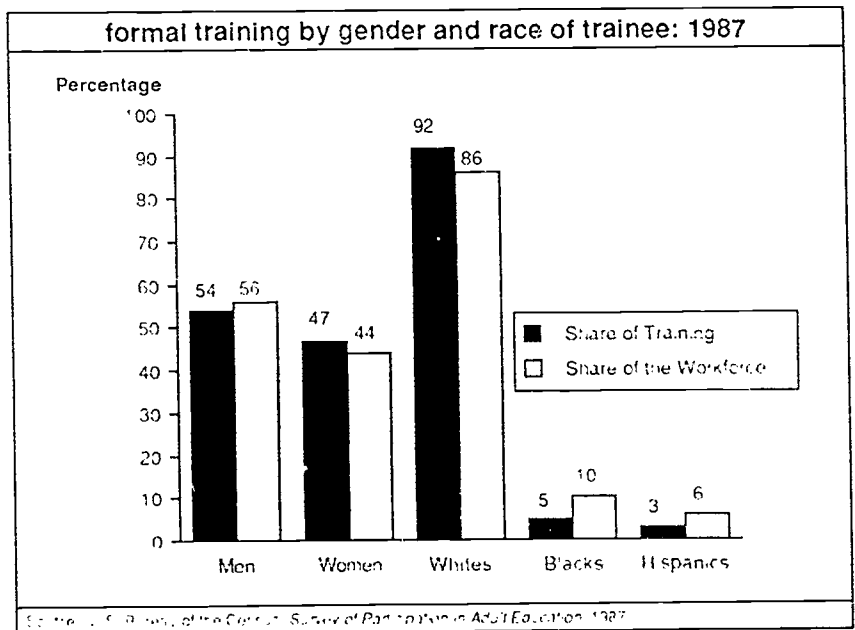
- Ninety-three percent of the nation's higher education institutions award credit for prior learning if students take examinations to assess their knowledge and skills. The majority of institutions use The College Board's College-Level Examination Program (CLEP) to assess students' skills.
- Seventy-seven percent of colleges and universities grant credit for course work completed while in the military. Only 40 percent grant credit for occupational proficiency gained in the armed services.
- Nearly 40 percent of institutions grant credit for courses offered by businesses and industry.
- More than 33 percent grant credit through the use of alternative assessment techniques to gauge students' skills.



minorities receive disproportionately low share of formal training

An increasing number of new jobs created by the year 2000 will go to minority workers. More than ever, the skills needed to perform these new jobs will be more complex and sophisticated. The majority of new jobs will require some form of postsecondary education. Currently, most formal training is targeted at white workers. Many workers receive training through their employers on the job, either during working hours or during non-working hours. The training is either provided in-house by the employer or is acquired through an educational provider, such as a college or university.

- While whites constituted roughly 86 percent of the labor force in 1987, they accounted for nearly 92 percent of those who received formal training.
- Blacks represented 10 percent of the reported labor force, yet only 5 percent of working blacks received formal training.
- Hispanics represented 6 percent of the reported labor force yet only 3 percent of working Hispanics received formal training.



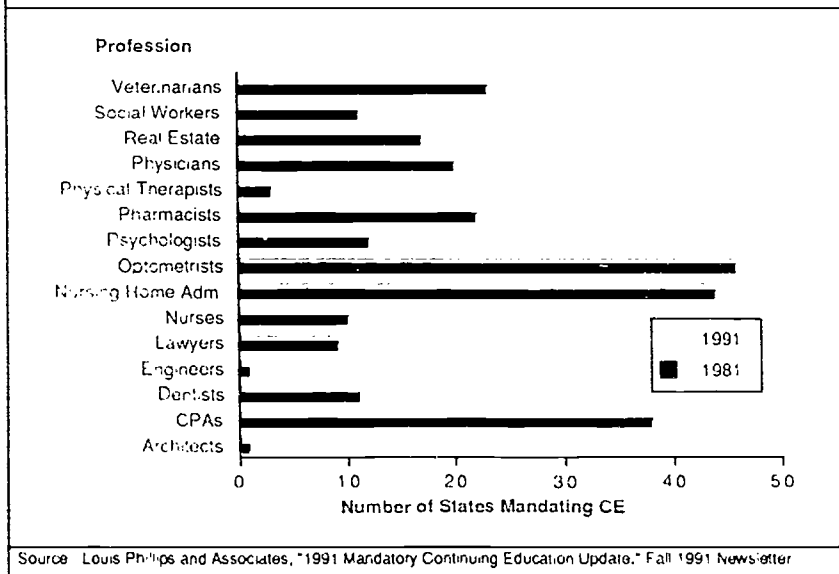
states mandate continuing education for professionals

