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ABSTRACT

This background paper provides information on the location and demographic environment, enrollment patterns, student characteristics, and faculty characteristics of public community colleges in the western United States. The first section locates the 242 public community colleges in the region, and offers information on population growth, minority populations, age characteristics, and educational attainment patterns. The next section looks at enrollment patterns in western community colleges, indicating that more than half of total higher education enrollment in these states is in two-year college. Enrollments are examined in terms of curriculum areas; racial/ethnic status, gender, full-/part-time status, and socioeconomic status of two-year college students; two-year college enrollments as a proportion of postsecondary education enrollments; comparisons with national data for two-year colleges; educational preparation of two-year college students; enrollments in remedial education; and student typologies. The final section looks at demographic and social changes in faculty characteristics at two-year colleges, covering trends in the number of full- and part-time faculty, educational attainment, part-time faculty employment issues, and faculty salaries. (AYC)

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THE DEMOGRAPHY OF COMMUNITY COLLEGES
IN THE WEST

Materials developed for a legislative workshop
on community college issues

JC 850 295

WICHE Western Interstate Commission for Higher Education
P.O. Drawer P Boulder, Colorado 80302
An Affirmative Action/Equal Opportunity Employer
Improving Education in The West

THE DEMOGRAPHY OF COMMUNITY COLLEGES IN THE WEST

Location and Demographic Environment

There are 242 public community colleges in the WICHE states, counting each discrete campus. The number of institutions in each state ranges from three each in Idaho and Montana to 107 in California, as indicated on the accompanying table. College locations generally follow population concentrations, although the presence of public four-year colleges and universities and other factors have also influenced the location of two-year colleges. On the following maps, the wide dispersal of community colleges in Idaho, Montana, Nevada and North Dakota is evident, as is the clustering of colleges in major population centers in Arizona, California, Colorado, Oregon and Washington.

