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ABSTRACT

This document provides information on teacher supply and demand in Michigan with comparative tables on data for the United States. Charts and graphs depict 1989-1990 hiring practices and describe: (1) follow-up data on teacher education graduates; (2) supply of out-of-state teachers; (3) new teachers hired by category; (4) financing for school systems; (5) demographics--births each year; (6) pupil enrollment; (7) changes in pupil enrollments within other states; (8) total instructional staff--changes for the United States and for individual states; (9) retirements of teachers; (10) demand for teachers--academic majors in demand; (11) relative demand categories; (12) demand for minority teaching candidates; (13) demand for master's degree candidates; (14) other factors influencing hiring such as size of school district; and (15) starting salary averages and average salaries of teachers. Information is provided on a teacher recruitment fair held every April by Michigan teacher preparation institutions. Teachers graduating each year are advised to: broaden the scope of geographical considerations; develop additional certification endorsements in high-demand academic majors; agree to supervise several extracurricular activities; and extend coaching options. (LL)

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Teacher Supply and Demand in Michigan and the United States - 1991

Collegiate Employment Research Institute
Michigan State University

June 1991

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The current job market for teachers in Michigan cannot be easily portrayed. Some geographical regions need teachers, while others have an excess supply. Elementary, physical education, and social studies teachers are generally oversupplied, while special education, mathematics, and sciences teachers are badly needed. While minority job applicants are scarce in all geographical regions, majority applicants are needed in large metropolitan regions. Majority teachers are oversupplied in suburban areas. Out-of-state regions could provide employment for most of Michigan's excess supply of teachers, if the job applicants would agree to move.

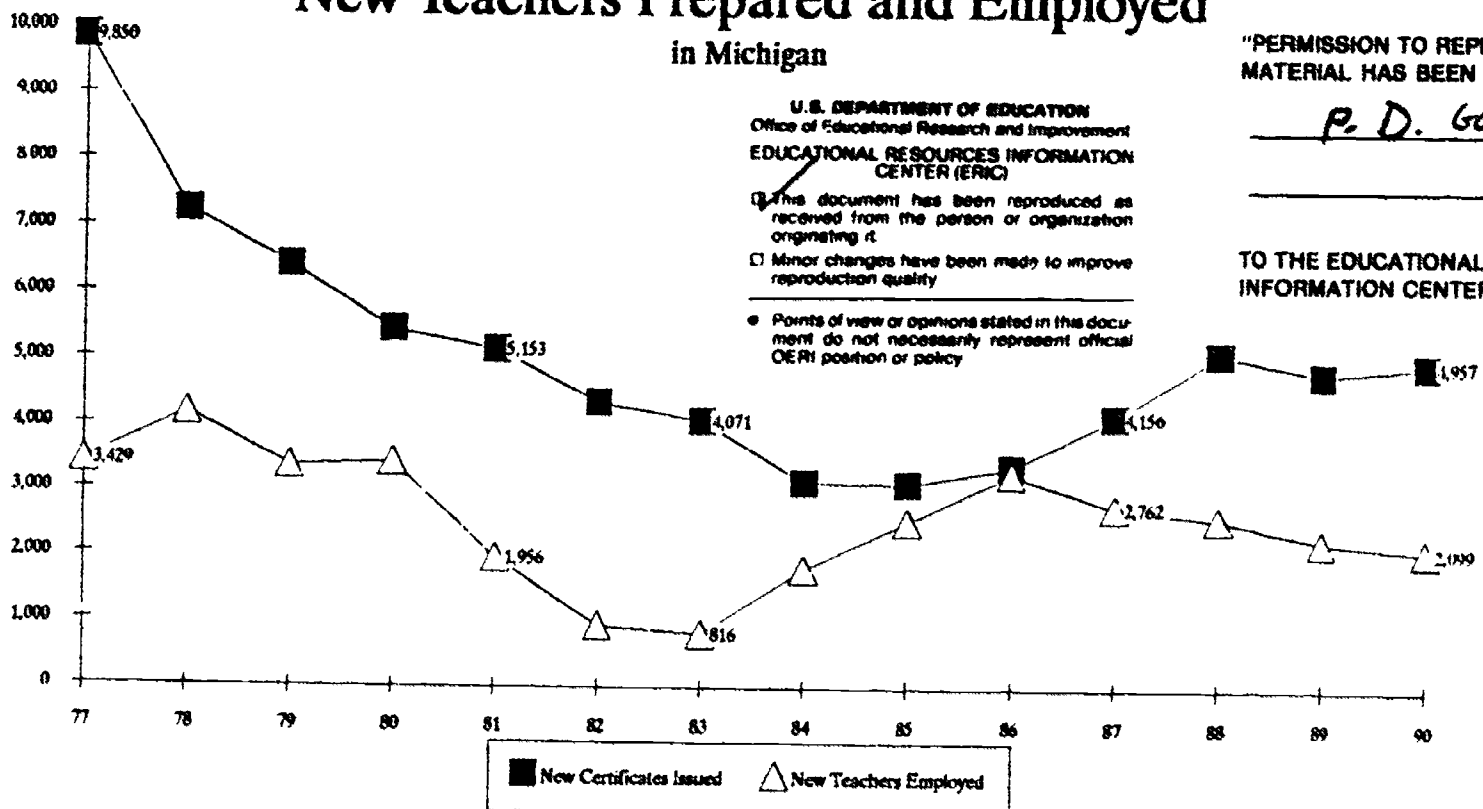
During 1989-90, 2,099 new teachers were hired by Michigan public school systems while 4,957 teaching certificates were granted to graduates of Michigan colleges and

universities. Data, displayed in the accompanying graph, provide an illustration of recent graduation and hiring patterns in the State. Statistics are listed for new teachers prepared and new teachers hired by Michigan public school systems. Since 1985-86, the number of job openings filled by new teachers, those with no prior teaching experience, has declined by 35.9% (Michigan Department of Education, 1990). During this same period, teaching certificates issued to new graduates increased 47.0%.