States are showing increased interest in the quality of services offered by professionals and, as a result, are mandating continuing education for a variety of professions. Professions, too, are placing a premium on education and training to ensure competencies in specialized fields. Professionals in rapidly changing fields, such as information technology, rely on continuing education to stay abreast of the latest developments in their areas of specialty.

Mandatory professional continuing education usually implies completion of a designated number of hours of study provided by an approved educational institution, such as a college or university. Given the rapid pace of change, most higher education institutions tend to offer professional programs that exceed the minimum requirements for state-licensed professions.

- Between 1981 and 1991, 11 states implemented mandatory continuing education for certified public accountants (CPAs). Every state but one now requires mandatory continuing education for CPAs.
- Twenty-six more states approved mandatory continuing education for lawyers between 1981 and 1991, bringing the total to 35.
- Mandatory continuing education for pharmacists rose from 22 to 45 states between 1981 and 1991.
- Real estate brokers are now required to take continuing education in 41 states, an increase of 24 since 1981.

number of states requiring continuing education, by profession: 1981 and 1991

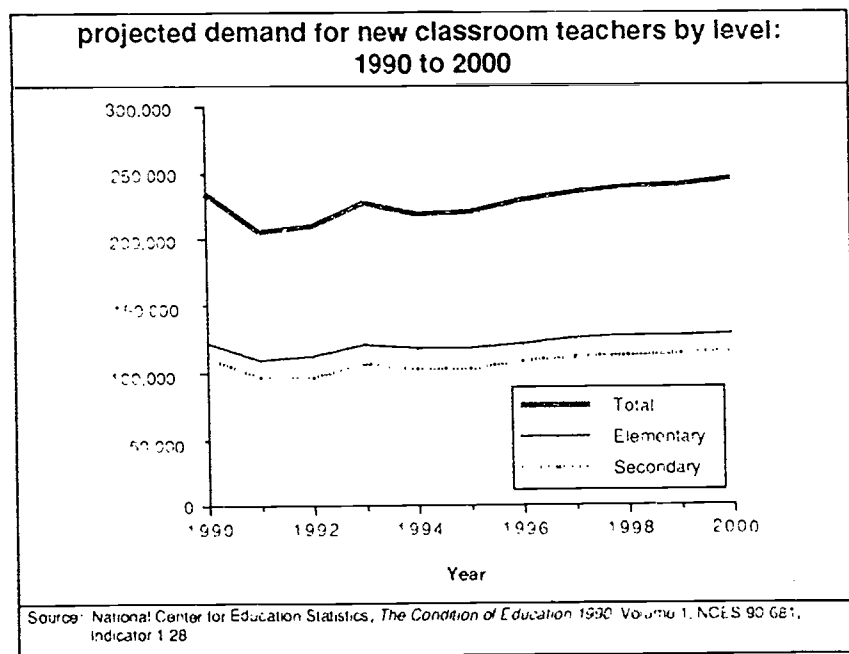


a shrinking pool of K-12 teachers heightens the need for part-time degree programs in teacher education

America's elementary and secondary schools will need to hire more teachers by the year 2000. In 1985, the supply of new teachers in the United States exceeded 90 percent of the demand for new teachers. But by the mid-1990s, it is projected that there may be only 6 new teachers for every 10 available teaching jobs. There is an especially urgent need to prepare more minority teachers. Some may be drawn to the profession from other fields and from the ranks of school para-professionals if more part-time degree opportunities were available. Also important are the certificate programs that provide liberal arts majors with an avenue into the teaching profession.

By fall 1987, 45 states had enacted competency testing into teacher certification programs. Thirty-one states now require students to take an examination in order to be admitted to a teacher education program. As a consequence, there is a growing demand for in-service teacher education and a need for special post-graduate opportunities to enhance teachers' command of the subjects they teach.