TABLE I-1

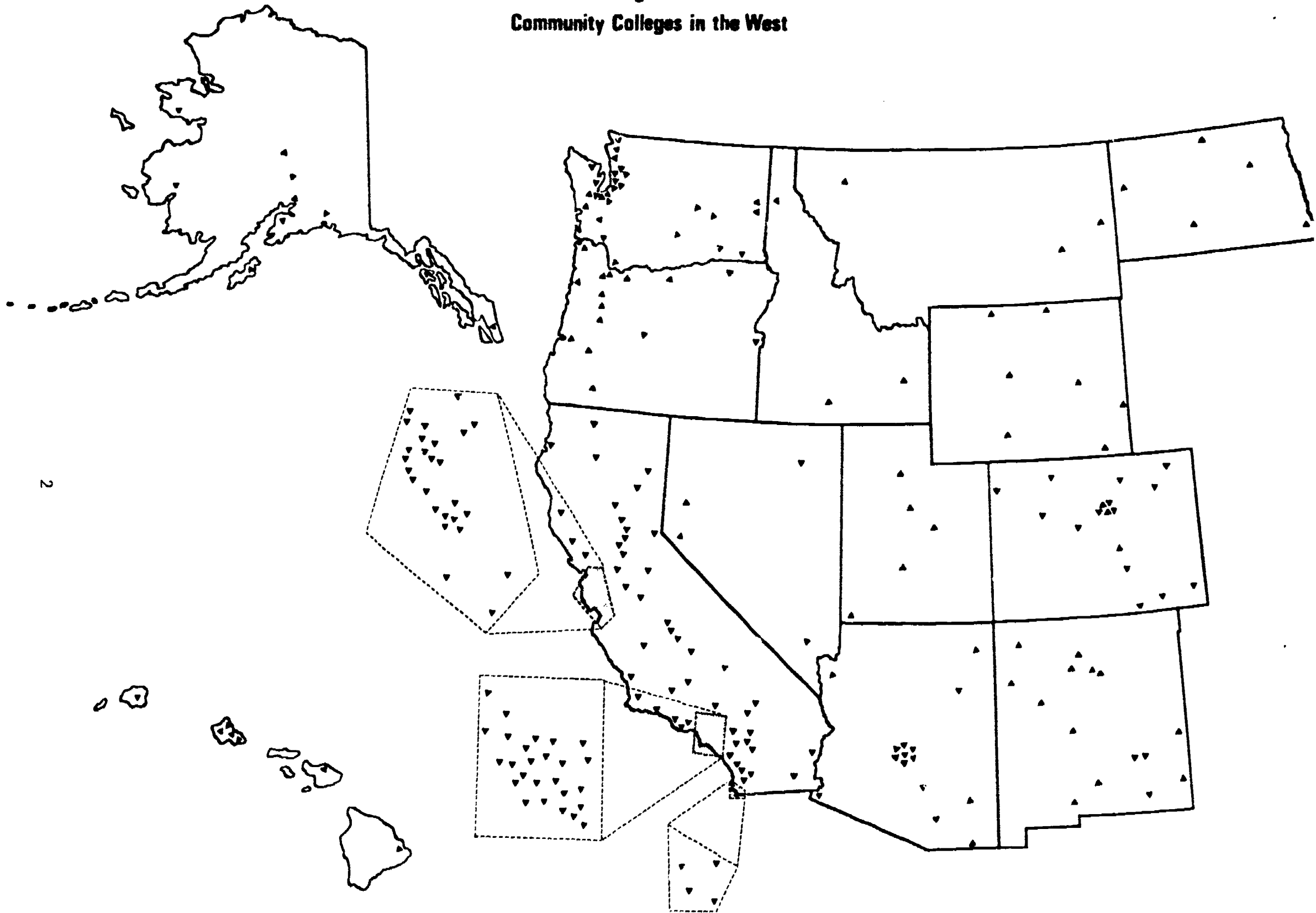
Public Two-Year Colleges

Alaska	11
Arizona	16
California	107
Colorado	17
Hawaii	7
Idaho	3
Montana	3
Nevada	4
New Mexico	15
North Dakota	5
Oregon	15
Utah	5
Washington	27
Wyoming	7
<u>Total</u>	<u>242</u>

With over 50 percent of the land mass and 20 percent of the nation's population within the WICHE states, community colleges play key roles in meeting the educational needs of diverse populations within very different physical and social environments.

The wide diversity in characteristics and conditions makes it difficult to generalize about the populations served by community colleges in the West. The region includes the least-populated state, Alaska, and the most-populated state, California. It includes highly rural states with no large metropolitan areas—Idaho, Montana, North Dakota, and Wyoming, and others with population concentrations that place them nationally among the most urban—California and Hawaii. It includes states having the smallest proportions of minorities—

Fig. I-1
Community Colleges in the West



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Idaho, Montana and North Dakota—and others such as California and New Mexico, with large Hispanic populations, and Hawaii, where the majority is of Asian origin. Population factors alone suggest that any consideration of community college missions, activities, and operations must take into account the diversity of populations and needs being served.

Table I-2 shows population growth in the WICHE states since 1960 and projected growth through 1990. Significant points include:

- o Between 1960 and 1980, the rate of population growth in the WICHE states was double that of the nation at large. Except for Montana and North Dakota, every WICHE state exceeded the national growth rate; most exceeded it by a large amount.
- o Growth substantially exceeding that of the nation is expected to continue in the current decade in all WICHE states except North Dakota and Montana.

Table I-3 shows minority populations, age characteristics, and educational attainment for the WICHE states. The composition of the region's population differs from the nation as a whole. More specifically:

- o The proportion of Blacks in all WICHE states is less than one-half that of the nation as a whole. In six WICHE states the proportion of Spanish origin population is larger (in four of these, very much larger) than in the nation as a whole. In all WICHE states except Hawaii the proportion of American Indians exceeds the U.S. average; in Alaska, California, Hawaii and Washington, the proportion of Asians exceeds the national average.
- o The population of the West is relatively young; only in Oregon and Nevada does the median age slightly exceed that of the nation. Nine WICHE states have a higher proportion of the population under the age of 18 than the national average.
- o WICHE state populations are well educated in comparison to the nation as a whole. In the percentage of the population age 25 and over who graduated from high school, 11 of 12 top-ranking states are WICHE states.

WICHE's recent demographic studies of southwestern states document large differences in educational attainment among major racial/ethnic groups. The West's high level of average educational attainment is not reflected equally among minorities. This is particularly true for persons of Spanish origin and

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TABLE I-2
Population in the WICHE States 1960-1990

	Population			Percent Growth			Projections, 1980-90	
	1960	1970	1980	1960-70	1970-80	1960-80	Census Bureau	National Planning Association
Alaska	226,167	300,382	401,851	32.8%	33.8%	77.7%	30.4%	21.7%
Arizona	1,302,161	1,770,900	2,718,215	36.0	53.5	108.7	46.9	25.5
California	15,717,204	19,953,134	23,667,902	27.0	18.6	50.6	16.3	13.1
Colorado	1,753,947	2,207,259	2,889,964	25.8	30.9	64.8	30.0	18.9
Hawaii	632,772	768,561	964,691	21.5	25.5	52.5	17.9	14.1
Idaho	667,191	717,567	943,935	6.8	32.5	41.5	28.6	17.1
Montana	674,767	694,409	786,690	2.9	13.3	16.6	12.9	9.9
Nevada	285,278	488,738	800,493	71.3	63.8	180.6	59.6	22.5
New Mexico	951,023	1,016,000	1,302,894	6.8	28.2	37.0	18.2	17.7
North Dakota	632,446	617,761	652,717	(2.3)	5.7	3.2	3.9	5.8
Oregon	1,768,697	2,091,385	2,633,105	18.2	25.9	48.9	26.1	13.5
Utah	890,627	1,059,273	1,461,037	18.9	37.9	64.0	39.7	23.2
Washington	2,853,214	3,409,169	4,132,156	19.5	21.2	44.8	21.3	15.4
Wyoming	330,066	332,416	469,557	0.7	41.3	42.3	49.0	24.8
WICHE States	28,685,550 (16% of U.S.)	35,426,954 (17.4% of U.S.)	43,825,207 (19.3% of U.S.)	23.5%	23.7%	52.8%	22.3%	15.3%
WICHE w/o California	12,968,346	15,473,820	20,157,305	19.3	30.3	55.4	29.3	17.8
U.S.	179,323,000	203,211,926	226,545,805	13.3	11.5	26.3	10.0	10.0