FOLLOW-UP DATA ON TEACHER EDUCATION GRADUATES

Statewide follow-up data for 1988-89 teacher education graduates show the problems these individuals face in Michigan: unemployment rates for academic majors in teacher education programs ranged from 10% to 50%, and positions accepted outside Michigan accounted for approximately 36% of the jobs held by new teacher education graduates (Scheetz and Gardner, 1990).

New Teachers Prepared and Employed in Michigan



Source: Professional Personnel Data for Michigan Public School Systems

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New teachers with no prior teaching experience represented 43.1% of new personnel hired by Michigan public school districts in 1989-90, according to a survey by the Institute (Scheetz and Brandou 1990). In an analysis of the professional personnel file maintained by the Michigan Department of Education on Michigan public school districts, only 36.1% of 5,174 new personnel employed in 1989-90 were teachers with no prior teaching experience.

SUPPLY OF OUT-OF-STATE TEACHERS

Of the new teachers hired by Michigan school districts in 1989-90, 214 (10.2%) were prepared by out-of-state colleges and universities. During 1989-90, a total of 1,099 out-of-state candidates were granted teaching certificates by the Michigan Department of Education. In the last eight years, the numbers of out-of-state graduates seeking teaching certificates increased from 1982-83 to 1986-87. Since then, the numbers have decreased.

Year	Total Hired
1982-83	1,032
1983-84	1,197
1984-85	1,237
1985-86	1,670
1986-87	2,159
1987-88	1,813
1988-89	1,419

Source: Michigan Department of Education. 1990. Teacher Certification Approvals from 1979-80 to 1989-90. Lansing, MI: Michigan Department of Education.

NEW TEACHERS HIRED BY CATEGORY

Recent hiring trends, found in the following chart, shed additional light on the situation. The following new teachers were hired in 1989-90: 751 elementary teachers, 417 special education teachers, 148 English/language arts teachers, 114 science teachers, 112 mathematics teachers, and 102 social science teachers. The numbers hired for other categories are also provided on this chart.

FINANCING FOR SCHOOL SYSTEMS

Another major factor influencing the labor market for new teachers appears to center on the financial situation in many local school districts. Budgets are tight, according to numerous school district administrators, but even with pressing needs for new faculty, school districts are financially unable to pay for all the new staff needed to run their schools (Albright 1991).

Besides finances, state and national demographics also influence the demand for teachers. The purpose of this report is to present an overview of the current labor market for teachers in Michigan and to explore possible

employment options for students who will soon graduate with teacher education degrees from Michigan's colleges and universities.

DEMOGRAPHICS

Births Each Year

The number of children born each year will affect the future demand for new teachers in Michigan. Since 1976, when 131,378 children were born in Michigan, births have fluctuated, moving slightly higher between 1977 and 1980 before falling again in the early 1980's. The drop in births between 1980 and 1983 corresponded to a period when economic conditions in Michigan forced many families of the childbearing age group to move out of the state or caused them to delay having children. In recent years, these families have returned or started their families. Since 1983, when 133,026 children were born, births have steadily increased to 148,164 in 1989.

When compared to the remainder of the United States, Michigan's births have increased at a rate of 3.6% per year compared to the remainder of the United States birth rates, though birth rates have increased nationwide. In the District of Columbia, Nevada, California, Delaware, Florida, Oregon, Tennessee, Georgia, North Carolina,

Teaching Categories	New Teachers Hired	Total Teachers Employed
Elementary Education	751	31,600
Special Education	417	12,640
English/Language Arts	148	9,027
Sciences	114	5,160
Mathematics	112	5,630
Social Sciences	102	6,065
Music (Vocal/Instrumental)	98	2,626
Physical Educ. & Health	67	4,365
Foreign Languages	49	1,750
School Social Workers	44	1,022
Art Education	41	1,909
Business/Distributive Educ.	31	2,048
Industrial Arts	22	1,883
School Psychologists	22	770
Library Science	20	1,182
Home Economics	14	1,082
Counselors	11	2,633
Media Specialists	6	324
School Nurses	6	179
Agriculture	3	59
Other	21	1,398
Total New Hires:	2,099	93,352

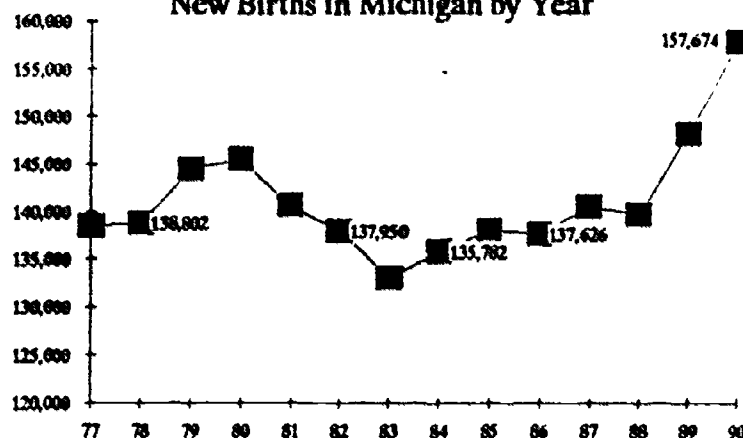
Source: Michigan Department of Education. Professional Personnel Report 1989-90 (Lansing, MI.: Michigan Department of Education, 1990).