- Currently, it is estimated that America's schools need 208,000 new teachers, approximately 54 percent at the elementary level, and 46 percent at the secondary level.
- By the year 2000, it is projected that 243,000 new teachers will be needed, an increase of 17 percent over the 1992 estimate.

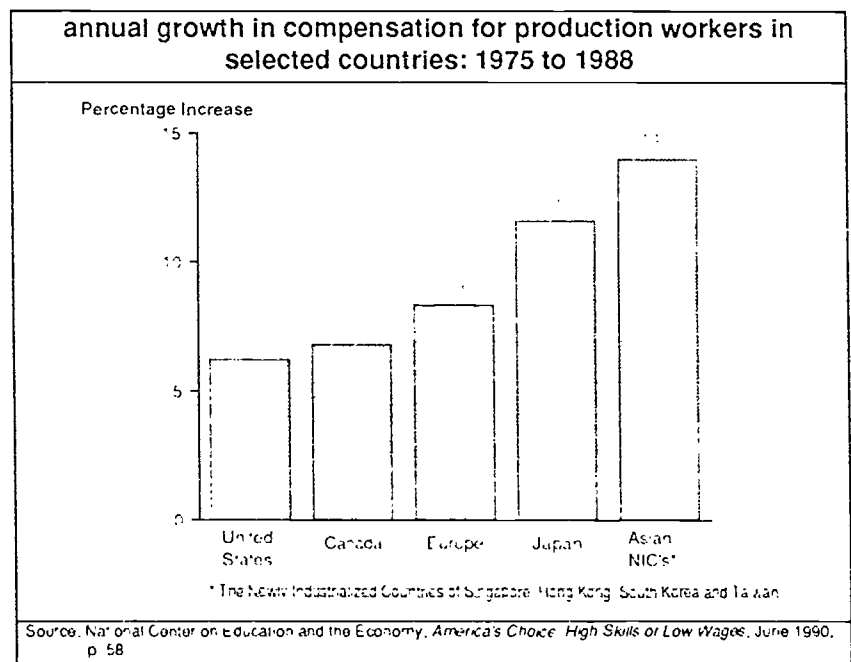


foreign workers' wages have grown faster than U.S. workers'

Growth in wages is typically a good indicator of the relative health of a nation's economy. While U.S. workers still earn among the highest wages in the world, wage trends between 1975 and 1988 reveal that their earnings have been growing more slowly relative to foreign workers' earnings.

The level of earnings has a profound impact on the standard of living. The U.S. standard of living remains high but is being threatened by slower domestic growth and the relative stagnation in wages since 1973. The level of education and training continues to be one of the surest hedges against earnings stagnation.

- Asian nations like Singapore, Hong Kong, South Korea and Taiwan increased production wages by 14 percent between 1975 and 1988.
- U.S. production wages grew 6.2 percent during the same period.



other nations invest more in employment and training programs

Many experts have estimated that American companies invest some \$30 billion annually on formal postsecondary employee education and training. Yet when compared with other nations' spending on employment and training programs, the United States ranks near the bottom.

When viewed as a percentage of public expenditures, the United States spends less than 1 percent of its gross domestic product (the sum of all domestic goods and services consumed within the United States) on employment and training programs. This figure suggests that America's ability to compete effectively in the global economy may be impaired by its relatively low expenditure on employee education and training programs.

- Denmark spent nearly 6 percent of its gross domestic product on employment and training programs in 1987.
- Monies spent by countries include public spending on training and job counseling, as well as support services such as unemployment insurance and compensation.