Sources: U.S. Bureau of the Census, 1980 Census of the Population, General Population Characteristics (Washington D.C., 1982). Data from PC 80-1-B series for each state. Population projections from U.S. Bureau of the Census, Provisional Projections of the Population of States by Age and Sex, 1980 to 2000, Series P-25 (Washington D.C.: 1983); and "The States in 1990," American Demographics, (December 1983), pp. 21-46.

TABLE I-3

Selected Population Characteristics, WICHE States and U.S., 1980
(Numbers in parenthesis are ranks among WICHE states)

STATE	MINORITIES (% of total population)					AGE		EDUCATIONAL ATTAINMENT	
	Total	Spanish Origin	Black	American Indian	Asian	Median (years)	Under 18 (percent)	% high school grads, pop. 25 yrs. old & over	% 4 years or more of college
Alaska	24.5 (5)	2.4	3.4	16.0	2.0	26.0 (13)	32.5 (2-3)	82.9 (1)	22.4 (2)
Arizona	25.5 (4)	16.2	2.8	5.6	0.8	29.2 (5)	29.1 (8)	72.4 (12)	16.8 (11)
California	33.4 (3)	19.2	7.7	0.9	5.3	29.9 (3)	27.0 (13-14)	73.6 (9)	19.8 (5)
Colorado	17.3 (6)	11.8	3.5	0.6	1.0	28.6 (7)	28.0 (10)	78.1 (3)	23.0 (1)
Hawaii	69.8 (1)	7.4	1.8	0.3	60.5	28.3 (8)	28.6 (9)	73.4 (10)	20.3 (3-4)
Idaho	6.1 (13)	3.9	0.3	1.1	0.6	27.5 (10)	32.5 (2-3)	72.8 (11)	16.1 (12)
Montana	6.6 (12)	1.3	0.2	4.7	0.3	29.0 (6)	29.5 (6)	75.3 (7)	17.3 (7-8)
Nevada	16.8 (7)	6.7	6.4	1.7	1.8	30.2 (1-2)	27.0 (13-14)	75.6 (6)	15.1 (14)
New Mexico	47.4 (2)	36.6	1.8	8.1	0.5	27.3 (11)	32.1 (4)	68.2 (13)	17.3 (7-8)
North Dakota	4.5 (14)	0.6	0.4	3.1	0.3	28.1 (9)	29.3 (7)	66.5 (14)	15.2 (13)
Oregon	6.7 (11)	2.5	1.4	1.0	1.3	30.2 (1-2)	27.5 (12)	74.7 (8)	17.2 (9-10)
Utah	7.6 (10)	4.1	0.6	1.3	1.0	24.2 (14)	37.0 (1)	80.3 (2)	20.3 (3-4)
Washington	9.8 (8)	2.9	2.6	1.5	2.5	29.8 (4)	27.6 (11)	77.0 (5)	18.8 (6)
Wyoming	8.0 (9)	5.2	0.7	1.5	0.4	27.0 (12)	31.0 (5)	77.8 (4)	17.2 (9-10)
WICHE States	25.8	14.3	5.2	1.7	4.8	29.3*	28.1*	n.a.	n.a.
WICHE w/o California	17.5	8.5	2.2	2.7	4.1	28.6*	29.4	n.a.	n.a.
United States	20.4	6.4	11.7	0.6	1.5	30.0	28.1	68.1	16.3

* For West census region; does not include North Dakota

Sources: U.S. Bureau of the Census, 1980 Census of the Population, General Population Characteristics, (Washington D.C., 1982). Data from PC 80-1-B series for each state. Data on educational attainment from "Special Research Section: 1980 Census Demographics for States and Large Metropolitan Areas," American Demographics (December 1982), pp. 28-47.

American Indians. Table I-4 shows that in four southwest states, approximately 75 percent of Whites and Asians completed high school, compared to less than half the Spanish origin population. The percentage of high school graduates among American Indians in these four states ranges from 42.4 to 68.1 percent. Similarly, the percentage who earn a baccalaureate degree differs significantly; Asians have the highest proportion of college graduates, while persons of Spanish origin and American Indians have the lowest. These differences point to the vital tasks for education at all levels. Population projections for the West indicate that minority populations, especially Spanish origin, will increase more rapidly than the population as a whole.