**Change in U. S. Births
1986 to 1990
By State**

States	% Change Since 1986	Births in 1990
District of Columbia	118.14%	21,912
Nevada	32.79%	21,109
California	28.09%	617,704
Delaware	20.66%	11,728
Florida	19.02%	199,481
Oregon	17.96%	45,851
Tennessee	17.47%	77,821
Georgia	16.94%	114,818
North Carolina	16.59%	105,230
Rhode Island	16.53%	15,666
Connecticut	16.45%	52,230
Massachusetts	15.67%	95,066
Missouri	14.98%	83,085
Michigan	14.56%	157,674
New York	14.41%	302,084
Arizona	12.86%	68,701
Alabama	12.56%	66,935
Hawaii	11.87%	20,469
Ohio	11.84%	165,546
--United States	11.61%	4,192,649
Washington	10.94%	77,034
Virginia	10.88%	96,665
New Jersey	10.18%	119,887
Kentucky	9.57%	56,753
South Carolina	9.11%	56,521
Maryland	8.66%	75,557
Texas	7.46%	329,976
Indiana	7.41%	85,202
Illinois	7.02%	189,129
Pennsylvania	6.94%	172,145
New Hampshire	6.49%	16,927
Minnesota	3.91%	68,353
Arkansas	3.22%	35,499
New Mexico	3.14%	28,252
Mississippi	2.85%	43,063
Iowa	2.13%	39,595
Utah	2.10%	37,175
Wisconsin	0.21%	72,488
West Virginia	-0.15%	23,202
Idaho	-0.18%	16,418
Nebraska	-0.45%	24,317
Kansas	1.02%	8,864
Vermont	-1.15%	8,045
Maine	-2.98%	16,211
North Dakota	-3.11%	10,483
Colorado	-3.47%	53,238
Alaska	-3.96%	11,685
South Dakota	-6.05%	10,912
Louisiana	-7.75%	71,913
Oklahoma	-8.93%	46,119
Montana	-10.52%	11,394
Wyoming	-24.51%	6,517

Source: National Center for Health Statistics, 1991. *Monthly Vital Statistics Report*, 8 April, Vol. 39, No. 12.

New Births in Michigan by Year



Source: Michigan data from a study by Stanley E. Hecker, Ed.D. and Frederick R. Ignatovich, Ph.D. (Michigan Total and Public Enrollment Projections Based on 1989-91 through 1987-88 Membership Data. East Lansing, Michigan: College of Education, Michigan State University, 1988, pp. 10-12.

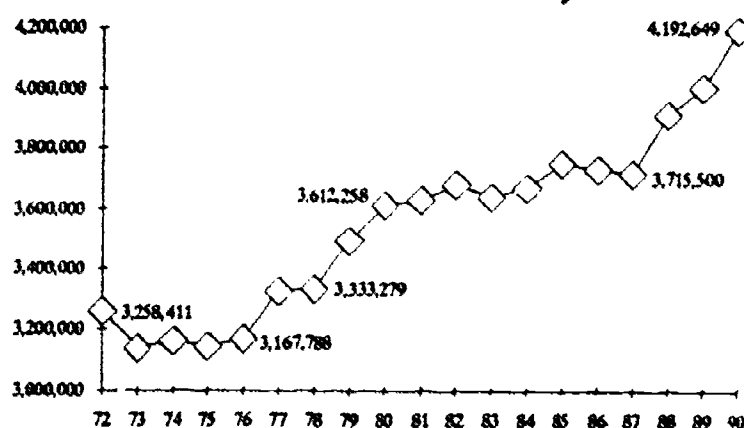
Rhode Island, Connecticut, and Massachusetts, births have increased at rates above 15% between 1986 and 1990. The birth rate increase in these areas are slightly higher than Michigan.

Also experiencing significant increases in births are the states of Missouri, New York, Arizona, Alabama, Hawaii, Ohio, Washington, Virginia, New Jersey, Kentucky, South Carolina, Maryland, Texas, Indiana, Illinois, Pennsylvania, New Hampshire, and New Hampshire. From these data, it can be assumed that demand for new teachers in these states may increase during the next decade.

PUPIL ENROLLMENT

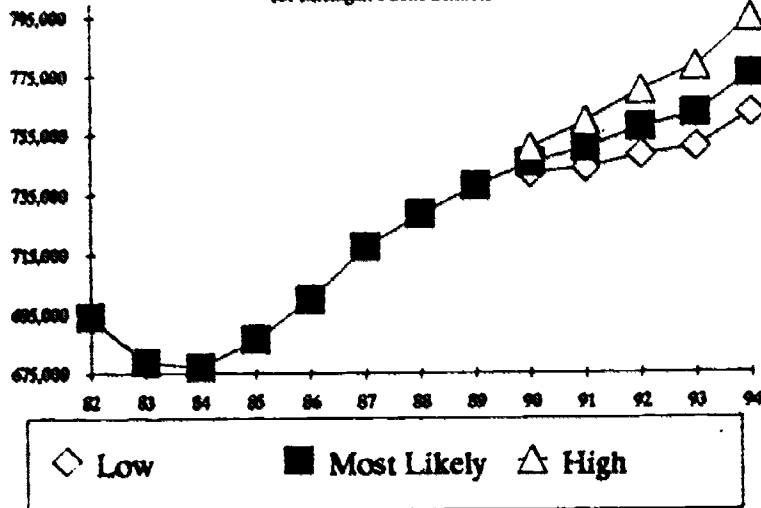
Enrollment projections are another indicator of probable demand for teachers. Assuming that children enter kindergarten at five to six years after birth, the demand for teachers, at least at the elementary school level, can be predicted with some accuracy. According to Hecker and Ignatovich (1990), children born in 1989 are likely to enter the kindergarten in 1994-95. From these data, it appears likely that more elementary teachers will be needed in Michigan.

New Births in the United States by Year



Source: U. S. Department of Commerce, Bureau of the Census, 1990.

Enrollment Projections for Grades K-5
for Michigan Public Schools

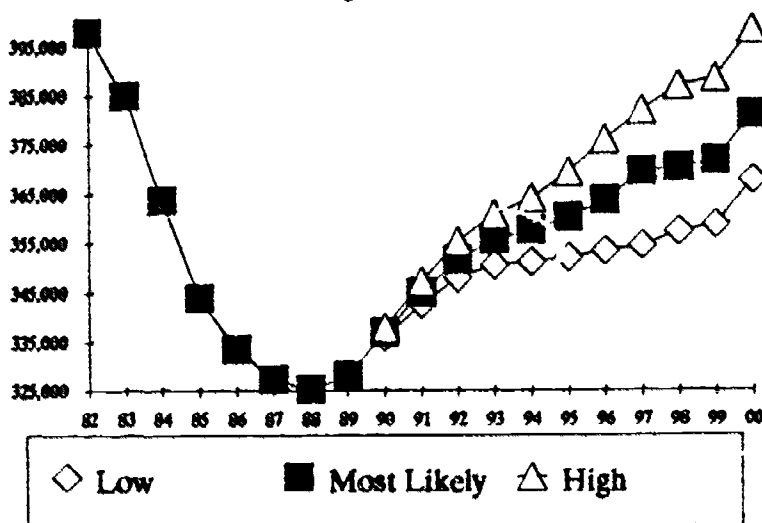


Source: Hecker, Stanley E. and Frederick R. Ignatovich. 1990. Michigan Total and Public Enrollment Projections Based on 1982-83 through 1989-90 Membership Data. East Lansing, MI: College of Education, Michigan State University.