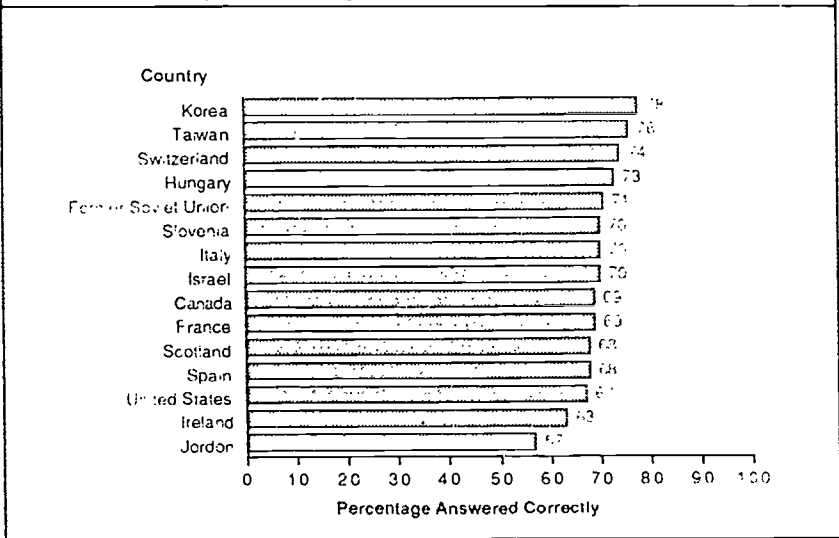
american children exhibit low levels of scientific literacy

Recent reports have highlighted the poor performance of students in American schools on tests designed to measure knowledge of basic science. Global competition makes it imperative for American students to acquire a higher order of skills and knowledge if the United States is to build the intellectual capital it will need in the future.

The growth of a knowledge-based economy implies that colleges and universities will need to help more adults to acquire increased levels of mathematical and scientific literacy to prepare for the new jobs that are being created.

- American 13-year-olds rank near the bottom on tests measuring scientific knowledge.
- The Asian nations of Korea and Taiwan lead the European and North America nations in scientific literacy.
- One-half of all Ph.D.s awarded by American colleges and universities in the physical sciences and engineering go to foreign students, primarily from Asian countries.

average percentage of correct scores on science questionnaires for 13-year-olds by selected countries: 1990-91



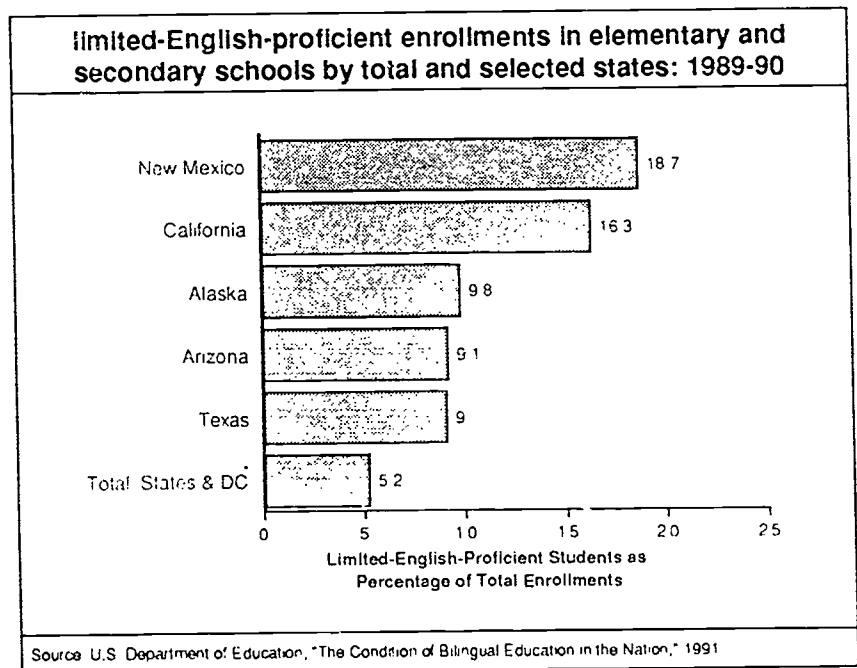
Source: Educational Testing Service, *Learning Science, The International Assessment of Educational Progress*, February 1992

continuing education responds to increased demand for bilingual teachers

The rapidly changing composition of the U.S. population, coupled with the projected growth in legal immigration, is pushing national demand for bilingual teachers to a record high, particularly at the elementary and secondary levels.

Bilingual education requires teachers to have command both of English and the student's primary language. Limited-English-proficient students generally have a history of poor performance in schools without bilingual education and are under-represented in postsecondary education. Bilingual education seeks to raise the academic performance of limited-English-proficient students so that they can join the educational mainstream. Without bilingual education, many of these students become adults with limited career options.

College and university continuing education units are helping to alleviate these problems both by providing bilingual and English-as-a-second-language programs, and by developing programs to reach teachers on-site through distance education and other innovative programs.