Enrollment Patterns and Student Characteristics

More than one-half of total higher education enrollment in the West is in two-year colleges. While community colleges have had a strong regional role for several decades, this majority-enrollment status is more recent and is attributable primarily to the exceptionally large California community college system.

The creation and expansion of public community colleges in the past decades occurred in response to rapid increases in population and in the proportion of youth graduating from high school. The expanding community colleges responded to the interests of new students with a wider variety of occupational courses, including many sequences that required transfer to senior institutions for completion. In 1960, one-fourth of community college enrollment nationally was in occupational programs. By 1975, 35 percent of enrollments were in programs leading to immediate employment, and by 1980 more than 62 percent of associate degrees awarded were in occupational curricula. Opportunities for adult students were expanded as colleges added night and weekend sequences. Between 1970 and 1980, part-time enrollment burgeoned. In 1970, full- and part-time numbers students constituted essentially half of the total community college enrollment of 2,102,000; by 1980, however, nearly two

out of three were enrolled part time in a total enrollment more than twice as large as in 1970. As a reflection of these and other changes, by 1980 the average age of community college students was 29 years old.¹

The following tables present enrollments, as well as racial/ethnic, gender, full-time/part-time, and socioeconomic characteristics of community college students in each of the WICHE states. A number of important characteristics of community colleges and significant differences in enrollments from state to state are notable.

As indicated in Table I-5, community colleges in California enroll more than 60 percent of that state's postsecondary students. This is far higher than for the nation as a whole, with slightly more than one-third (36 percent) of the nation's college enrollment in the two-year sector. Reflecting California's large population and postsecondary enrollment, the WICHE region as a whole exceeds by far the proportion of students in the two-year sector nationally. Even without California, the WICHE states enroll a higher proportion of students in two-year institutions than is true of the country as a whole. In addition:

- o In Arizona and Washington more than one-half of total postsecondary enrollment is in community colleges. Smaller proportions are in community colleges in those states where there are relatively few population centers or where there are well distributed four-year colleges, for example in Montana, New Mexico, North Dakota, and Utah.
- o The percentage of minority students in total community college enrollment in the WICHE states is slightly higher than for the population at large--26.8 compared to 25.8 percent. This is primarily attributable to minority enrollments in California community colleges.
- o The high representation of minorities in community colleges, however, reflects the fact that within all of higher education, these colleges serve as the main point of access for minorities.

Table I-6 provides national data on the number of community colleges and enrollments by gender and full-time/part-time status. By the late 1970s, the proportion of women exceeded that of men, a pattern that is true for Califor-

¹A number of these observations are taken from A.M. Cohen, "The Community College in the American Educational System," a background paper for the National Institute of Education Study Group, 1984, pp. 7-8.

TABLE I-4

Educational Attainment, Persons over 25 Years, 1980,
By Race and Spanish Origin
(Percent of respective population groups)

	White	Spanish Origin	Black	American Indian	Asian
<u>Completed High School</u>					
Arizona	76.1	43.9	60.6	42.4	73.9
California	76.6	43.6	68.6	65.6	76.3
Colorado	80.2	48.7	74.5	68.1	77.1
New Mexico	73.1	50.6	62.7	47.3	74.7
<u>Completed Baccalaureate</u>					
Arizona	18.9	5.6	10.8	4.3	28.5
California	20.8	6.4	11.3	9.8	31.1
Colorado	24.0	6.9	13.8	11.5	27.9
New Mexico	20.1	7.0	10.3	5.1	28.8

Source: N.S. Kaufman, The Changing Demographics of the Southwest: Data and Issues Relating to Minority Representation in Postsecondary Education in Seven Southwest States. (Boulder, CO: Western Interstate Commission for Higher Education, 1983).