Enrollment in public school systems at the elementary grade levels (K-5) increased from 676,910 in 1984-85 to 737,681 in 1989-90 (Hecker and Ignatovich 1990). According to projections by these authors, elementary enrollment (K-5) will likely continue to increase through 1994-95, expected to reach 775,255 by that time.

For junior high/middle school grades (6-8), enrollments in Michigan public school systems are expected to increase from their 1988-89 level of 325,293 students (Hecker and Ignatovich 1990). Enrollment already began to increase in 1989-90, and this trend is expected to continue through 2000-2001 (380,954 students). This increase is anticipated as more elementary students matriculate to the junior high/middle school level during the early 1990's.

Enrollment Projections for Grades 6-8
for Michigan Public Schools

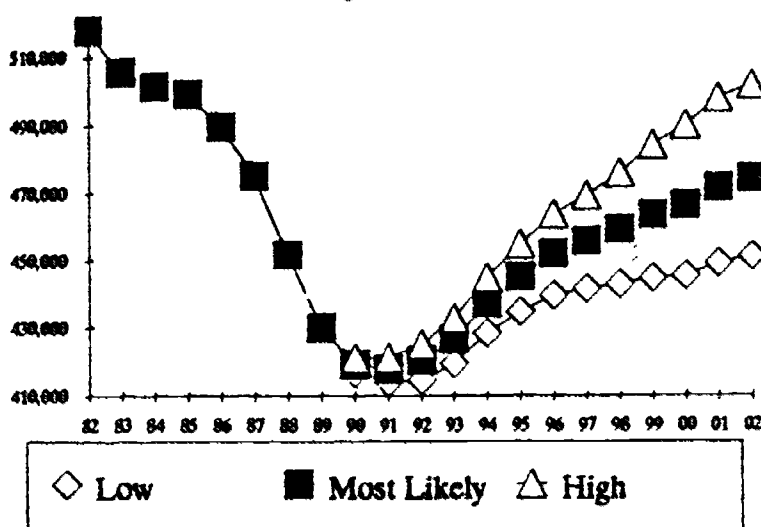


Source: Hecker, Stanley E. and Frederick R. Ignatovich. 1990. Michigan Total and Public Enrollment Projections Based on 1982-83 through 1989-90 Membership Data. East Lansing, MI: College of Education, Michigan State University.

Declines in high school enrollment (9-12) are expected through 1991-92, and then increases are likely to occur through 2003-04 (Hecker and Ignatovich 1990). In 1989-90, 430,038 students were enrolled in Michigan public school systems at the high school level (9-12). By 1991-92, student enrollment is expected to decrease to 417,713, and then increase to 483,731 by 2003-04.

Demand for teachers is expected to follow these enrollment curves quite closely, with increases in demand for elementary teachers beginning in 1984-85 and continuing through 1993-94. At the junior high/middle school levels, demand for teachers is expected to reach its lowest level in 1988-89 and then increase through 1999-2000. At the high school level, demand for teachers is expected to decrease through 1991-92 and then increase through 2003-2004.

Enrollment Projections for Grades 9-12
for Michigan Public Schools



Source: Hecker, Stanley E. and Frederick R. Ignatovich. 1990. Michigan Total and Public Enrollment Projections Based on 1982-83 through 1989-90 Membership Data. East Lansing, MI: College of Education, Michigan State University.

CHANGES IN PUPIL ENROLLMENTS WITHIN OTHER STATES

Elsewhere in the United States, pupil enrollments have varied considerably from state to state. Prominent among those states with the most significant increases in enrollments from Fall 1985 to Fall 1989 were Nevada (17.0%), Florida (13.1%), Arizona (12.2%), California (10.3%), Washington (7.6%), Mississippi (7.5%), Utah (7.5%), New Hampshire (6.2%), Minnesota (5.6%), Georgia (5.5%), Texas (5.4%), Oregon (5.3%), New Mexico (5.2%), and Delaware (5.0%) (NEA 1990). Michigan ranked 48th with an enrollment decrease of 7.3% from 1985 to 1989.

**Percent Change
in Public School Enrollment
from Fall 1985 to Fall 1989**

States	% Change Since 1985	Enrollment in 1989-90
Nevada	17.02%	186,800
Florida	13.12%	1,794,936
Arizona	12.23%	679,310
California	10.28%	4,728,293
Washington	7.64%	810,574
Mississippi	7.52%	502,020
Utah	7.45%	435,762
New Hampshire	6.16%	171,532
Minnesota	5.62%	737,997
Georgia	5.50%	1,126,535
Texas	5.35%	3,327,498
Oregon	5.27%	472,400
New Mexico	5.13%	279,219
Delaware	5.02%	97,808
Vermont	4.83%	94,779
Kansas	4.79%	430,864
Maryland	3.90%	698,806
Hawaii	3.13%	169,193
Colorado	2.82%	566,631
South Dakota	2.54%	127,100
Idaho	2.53%	216,909
South Carolina	1.95%	616,805
Wisconsin	1.91%	782,915
Virginia	1.72%	985,031
Tennessee	1.60%	828,688
Missouri	1.59%	807,934
Nebraska	1.50%	269,861
Rhode Island	1.17%	135,035
Maine	0.73%	208,343
Arkansas	0.36%	434,960
Illinois	0.15%	1,779,428
Alabama	-0.30%	728,254
North Dakota	-0.71%	117,134
Indiana	-1.09%	955,611
Pennsylvania	-1.15%	1,654,480
North Carolina	-1.37%	1,078,153
New York	-1.40%	2,572,500
Iowa	-1.45%	478,486
Connecticut	-1.46%	465,646
Ohio	-1.66%	1,764,200
Kentucky	-2.10%	630,688
Montana	-2.31%	150,593
Oklahoma	-3.29%	577,000
New Jersey	-3.74%	1,076,005
Louisiana	-3.78%	775,300
Alaska	-5.88%	103,373
Wyoming	-5.88%	97,072
Michigan	-7.28%	1,566,030
West Virginia	-9.10%	328,069
District of Columbia	-9.19%	79,759
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United States	2.58%	40,512,243

Source: National Education Association. 1990. *Estimates of School Statistics-1989-90*. West Haven, CT: National Education Association. p. 28.