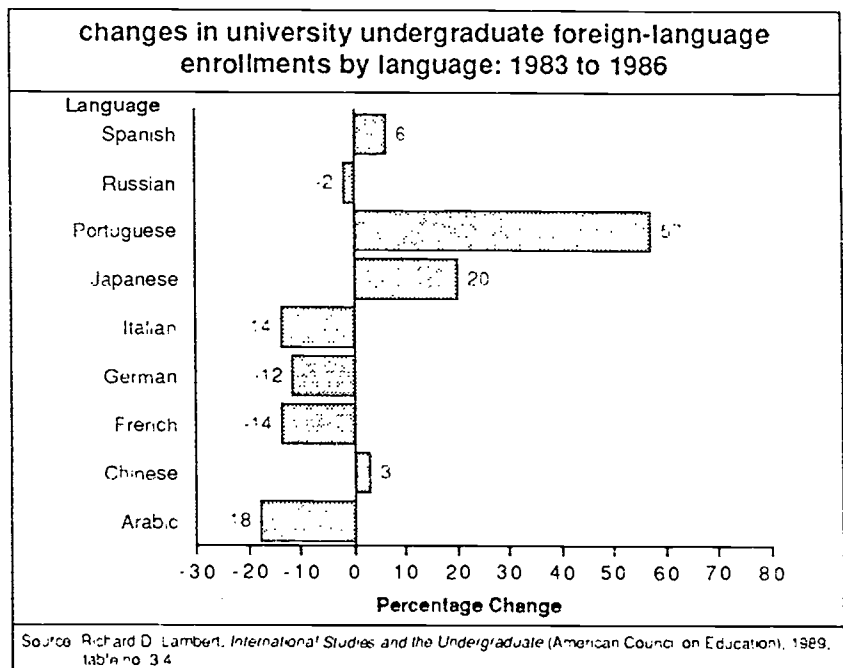


foreign language enrollments are increasing and showing more diversity

Foreign language enrollments in American universities are changing and becoming more reflective of economic realities in the global economy. Traditional languages like French, German and Italian are less favored by university students. Instead, interest in Japanese, Russian, Chinese and Portuguese is growing. Enrollments in Spanish-language courses show modest gains.

These trends highlight growing interest in the languages of emerging economic and political regions.

- Currently, some 22 percent of universities have foreign-language admission requirements for all students; 14 percent have them for some students.
- Only 9 percent of universities make foreign language study a graduation requirement for all students; 68 percent, for some students.