TABLE I-5

PARTICIPATION IN TWO-YEAR COLLEGES IN THE WICHE STATES, 1982

STATE	TOTAL POSTSECONDARY ENROLLMENT	TOTAL TWO-YEAR ENROLLMENT	PERCENT IN TWO-YEAR	==PART TIME ENROLLMENT==		==MINORITY ENROLLMENT==				
				PERCENT OF FOUR-YEAR	PERCENT OF TWO-YEAR	TOTAL POSTSECONDARY ENROLLMENT		TWO-YEAR COLLEGE ENROLLMENT		PERCENT MINORITY POPULATION
						NUMBER	PERCENT	NUMBER	PERCENT	
ALASKA	12,303	4,925	40.0%	26.9%	67.5%	1,462	11.9%	683	13.9%	24.2%
ARIZONA	195,995	112,280	57.3%	15.8%	74.3%	31,683	16.2%	22,821	20.3%	25.5%
CALIFORNIA	1,528,979	921,659	60.3%	21.8%	70.4%	436,017	28.5%	290,832	31.6%	33.4%
COLORADO	148,403	41,401	27.9%	17.4%	60.7%	15,019	10.1%	5,228	12.6%	17.3%
HAWAII	45,642	18,911	41.1%	23.1%	50.0%	31,832	69.7%	14,800	78.3%	68.9%
IDAHO	39,989	10,473	26.2%	22.2%	20.5%	1,622	4.1%	298	2.8%	6.1%
MONTANA	33,334	3,378	10.1%	14.1%	56.2%	2,210	6.4%	902*	26.7%*	6.6%
NEVADA	33,433	15,900	47.6%	32.8%	87.7%	3,895	11.7%	2,298	14.5%	16.8%
NEW MEXICO	53,865	9,440	17.5%	32.1%	51.9%	17,302	32.1%	3,224	34.2%	47.4%
NORTH DAKOTA	33,539	7,253	21.6%	11.4%	13.6%	1,476	4.4%	686	9.5%	4.5%
OREGON	122,701	53,263	43.4%	12.7%	46.9%	8,731	7.1%	3,918	7.4%	6.7%
UTAH	96,561	17,658	18.3%	28.6%	43.4%	4,503	4.7%	1,075	6.1%	7.6%
WASHINGTON	210,826	109,336	51.9%	8.6%	45.5%	19,461	9.2%	9,692	8.9%	9.8%
WYOMING	17,961	8,577	47.8%	6.9%	42.1%	849	4.7%	555	6.5%	8.0%
WICHE STATES	2,573,491	1,334,454	51.9%	19.4%	66.0%	575,972	22.4%	357,012	26.8%	25.8%
WICHE w/o CALIF	1,044,512	412,795	39.5%	17.5%	56.0%	139,955	13.4%	66,180	16.0%	17.5%
TOTAL USA	10,892,306	3,917,242	36.0%	18.7%	58.6%	1,820,097	16.7%	836,029	21.3%	20.4%

* The numbers appear to include enrollments at tribally-controlled colleges.

Source: National Center for Education Statistics, Higher Education General Information Survey (magnetic tapes).

TABLE I-6

Public Two-Year Colleges and Enrollments
United States, 1950-1980

Year	Number of Institutions	Total	ENROLLMENT			
			Men	Women	Full-Time	Part-Time
1950	527	168,043				
1955	525	265,891				
1960	593	393,553				
1965	664	1,043,378				
1970	897	2,102,000	1,255,000	847,000	1,068,000	1,034,000
1975	1,141	3,836,000	2,097,000	1,740,000	1,663,000	2,174,000
1980	1,281*	4,329,000	1,964,000	2,365,000	1,596,000	2,733,000

* Fall 1982

Source: For number of institutions and enrollments for 1950-65, American Council on Education, 1984-85 Fact Book, (New York, 1984); for enrollments 1970-1980, National Center for Education Statistics, Projections of Education Statistics to 1990-91 (Washington D.C., 1982).

nia and other WICHE states for which data are available. It is also generally true that relatively more women than men attend part time and enroll in occupational programs or special interest courses.

As in the nation as a whole, in WICHE states the proportion of two-year college students attending on a part-time basis is very large—more than three times the proportion in the region's four-year schools. The proportion of part-timers in the two-year sector is almost nine out of ten in Nevada, nearly three out of four in Arizona and California, and more than three out of five in Alaska and Colorado. The enrollment patterns demonstrate that community colleges typically have a more diverse student body than other postsecondary institutions.

This diversity is evident in data on student characteristics, particularly financial resources, family background, and prior educational experience. Table I-7 compares parental income and parents' education of full-time, first-year students in public four-year and two-year institutions. Among public university students, 63.5 percent come from families with income greater than \$30,000 per year, compared to 40.2 percent of two-year college freshmen. Lower income students make up a higher proportion of community college enrollments. Among full-time, first-year public university students, 12.7 percent come from families with income below \$15,000—less than one-half the 25.8 percent of two-year college students from this income category. Moreover, many community college students who are not enrolled full-time are not included in these data.

Among students who apply for and receive some form of financial aid, there are also significant differences between students in community colleges and other institutions. Table I-8 shows family income of dependent students receiving financial aid to attend different types of institutions. Among the aid recipients at community colleges, 29.8 percent are from families with income less than \$7,500, compared to 16.5 percent at public universities, 23.4 percent at four-year public colleges, and 11.1 percent at private institutions. Again, these data probably understate the proportion of lower income students at community colleges since either half-time or full-time status is generally required to qualify for financial aid. Clearly, community colleges

TABLE I-7

Parental Income and Education, First Time Full-time Freshmen,
Public Institutions, Fall 1984

	<u>Universities</u>	<u>Four-Year Colleges</u>	<u>Two-Year Colleges</u>
Parental Income:			
Under \$15,000	12.7	20.9	25.8
\$15,000 to \$30,000	23.8	28.7	34.0
\$30,000 or more	63.5	50.4	40.2
Parental Education:			
Father has college degree	53.0	38.7	25.1
Mother has college degree	37.6	27.6	18.1

Source: Alexander Astin and others, The American Freshman, National Norms for Fall 1984, (Los Angeles: Cooperative Institution Research Program, 1984), pages 44, 50, 51. (Note that the student group surveyed is limited to full-time students.)