TOTAL INSTRUCTIONAL STAFF
Changes for the United States
and Individual States

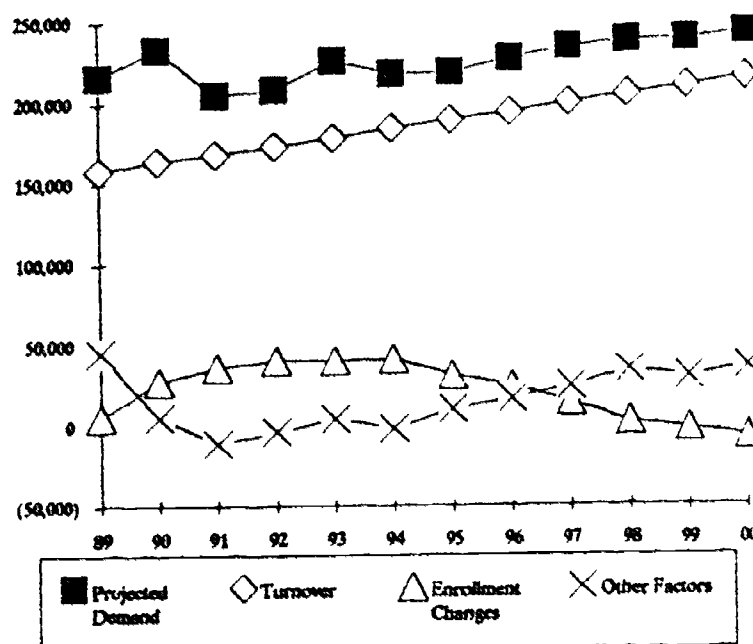
According to the National Center for Education Statistics (1989), the total instructional staff, nationally, in public school districts is expected to increase from 2,296,000 in 1987-88 to 2,681,000 in 1999-2000. At the same time, projected demand for new teachers (both elementary and secondary) throughout the United States is expected to increase from 216,000 needed in 1988-89 to 243,000 in 1999-2000.

Total classroom teachers employed in individual states are also expected to vary. As evidence, changes from 1983-84 to 1989-90 are noted in the accompanying table. Experiencing the highest increases in total teachers employed were Arizona (30.9%), Nevada (25.9%), Rhode Island (25.8%), Florida (25.3%), Massachusetts (21.5%), and Utah (20.4%). Also gaining substantial new instructional personnel were California (19.7%), Washington (18.8%), Texas (18.4%), Georgia (18.2%), Maine (15.7%), Hawaii (15.4%), North Carolina (15.1%), and District of Columbia (14.7%). Michigan ranked 35th with an increase of 6.5%.

RETIREMENTS OF TEACHERS

Also expected to influence the demand for new and replacement teachers is the number of retirements among current public school teaching staff. When incentives were offered to public school professional personnel by the Michigan Public School Employee's Retirement Sys-

Demand for Teachers in the United States



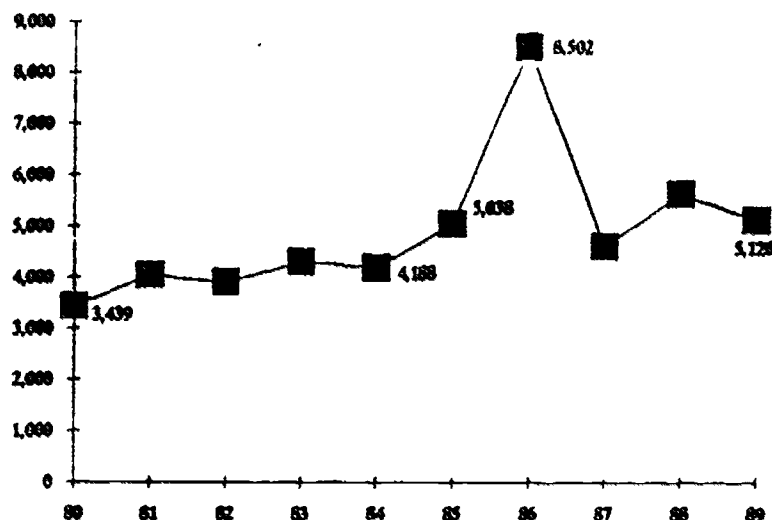
Source: National Center for Education Statistics. 1989. *Projections of Education Statistics to 2000*.