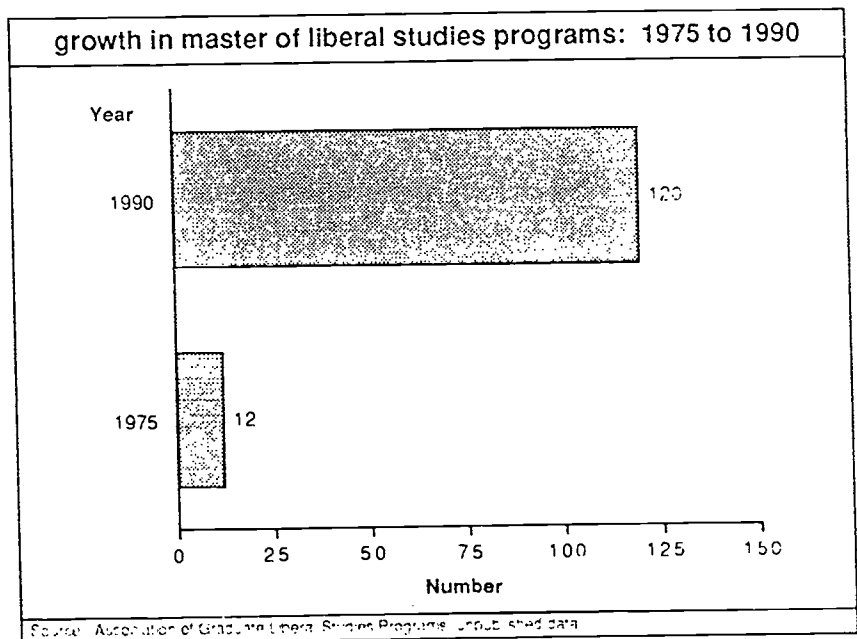


**BUILDING
A LITERATE
AND AN INFORMED
SOCIETY**

master of liberal studies programs are multiplying

The study of liberal arts has been at the center of educational curricula since the advent of colleges and universities. Increasingly, professionals recognize the importance of liberal studies for success in the working world, regardless of occupation. Master of Liberal Studies (MLS) degrees offer students the opportunity to pursue graduate-level studies leading to a multi-disciplinary master's degree in the liberal arts. Such programs typically consist of a core curriculum, course electives, and a graduate thesis or major research project. Students complete between 30 and 36 credit hours at the graduate level. Part-time MLS students complete their degrees within a three- to five-year period.

The first MLS program was developed by Wesleyan University (Connecticut) in 1953, followed by Johns Hopkins University in 1962. Since then, about 120 MLS programs have been established at colleges and universities around the country. Programs tend to be small and are usually administered and operated by the continuing education unit in conjunction with the institution's graduate college of liberal arts.



continuing education for alumni is increasing in size and scope

Since 1913, when Yale University began a reading program for alumni, continuing education programs for alumni have become an integral component of many institutions' programs. Some institutions offer a comprehensive program of activities throughout the year. Others confine their programs to homecoming weekend. The estimates are, however, that two-thirds of four-year colleges and universities offer some type of continuing education programs to their alumni.

The growth in the number of Americans with college degrees since 1970 (see page 7) has supported the expansion of alumni continuing education programs.

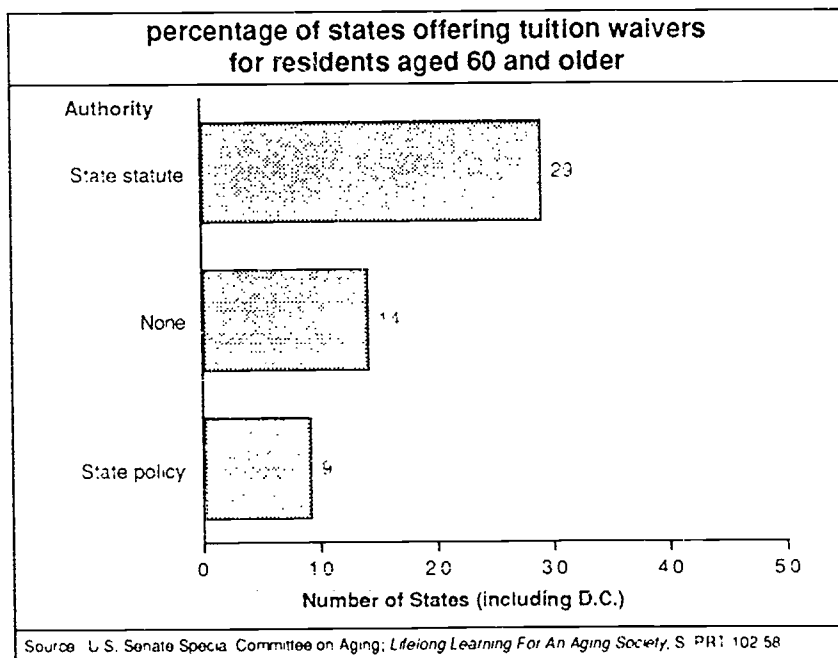
- Thirty-two million adults already have had a successful college experience, and statistics show that many would be interested in returning for more education. These adults represent a ready market for continuing higher education programs.
- These 32 million adults also represent a large potential pool of educated volunteers, both to support higher education and to address national problems, such as elementary and secondary education reform, adult illiteracy, environmental clean-up, and urban revitalization.

programs for adults of retirement-age are popular and numerous

Programs for adults of retirement age are growing in response to the increase in the 60 and older population. Programs for adults of retirement age take several forms. Many colleges and universities have developed centers for learning in retirement, which are residential programs for adults that usually last several weeks. Today, there are more than 160 such centers at the nation's colleges and universities serving thousands of adults of retirement age each year. Programs in history and computers are among the most popular offerings.

In addition, during the 1991-92 year, 1,800 institutions offered Elderhostel-approved programs, usually lasting one week, to adults of retirement age in the United States and Canada. Fifty-seven percent of these programs are housed at colleges and universities. These programs registered more than 250,000 enrollments last year. Elderhostel also sponsors overseas travel programs for Americans of retirement age, generally two to three weeks in duration.