TABLE I-8

Income Level of Families of Dependent Students Receiving
Financial Aid, by Control and Type of Institution, Fall 1982

Percent of families with income of:

Type of Institution	Less than \$7,500	\$7,500- 14,999	\$15,000- 29,999	\$30,000 or more
All institutions	18.1	21.8	37.8	22.3
Public institutions	22.4	24.9	37.2	15.5
Universities	16.5	20.4	40.3	22.8
Four-Year Colleges	23.4	26.2	36.6	13.8
Two-Year Colleges	29.8	29.6	33.3	7.3
Private institutions	11.1	16.8	38.9	33.2
Universities	10.0	14.3	35.6	40.1
Four-Year Colleges	11.2	17.2	39.2	32.4
Two-Year Colleges	13.1	18.6	44.4	23.9

Source: Charles J. Anderson, Financial Aid for Full-Time Undergraduates (Washington, D.C.: American Council on Education, 1984), p. 16.

enroll students from much more diverse economic backgrounds and provide educational access for a much larger proportion of lower income individuals than do other types of institutions.

Greater diversity and student characteristics more similar to the average for the population as a whole are also typical of community college enrollments. Many community college students come from families that previously had not participated in postsecondary education. As indicated on Table I-7, the percentage of community college students whose mother or father has a college degree is less than half that of students in public universities. This means that community colleges are the first point of access to postsecondary education for many families as well as individuals.

Community college enrollments also have a more "average" profile in terms of educational preparation. Table I-9 shows average scores on the American College Testing (ACT) entrance examinations for students entering different types of institutions. Average community college test scores are consistently lower and closer to the level that would be the average for the population as a whole. High school grade point averages are also lower for community college students than for students in other institutions. The differences are not that large, however, in comparison to students in public four-year colleges.

As with other data, these ACT test scores and grade averages provide an indication of general characteristics, but are not necessarily representative of all community college students. Many community college students do not take the entrance tests. A growing proportion of community college enrollments involve individuals from very diverse educational backgrounds. Many are older, non-traditional students with work experience or a high school equivalency diploma; relatively few enter college directly following high school graduation. Another group of non-traditional community college students--often called reverse transfer students--enroll for special technical training or to develop new employment credentials after having completed a baccalaureate or advanced degree in another institution. This diversity in student educational backgrounds means that community colleges are being called upon to provide an expanding array of educational programs.

TABLE I-9

Average Student Preparation and Ability Measures,
Fall 1982 Entering Enrollments
(Based on Freshmen Taking ACT Test)

Average ACT Scores	English	Mathematics	Social Studies	Natural Sciences	Composite
Public Community Colleges	15.6	13.2	14.5	18.3	15.5
Public Four-year Colleges	15.9	14.5	15.0	18.9	16.2
Public Universities	18.8	18.6	18.7	22.0	19.6
Private Institutions	19.4	18.6	19.2	22.1	20.0
<u>Average High School Grade Point Average</u>					
Public Community Colleges	2.79	2.58	2.86	2.68	2.73
Public Four-Year Colleges	2.85	2.58	2.95	2.79	2.80
Public Universities	3.10	2.84	3.22	3.01	3.04
Private Institutions	3.18	2.90	3.25	3.06	3.10

Source: American College Testing Program (ACT), College Student Profiles: Norms for the ACT Assessment (Iowa City, Iowa: ACT, 1983), Tables 2.8, 2.9, 2.10, 2.11 and 2.12.

TABLE I-10

Remedial Instruction in Institutions of Higher Education
 Percentage of Freshmen in Remedial Courses by Subject, 1983-84

	<u>Reading</u>	<u>Writing</u>	<u>Math</u>
Public Institutions	18%	22%	27%
Private Institutions	9	12	15
Two-Year Institutions	19	23	28
Four-Year Institutions	12	17	19
U. S. Total	16	21	25

Change in Remedial Course Enrollment from 1978 to 1984

	<u>Decrease</u>	<u>No Change</u>	<u>--Increased Enrollment--</u>	
			<u>10-30%</u>	<u>more than 30%</u>
Percentage of Institutions	4%	33%	44%	19%

Source: U.S. Department of Education, Indicators of Education Status and Trends, (Washington, D. C., January 1985), page 14.