Total Classroom Teachers in Public School Systems 1989-90

States	Total Teachers in 1989-90	% Change since 1985
Arizona	33,593	30.91%
Nevada	9,178	25.85%
Rhode Island	9,361	25.80%
Florida	104,127	25.34%
Massachusetts	58,660	21.53%
Utah	18,588	20.44%
California	203,941	19.66%
Washington	40,357	18.77%
Texas	202,572	18.40%
Georgia	66,481	18.15%
Maine	14,199	15.69%
Hawaii	9,318	15.42%
North Carolina	62,947	15.06%
District of Columbia	6,479	14.71%
Minnesota	43,750	13.51%
Kentucky	35,843	12.01%
Virginia	52,617	11.51%
Vermont	6,950	11.47%
Tennessee	43,590	11.38%
--United States	2,354,767	11.23%
Kansas	28,696	11.22%
South Carolina	35,580	10.94%
New Jersey	81,092	10.69%
Indiana	54,675	10.55%
New Hampshire	10,693	10.03%
Delaware	5,972	9.86%
Missouri	51,227	9.66%
Ohio	101,510	9.43%
Maryland	40,716	8.76%
Nebraska	18,249	8.72%
Mississippi	27,018	8.66%
New York	178,100	8.60%
Colorado	31,700	7.65%
Oregon	25,631	6.84%
Arkansas	25,452	6.51%
Michigan	77,668	6.46%
Connecticut	34,795	6.36%
Louisiana	43,882	5.43%
Idaho	10,435	5.40%
New Mexico	16,300	4.96%
North Dakota	7,751	4.96%
Wisconsin	49,180	3.32%
South Dakota	8,180	2.39%
Montana	9,568	2.33%
Illinois	103,257	2.18%
Pennsylvania	104,100	1.91%
Alaska	6,492	1.64%
Alabama	39,700	1.28%
Iowa	30,874	0.61%
Oklahoma	35,600	-0.26%
West Virginia	21,653	-3.41%
Wyoming	6,470	-8.34%

Source: National Education Association. 1990. *Estimates of School Statistics-1989-90*. West Haven, CT: National Education Association. p. 28.

Retirements in Michigan Public Schools



Source: Pearl Ann Miller, Administrative Assistant for the Michigan Public School Retirement System. Letter of October 2, 1989, and telephone call on November 16, 1990. Lansing, MI: Michigan Department of Management and Budget.

tem during 1985 to 1987, retirements increased, reaching 8,502 in 1987. After the program expired in 1987, retirements decreased to approximately 5,300 per year.

According to data collected in 1990, 51.2% of Michigan public school districts are offering incentive packages to teachers and other professionals who retire early (Scheetz and Brandou 1990). Offered among incentive packages were cash bonuses, severance pay, payments for insurance, purchase of retirement credit, and payments of sick leave. Retirements should continue to increase as districts attempt to shed some of their higher paid teachers.

DEMAND FOR TEACHERS Academic Majors in Demand

Demand for new teachers in specific disciplines varies significantly, depending upon the ratio of available supply to demand. Most notable among the academic majors in high demand/low supply are learning disabilities teachers (M.S. & experience required); school psychologists/diagnosticians (Ed.S. or Ph.D. required); school social workers (MSW required); and teachers of mathematics, agricultural education, chemistry, earth science, industrial arts, physics, and classes for the emotionally disturbed.

Good demand/possible shortage is currently experienced by teachers of general science, physical science, business education (especially typing and shorthand) and computer science/data processing. Counselors (M.S. & 3 years teaching experience), school librarians, speech correctionists (M.A. required), teachers of deaf education, distributive education, mentally handicapped, reading instruction, and visually handicapped also fall into this category.

**Elementary and Secondary Teacher Education Report
Based on Supply and Demand for Graduation in 1991-92**

Relative Demand Categories:

Low Supply/ High Demand

Agricultural Education
Chemistry
Earth Science
Emotionally Disturbed
Industrial Arts
Learning Disabilities (M. S. & experience.)
Mathematics
Physics
School Psychologist/ Diagnostician (Ed.S or Ph.D.)
School Social Worker (M.S.)

Possible Shortage/ Good Demand

Business Education
Counseling (M.S. & 3 yrs. exp.)
Data Processing
Deaf Education
Distributive Education
Driver Education
General Science

Librarian

Mentally Handicapped
Physical Science
Reading Education
Speech Correction (M.A. req.)
Visually Handicapped
Swimming Coach
Wrestling Coach

Near Balance

Art
English
French
Home Economics
Instrumental Music
Journalism
Physically Handicapped
Spanish
Vocal Music
Football Coaching
Basketball Coaching

Adequate Supply

Child Development
Elementary Education
German
History
Social Studies
Baseball Coaching
Golf Coaching
Tennis Coaching
Track Coaching

Surplus

Biology
Conservation/ Natural Resources
Economics
Geography
Health Education
Latin
Physical Education
Political Science
Psychology
Recreation

Definitions:

Low Supply/ High Demand: Many more positions than college graduates.

Possible Shortage/ Good Demand: A few more positions than graduates.

Near Balance: Approximately as many positions as college graduates.

Adequate Supply: A few more college graduates than positions.

Surplus: Many more college graduates than positions.

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- U.S. Department of Labor, Bureau of Labor Statistics. Occupational Outlook Handbook. Washington, D.C.: U.S. Government Printing Office, Quarterly. HF 5382.O53