A number of states have enacted tuition waiver programs for adults of retirement age. Currently, 29 states have statutes that allow older adults to take courses tuition-free at state higher education institutions on a space-available basis.

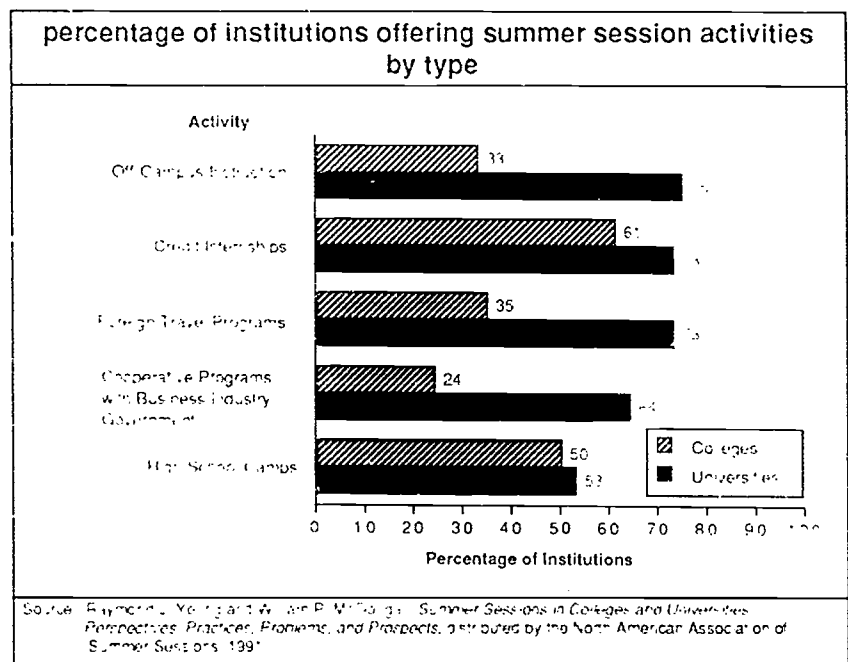


V . BUILDING A LITERATE AND AN INFORMED SOCIETY

summer schools provide year-round continuing education

It is estimated that between 2,200 and 2,800 — more than 60 percent — of all accredited, degree-granting institutions offer summer school courses and programs. Summer schools give part-time students an opportunity to attend college year-round and to accelerate progress toward a degree. Summer session college and university enrollments have increased steadily over the past several years, according to reports from a number of associations representing summer schools. Summer school enrollments have been increasing for several important reasons and are expected to continue to increase:

- Students use summer school to accelerate their degree studies in order to lessen economic pressures.
- Summer schools help institutions defray their operating costs by allowing them to use facilities year-round.
- Summer schools provide students with greater flexibility and access to courses that are not available during the regular school year.