Part of this expanding role involves providing remedial or compensatory instruction for individuals who are not fully prepared for postsecondary education. Table I-10 shows the percentage of first-year students taking remedial instruction in reading, writing, or mathematics. The proportions are consistently higher for students in public as compared to private institutions and in two-year institutions as compared to four-year institutions, although the differences are not large in all cases. Since 1978, 44 percent of all institutions have reported a 10 to 30 percent increase in remedial enrollments, and 19 percent of the institutions have reported more than a 30 percent increase in these enrollments. What these figures mean in terms of overall educational opportunity and quality is uncertain. What is clear is that community colleges enroll a large proportion of students who require special instruction to bring them up to the postsecondary levels, that this proportion has grown in recent years, and that without these programs many individuals would not be able to pursue postsecondary education.

Providing remedial programs is only one aspect of expanding community college roles to meet the educational needs and goals of a rapidly changing population. Reverse transfers of students with four-year degrees and short-term, non-sequential programs in technical fields, job-related skills, and the liberal arts also indicate the increasing diversity among students and programs.

A recent study of California community colleges identified three major student prototypes and seventeen subtypes among community college students.² Thirty-seven percent were identified as "transfer prototypes," although only 10.6 percent were full-time transfer students. Many of the transfer prototypes were enrolled in vocational or technical programs. The actual "vocational prototypes," 35.5 percent of the total, generally had more immediate educational objectives. Only 5.7 percent appeared to be "program completers" in the sense of completing an associate degree. Larger proportions were

²Richard H. Simpson, The Neglected Branch: California Community Colleges (Sacramento, CA.: Senate Office of Research, 1984), p.27. Data and prototypes from the California Postsecondary Education Commission.

enrolled in vocational programs with the more immediate objective of finding a job or improving current job skills. "Special interest prototypes" were the other major category--27.5 percent of community college students.

While California is not necessarily representative of community college enrollments in all WICHE states, these typologies represent the diversity of students and student objectives found to varying degrees at community colleges throughout the West. In the absence of educational opportunities that are highly accessible, relatively affordable, and geared to a wide variety of educational backgrounds and goals, many community college students would be unlikely to pursue postsecondary education.

Faculty Characteristics

Demographic and social changes have affected not only community college enrollment patterns and student characteristics, but faculty characteristics as well. At the same time that enrollment growth required faculty expansion, greater diversity in student needs, academic program offerings, and institutional objectives changed both the characteristics and roles of faculty members. Community college faculty appear to have changed as much as the students.

Table I-11 shows the growth in the number of full-time and part-time faculty at community colleges since 1958. A number of trends are notable:

- o The total number of faculty members has increased more than seven-fold since the mid-1950s, including more than a doubling after 1973 to a high of approximately 239,000 in 1980. In contrast, total headcount enrollment in community colleges has increased more than 15-fold during this period (see Table I-6).
- o The largest growth has been in part-time faculty. Since 1973, the number of full-time community college faculty members increased slightly more than 10 percent, while part-time faculty more than doubled. In 1982, 58 percent of community college instructors worked part-time.
- o Between 1980 and 1982, community college faculty declined in number. These decreases occurred entirely among full-time faculty members; part-time faculty continued to increase.

TABLE I-11

Numbers of Full-Time and Part-Time
Two-Year College Instructors, 1958-82

	<u>Total Instructors</u>	<u>Full-Time</u>		<u>Part-Time</u>	
		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
1958	33,396	20,003	60	13,393	40
1968	97,443	63,864	66	33,579	34
1973	151,947	89,958	59	61,989	41
1978	213,712	95,461	45	118,251	55
1980	238,841	104,777	44	134,064	56
1982	236,761	99,701	42	137,060	58

Source: A.M. Cohen, "The Community College in the American Educational System," unpublished background paper prepared for National Institute of Education Study Group (1984), Table 7.

TABLE I-12

Highest Degree Held by Two-Year College Instructors
(percentages)

<u>Year</u>	<u>Less than B.A.</u>	<u>Bachelor's</u>	<u>Master's</u>	<u>Doctorate</u>
1930	7%	29%	59%	5%
1941	3	27	64	6
1957	7	17	65	10
1969	17 (includes both)		75	7
1972	3	13	74	10
1979	3	8	74	15

Source: A.M. Cohen and F.B. Brawer, The American Community College, (San Francisco, CA: Jossey-Bass, 1982), Table 13, p. 77. Additional information on sources and characteristics of the studies cited is provided in the table.

Scarce resources and budgetary decisions have contributed directly to this trend toward predominantly part-time community college faculties. Part-time and temporary appointment instructors contracted to teach specific courses are typically paid less per course or per semester than instructors with full-time appointments that include non-teaching responsibilities. Other factors are involved as well. Flexible class scheduling with more evening and weekend classes provide opportunities for part-time instructors who hold other jobs. More variety in course offerings, particularly in rapidly-changing technical fields, make it more appropriate to use instructors currently employed in the field. Conditions in the academic job market lead many new degree recipients to accept part-time employment. In other areas, such as accounting, rapid enrollment growth combined with higher-paying non-academic job opportunities have virtually forced the hiring of part-timers as the only available instructors.