Professional Personnel Data for Michigan Public School Systems 1989-90

Codes	Assignment Areas	Number of Personnel		Codes	Assignment Areas	Number of Personnel	
		New	Total			New	Total
BA	English	98	5,739	NN	Junior High Grades	36	2,194
BC	Journalism		173	NR	Computer Science	17	437
BD	Speech		374	NT	Counselor	11	2,633
BR	Reading	17	1,638	NU	Occupational Therapy	18	458
BX	Language Arts	19	1,103	NV	Media Specialist	6	324
CA	Economics	2	100	NX	Other	21	1,398
CB	Geography	4	314	NY	School Nurse	6	179
CC	History	31	1,570	NZ	Sex Education	12	
CD	Political Science	1	246	OX	Fine Arts	2	41
CE	Psychology	6	160	PS	Philosophy		
CF	Sociology	2	122	PX	Humanities	1	26
CH	Anthropology		3	SA	Mentally Handicapped	113	3,381
CL	Cultural Studies		10	SB	Speech Correction	43	1,599
CM	Behavioral Studies	1	8	SC	Orthopedically Handicapped	8	271
CX	Social Science	48	3,532	SD	School Social Worker	44	1,022
DA	Biology	28	956	SE	Emotionally Disturbed	133	2,512
DC	Chemistry	11	451	SF	Diagnostician		53
DE	Physics	2	267	SG	Psychologist	22	770
DH	Geology	2	157	SH	Homebound/Hospitalized	3	82
DO	Astronomy		12	SI	Consult., Phys. Impaired		75
DX	Science	71	3,317	SK	Education of the Blind	1	151
EX	Mathematics	112	5,630	SL	Education of the Deaf	8	415
FA	French	14	623	SM	Learning Disabled	95	3,289
FB	German	5	19	ST	Teacher of Trainable	1	369
FD	Latin		65	SU	Consult., for Ment. Handcp		286
FE	Russian	1	7	SV	Teacher of Autistic	12	157
FF	Spanish	28	850	VA	Vocational Agriculture	4	104
FG	Other		9	VB	Vocational Business	5	466
FN	Italian		3	VD	Distributive Education	2	182
FI	Polish		1	VH	Home Economics	7	474
FJ	Hebrew	1	1	VT	Vocational Technical	17	1,241
GA	Accounting	99		YA	Bilingual French		6
GN	Business Administration	1	27	YC	Bilingual Greek	1	
GI	Secretarial Science		157	YE	Bilingual Russian	1	
GM	Distributive Education		82	YF	Bilingual Spanish	5	148
GX	Business Education	28	1,683	YH	Bilingual Italian		3
HX	Agriculture	3	59	YK	Bilingual Arabic	1	42
IX	Industrial Arts	22	1,883	YL	Bilingual Other	1	38
JX	Music Education	98	2,626	YM	Bilingual Vietnamese		1
KH	Home Economics	14	1,082	YO	Bilingual Yugoslavic		1
LX	Art	41	1,909	YR	Bilingual Chinese		1
MA	Health	8	394	ZA	Early Childhood Education	26	568
MB	Physical Education	53	3,056	ZD	Middle School	5	124
MD	Recreation		6	ZE	General Elementary	12	61
MN	Dance	2	18		Summary--	2,285	100,128
MX	Health and Physical Ed.	4	891		Total- In-State	2,102	94,748
NC	Driver & Safety Education		100		Total- Out-of-State	214	13,189
ND	Library Science	20	1,182			2,316	107,937
NE	Elementary Grades	751	31,600		Program Totals-	2,169	98,336
NF	Adult Education		16		Total Teachers-	2,095	90,250
NJ	Environmental Studies	51	30				

Source: Michigan Department of Education. Professional Personnel Report 1989-90 (Lansing, MI: Michigan Department of Education, 1990).

Near balance/supply equal demand describes the job market situation for teachers of English, art, French, home economics, instrumental music, journalism, physically handicapped, Spanish, and vocal music.

Adequate supply/some oversupply can be expected for teachers in elementary education, child development, German, history, and social studies.

A surplus condition is currently experienced by teachers of biological science, conservation/natural resources

education, economics, geography, government, health, Latin, physical education, political science, psychology, sociology, speech/communications, and theatre.

For college students considering academic majors or minors for their college degrees, or others adding endorsements for gaining employment in school districts, the following question is a very good one to ask: How many classes of this subject are normally required in the middle school, junior high, or high school for completion of a high school diploma? The following are examples of subjects with few classes offered, thus few teachers are needed: psychology, sociology, conservation education, and economics. If only a few classes are traditionally offered in a subject, then very few teachers will be needed to teach it, and limited openings for new teachers can be expected.

For an understanding of the numbers of teachers employed in Michigan public school districts and the numbers of new teachers hired last year for each assignment category, data are provided in the table on the previous page.

DEMAND FOR MINORITY TEACHING CANDIDATES

Among job candidates, minority applicants are scarce in all geographical regions of the United States and in most Michigan school districts. According to Earl Nelson, director of the Office of Minority Equity in the Michigan Department of Education, "We have a crisis as it relates to the number of minorities in the classroom or being prepared to go into the classroom. It's not just a state issue. It's a national issue." (Gutierrez 1990)

In Michigan, minority students represent 22.2 percent of the K-12 population, but minority teachers are 10.7 percent of the K-12 teaching staff. Nationally, 28.7 percent of the K-12 students are minorities, and 10.3 percent of K-12 teachers are minorities (Gutierrez 1990). To reduce this gap between percentage of minority students and minority teachers in elementaries and high schools, school districts throughout the United States are actively recruiting new minority graduates of teacher education institutions.

According to the Michigan Department of Education, only eight percent of Michigan's college graduates receiving teaching certificates between 1981 and 1987 belonged to a minority group (Ventocilla 1990). For this small percentage of new teachers, recruitment is highly competitive. To attract more minority students for careers in education, extraordinary efforts are needed, as suggested by the Fall 1988 issue of the Phi Delta Kappa newsletter. As examples, development of promotional materials for

teaching careers, identification of excellent teacher education programs, information on available scholarships and financial aid, and speakers who are successful minority educators were suggested.

DEMAND FOR MASTER'S DEGREE CANDIDATES

As an alternative when job opportunities are hard to find, some new college graduates consider graduate study, including a master's degree. Depending upon the field of preparation, a master's degree can sometimes be a detriment. For instance, individuals seeking elementary teaching positions in most districts will be rewarded for three to five years of experience, but a master's degree might actually price them out of the market. School districts with restricted budgets may be unable or unwilling to pay the higher salaries required for teachers with advanced degrees.

When advising graduating students on career planning strategies, it might be wise for them to first obtain a position and then complete an advanced degree. Taking a few courses towards a master's degree will not hurt most job campaigns.

The opposite can be expected for individuals seeking job opportunities as counselors, teachers of the learning disabled, or speech correctionists. For these positions, master's degrees are generally required.

For school psychologists/diagnosticians or school administrators, at least master's degrees and generally doctoral degrees are required. But candidates seeking these positions should also have prior teaching experience.

OTHER FACTORS INFLUENCING HIRING

Size of School District

Of new teachers and other professional staff hired by Michigan public school districts, according to a survey by Scheetz and Brandou (1990), 43.1% had no prior teaching experience. This percent varied from 47.5% for rural school districts and 42.7% for suburban districts to 35.2% for urban districts.

Minorities (Black/African-American, Hispanic, Spanish-American, Asian/Pacific Islanders, or American Indians) represented 9.8% of all new teachers hired by surveyed employers. In rural districts, 1.2% of new teachers were minorities; suburban districts hired 12.5% minorities; and minorities represented 18.3% of new hires in urban districts (Scheetz and Brandou 1990).