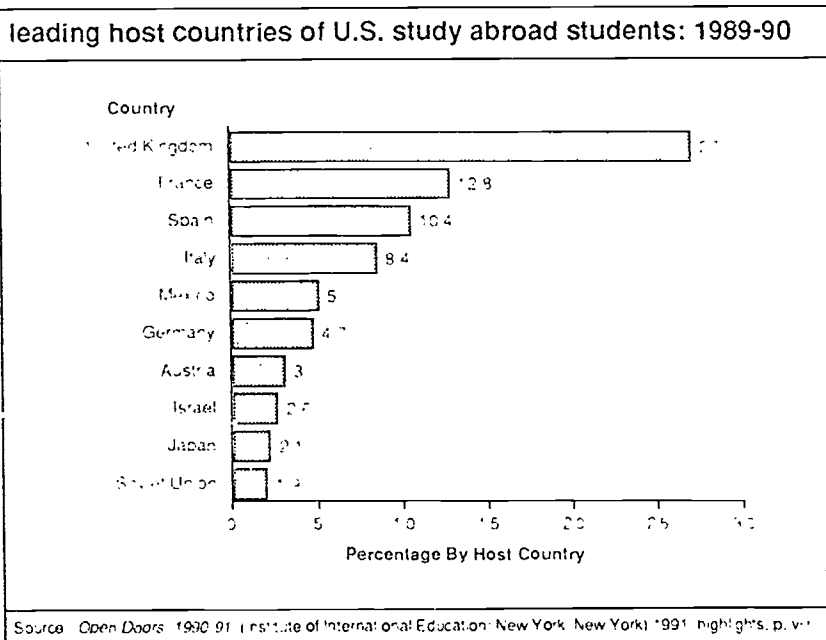


study abroad programs attract increasing numbers of students

During the 1989-90 academic year, more than 70,000 American students studied abroad, representing a 13 percent increase over the past two years. The number of Americans studying abroad has increased steadily since 1985. These students represent less than one-half percent of all students enrolled in U. S. higher education institutions.

While the numbers are growing, relatively few Americans take advantage of the many opportunities for foreign study. As nations' economies become increasingly interdependent, it becomes ever more critical for students to acquire knowledge of foreign languages and cultures. The ability to compete economically is increasingly tied to understanding foreign markets and labor policies.

- The most popular host country for study abroad programs is the United Kingdom.
- Germany and Japan are less popular destinations for U.S. students studying abroad.



GLOSSARY

GLOSSARY

associate degree

A degree awarded upon the successful completion of a pre-baccalaureate level program, usually consisting of two years of full-time study at the college level.

baccalaureate

Degree conferred upon completion of a four-year course of study at the undergraduate level.

bachelor's degree

A degree awarded upon the successful completion of a baccalaureate-level program, consisting of four years of full-time study at the college level.

college

A postsecondary-level institution that offers programs of study leading to an associate's, bachelor's, master's, doctoral, or professional degree. Colleges may be either two- or four-year institutions.

credit

A unit of value assigned by colleges or universities upon the successful completion of courses. Credits measure the academic quality of a course in relation to a program of study and measure the progress toward a specified degree program.

continuing higher education

Programs or courses offered by colleges and universities at the pre- or post-baccalaureate levels to students with at least a high school diploma or its equivalent attending on a less-than-full-time basis. Study can be for credit or non-credit, degree or non-degree, certificate or some other generally recognized educational credential.

doctoral degree

The highest degree awarded upon the demonstrated mastery of a subject, including the ability to perform scholarly research. Generally, a master's degree serves as a prerequisite to obtaining a doctorate.

educational attainment

The highest level of education obtained, or the highest level of school attended.

G L O S S A R Y

elementary and secondary schools

Schools below the postsecondary level that are a part of state or local school systems, non-profit private schools, and religiously-affiliated schools offering programs from the kindergarten to senior high school level.

enrollment

The total number of students officially participating in a given program or institution at a particular time.

first-professional degree

A degree awarded upon the successful completion of program of study for which a bachelor's degree is normally the prerequisite, and which prepares a student for a specific profession.

full-time enrollment

The number of students enrolled in higher education courses whose total credit-load usually equal at least 75 percent of the normal full-time load specified by the institution.

graduate

An individual who has successfully completed a specified educational program.

higher education

Study beyond the secondary level at institutions offering degree programs.

higher education institution

An institution legally authorized to offer programs at the two- or four-year level for credit and offering degrees. A university is a four-year institution offering degree programs beyond the baccalaureate level. A college may be an institution at the two- or four-year level.

labor force

Individuals 16 years of age or older who are employed as civilians or who are actively looking for employment.

master's degree

A degree awarded upon the successful completion of a program of study beyond the baccalaureate level, typically requiring one or two years of full-time study.

GLOSSARY

part-time enrollment

The number of students enrolled in higher education courses whose total credit-load is less than 75 percent of the full-time load as specified by the institution.

post-baccalaureate enrollment

The number of graduate-level and first-professional students enrolled in higher education courses leading to advanced degrees.

postsecondary education

Courses or programs of study offered to students who have completed high school degrees or the equivalent. These include programs of an academic, vocational or continuing education nature.

unclassified students

Students who are not candidates for degrees or other recognized educational credentials but who are taking courses at higher education institutions for credit.

undergraduate students

Students matriculated at a higher education institution who are working toward baccalaureate or associate's degrees.

university

A four-year institution of higher education offering degrees at the baccalaureate, master's, doctoral or first-professional levels.

nucea

National Society for Continuing Education Association

63

BEST COPY AVAILABLE