The educational consequences of this shift to part-time faculties are unclear. The recent National Institute of Education report, Involvement in Learning: Realizing the Potential in American Higher Education, raised questions about how part-time faculty relate to students and institutions, and what effects these relationships have on learning processes. While more research is needed on these questions, the extent of part-time faculty in community colleges virtually rules out any rapid changes.

The shift to more part-time faculty members does not, however, appear to have affected the credentials of those teaching in community colleges. Periodic studies of faculty academic degrees show that an increasing proportion of community college instructors have masters or doctorate degrees, as indicated on Table I-12. The most recent study, done in 1979, found that 74 percent of community college faculty hold a master's degree and 15 percent a doctorate.³

Faculty salaries are directly related to employment status, but are difficult to examine because of the variety of contractual practices used for part-time faculty members. Table I-13 shows average salaries only for faculty

³F.B. Brawer and J. Friedlander, Science and Social Science in the Two-Year College, Topical Paper No. 71 (Los Angeles: ERIC Clearinghouse for Junior Colleges, 1980).

TABLE I-13

Average Full-time Faculty Salaries in Public Universities,
Four-Year Colleges, and Two-Year Colleges,
WICHE States, 1981-82
(Numbers are rank in U.S.)

<u>Universities</u>		<u>Four-Year Colleges</u>		<u>Two-Year Colleges</u>	
1. Alaska	\$39,425	1. Alaska	\$35,379	1. Alaska	\$39,521
2. California	34,297	2. California	31,134	2. California	30,817
7. Arizona	30,240	4. Nevada	28,042	4. Arizona	25,994
10. Wyoming	29,280	7. Arizona	27,045	U.S. Average	24,238
11. Nevada	29,134	9. Washington	26,314	8. Washington	24,157
12. Washington	29,071	U.S. Average	25,659	10. Wyoming	23,738
15. Colorado	28,213	23. Oregon	24,179	13. Hawaii	23,477
U.S. Average	27,900	24. New Mexico	24,133	17. Oregon	22,345
18. Hawaii	27,884	25. Colorado	23,986	20. North Dakota	21,990
20. Utah	27,515	27. North Dakota	23,743	23. Nevada	21,649
30. New Mexico	26,618	28. Hawaii	23,679	26. Montana	20,774
34. Oregon	26,303	33. Utah	23,280	28. Utah	20,590
39. Idaho	25,398	35. Montana	22,788	30. New Mexico	20,159
42. North Dakota	24,799	40. Idaho	22,056	32. Idaho	19,965
46. Montana	24,457	(Wyoming not applicable)		33. Colorado	19,932

Source: National Education Association Research Memo, Rankings of the States, 1983 (Washington, D.C.: 1984) pp. 26-27.

Note: Salaries reflect nine-month faculty contact.

with full-time appointments in public universities, four-year colleges, and community colleges in the WICHE states. It must be noted that the reliability of comparisons across states is affected by differences in the cost of living and employment conditions. Comparisons across sectors are similarly affected by differences in the proportions of full-time faculty, in teaching loads, and other faculty responsibilities. With these caveats, several observations are notable in the table:

- o Nationally, full-time faculty salaries at community colleges are approximately \$1,500 less than at four-year colleges and \$3,700 less than at public universities.
- o These differences are not consistent from state to state. In several WICHE states, full-time faculty salaries at community colleges are equal to or exceed those in four-year colleges.
- o Only three WICHE states exceed the national average in community college salaries, fewer than the proportions for four-year college and university salaries.

Although the relationships are not apparent in the salary data, it must be noted that a higher proportion of faculty at community colleges work under negotiated contracts than in other institutions.⁴

In summary, the changing social and demographic environment of community colleges is reflected in student characteristics, new instructional roles, faculty characteristics, and other factors. Together these components raise a number of questions about the missions and operations of community colleges in the coming decade. How will community colleges respond to further population growth and to changes in the composition of enrollments? What academic programs and services are required to meet the increasingly diverse needs and educational objectives of community college students? What are the social, educational, and economic implications of an open-door philosophy? What community college services will best serve both individuals and the public at large? Are the roles, responsibilities, and rewards for community college faculty consistent with student needs and public expectations? The responses

⁴Richard J. Ernst, "Collective Bargaining: The Conflict Model as Norm," in William L. Deegan and James F. Gollattscheck (eds.) Ensuring Effective Governance, New Directions for Community Colleges (March 1985), pp. 53-62.

to such questions and challenges will determine how well community colleges meet social and individual needs, and how fully they contribute to personal and economic well-being during the next decade.