Men represented 25.9% of new hires in all school districts responding to Scheetz and Brandou's survey. This percentage varied from 22.7% for suburban districts to 26.8% in urban districts, and 30.6% for rural school districts.

New hires with master's degrees represented 29.6% of new hires in all surveyed districts. Percentages for different types of school districts included: 22.8% for rural districts, 31.2% for suburban districts, and 37.8% for urban districts (Scheetz and Brandou 1990).

According to a recent study by ASCUS (Research Committee 1988), the greatest need for teachers exists in very small (those with fewer than 500 students) and in moder-

ately large school districts (those with 7,500 to 10,000 students). Very large school districts (those enrolling 10,000 or more students) have reported very few categories where teachers are needed. Assuming this trend continues, small and moderately large school districts are likely to have more job openings in the near future.

STARTING SALARY AVERAGES AND AVERAGE SALARIES OF TEACHERS

When considering career options, some individuals may be swayed by starting salary averages. For teachers graduating in 1990-91, starting salaries are expected to average about \$21,662 (Scheetz 1990). Averages for other academic majors are also provided in the chart on the left.

For others, average salaries of teachers might influence their career decisions. Data for each of the United States and each geographical region are provided on the following page.

Teacher Recruitment Fair

To assist school districts in Michigan and throughout the United States with their recruitment efforts, the five largest institutions preparing teachers in Michigan are sponsoring Teacher Recruitment Days during April of each year. At this program, school district representatives from Michigan and other states around the country have an opportunity to meet and interview Michigan's new teacher education graduates and alumni candidates. For additional details regarding this program, contact: L. Patrick Scheetz, Assistant Director of Career Development and Placement Services, Michigan State University, 113 Student Services Building, East Lansing, Michigan 48824 or telephone: (517) 355-9510.

Summary

The best advice anyone can offer new teachers graduating each year is to: (1) broaden your geographical considerations--many excellent jobs are available in other parts of the country; (2) develop additional endorsements on your teaching certificate, especially academic majors in high demand, and offer to teach in your minor subject areas; (3) agree to supervise several extracurricular activities; and (4) extend your coaching options. Job opportunities will be available in Michigan school districts, but individuals who are flexible and can offer several teaching and coaching options will have better chances of being hired.

Estimated Starting Salaries for New College Graduates of 1990-91		
<u>Bachelor's Degree Graduates</u>		
<u>Academic Majors</u>	<u>Estimated %Change</u>	<u>Estimated Starting Salary for 1990-91</u>
Chemical Engineering	8.1%	\$38,114
Mechanical Engineering	7.9%	\$34,715
Electrical Engineering	7.5%	\$34,658
Computer Science	8.3%	\$33,238
Industrial Engineering	7.4%	\$32,784
Physics	6.0%	\$30,504
Civil Engineering	7.9%	\$29,508
Nursing	8.3%	\$29,449
Chemistry	6.8%	\$29,364
Accounting	2.8%	\$27,866
Financial Administration	2.2%	\$25,869
General Business Admin.	2.8%	\$24,992
Geology	5.0%	\$24,636
Marketing/Sales	3.1%	\$24,273
Mathematics	6.5%	\$24,168
Personnel Administration	3.3%	\$23,863
Agriculture	3.0%	\$23,486
Communications	4.7%	\$22,882
Social Science	6.1%	\$22,610
Education	4.9%	\$21,662
Liberal Arts/Arts & Letters	5.8%	\$21,655
Hotel, Rest. Inst. Mgt.	3.9%	\$21,555
Advertising	2.3%	\$21,483
Telecommunications	3.0%	\$20,499
Retailing	5.0%	\$20,360
Human Ecology/Home Economics	2.5%	\$20,202
Journalism	2.1%	\$19,516
Natural Resources	2.3%	\$19,496
<u>Averages for Graduate Degree Levels:</u>		
MBA	6.6%	\$38,563
Masters	6.5%	\$35,634
Ph.D.	4.0%	\$39,591

Source: Scheetz, L. Patrick. 1990. *Recruiting Trends 1990-91*. East Lansing, MI: Collegiate Employment Research Institute, Michigan State University.

**Average Salaries of
Classroom Teachers
1989-90**

<u>States</u>	<u>Average</u>
Alaska	\$43,153
Connecticut	\$40,496
California	\$38,996
New York	\$38,800
District of Columbia	\$36,450
Maryland	\$36,092
Rhode Island	\$36,057
New Jersey	\$36,030
Michigan	\$36,010
Massachusetts	\$34,225
Delaware	\$33,480
Illinois	\$33,014
Pennsylvania	\$32,809
Wisconsin	\$32,320
Minnesota	\$32,190
Hawaii	\$32,047
Ohio	\$31,170
Virginia	\$30,926
Colorado	\$30,700
Nevada	\$30,587
Oregon	\$30,563
Indiana	\$30,493
Washington	\$30,475
Arizona	\$29,600
New Hampshire	\$28,939
Vermont	\$28,798
Kansas	\$28,671
Florida	\$28,525
Wyoming	\$28,184
Georgia	\$27,892
North Carolina	\$27,814
Texas	\$27,502
Missouri	\$27,229
South Carolina	\$27,076
Tennessee	\$27,052
Maine	\$26,881
Iowa	\$26,747
Kentucky	\$26,275
Alabama	\$25,500
New Mexico	\$25,120
Montana	\$25,081
Nebraska	\$24,751
Mississippi	\$24,263
Utah	\$23,652
Idaho	\$23,494
Oklahoma	\$23,070
North Dakota	\$23,016
Louisiana	\$22,993
West Virginia	\$22,842
Arkansas	\$22,009
South Dakota	\$21,300
--United States	\$31,304

Source: National Education Association. 1990. Estimates of School Statistics- 1989-90. West Haven, CT.: National Education Association, p. 34.

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The Collegiate Employment Research Institute was established by Michigan's Legislature in 1984. The Institute is charged with the task of examining issues on career development and employment for college graduates. Various projects are underway, including the study covered in this report, to provide information to educators and counselors for program development. If you have any questions on this study or any Institute project, please contact the Institute directly.

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