

*The Annual*  
CONDITION  
OF EDUCATION  
*Report*



1998



GRIMES STATE OFFICE BUILDING IN DES MOINES - HOME OF THE IOWA DEPARTMENT OF EDUCATION

A Report on  
Pre Kindergarten, Elementary,  
and Secondary Education  
in Iowa

Iowa Department of Education

1998



Printed on Recycled Paper

*The Annual Condition of Education Report*

# *State Board of Education...*

State of Iowa

## **Department of Education**

Grimes State Office Building

Des Moines, Iowa

### **State Board of Education**

Corine A. Hadley, President, Newton  
Sally J. Frudden, Vice President, Charles City  
C.W. Callison, Burlington  
Gregory A. Forristall, Macedonia  
Gregory D. McClain, Cedar Falls  
Mary Jean Montgomery, Spencer  
Gene E. Vincent, Carroll  
Kay E. Wagner, Bettendorf  
John C. White, Iowa City

### **Administration**

Ted Stilwill, Director and Executive Officer  
of the State Board of Education  
Dwight R. Carlson, Assistant to the Director  
Gail Sullivan, Chief of Policy and Planning

It is the policy of the Iowa Department of Education not to discriminate on the basis of race, color, national origin, gender, disability, religion, creed, age or marital status in its programs or employment practices. If you have questions or grievances related to this policy, please contact the Bureau of Administration and School Improvement Services, Grimes State Office Building, Des Moines, Iowa 50319-0146, (515) 281-5811.

# Pre Kindergarten, Elementary and Secondary Education

in Iowa

Iowa Department of Education

**Division of Financial and Information Services**  
Leland Tack, Administrator

**Bureau of Planning, Research & Evaluation**  
David J. Alvord, Chief  
Steve Boal, Consultant  
Xiaoping Wang, Consultant  
Sharon K. Willis, Graphic Artist

*The Annual Condition of Education Report*

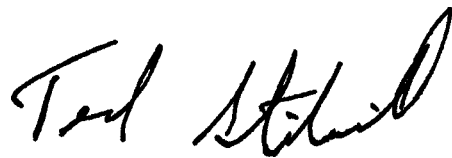
## *To the Citizens of Iowa...*

Iowa's traditional success in education is built upon a solid foundation of community responsibility. We have demonstrated beyond doubt that our students achieve to their fullest potential when local citizens take ownership of their schools. It is our job at the state level to assist local decisionmakers in their ongoing school improvement efforts. The annual *Condition of Education Report* is a fundamental resource for state policymakers and community leaders, providing the necessary data upon which good decisions are made in the best interest of Iowa's young people.

The *Condition of Education Report* offers critical state-level information about education in Iowa, including trend-line data that highlights change over time. In most areas, this state-level information can be compared to local data. I strongly urge districts to pursue this analysis.

This year we have further expanded the information provided for consideration and analysis in such areas as student achievement, international achievement comparisons, and teacher compensation and experience. In addition, we have included for the second year an introductory section including vital background information about the social, economic and demographic context in which Iowa youth enter our schools. As the needs of our students change, we must continue to support and build upon community-level partnerships that focus educational and other resources on a better quality of life for all of our citizens.

As always, we welcome your suggestions for further improvement in this, our ninth annual *Condition of Education Report*.



Ted Stilwill, Director  
Iowa Department of Education

# *Introduction...*

The *Condition of Education Report* is composed of seven basic sections: preface; enrollments; staff; program; student performance; school finance; and community colleges. The preface provides a context for the *Condition of Education Report* by describing Iowa population, economic, and social changes over time. Each section presents summary information on the status of education with respect to data provided by Iowa public school districts, nonpublic schools and area education agencies. The major portion of the data come from the Basic Educational Data Survey (BEDS), the Basic Educational Data survey is the Department of Education's primary source for PK-12 information on enrollments, staff, programs, policies and procedures, dropouts, graduate follow-up, and high school completers, as well as a series of other specialized reporting areas. The BEDS reports are completed by public schools, approved nonpublic schools, and by area education agencies in the spring and fall of each school year and serve to provide data for required state and federal reports as well as for other uses related to policy development in the Department of Education.

Wherever possible, data for Iowa public schools are summarized by seven standard enrollment categories and for the state as a whole. The emphasis for the report focuses on change that has occurred over time. The base year, for comparison purposes, is 1985-86. This year was selected since it represented a period just prior to the implementation of significant change in education, including the revision of school accreditation standards and a state supported minimum teacher salary. Comparisons are generally made using the base year, the most current school year for which data are available, 1997-98, and the most recent prior school year. In the case of school expenditure information, 1996-97 data are used as the most current year. Whenever possible, Iowa data are compared with regional and national data.

In keeping with the original intent of the principles which guided the development of the *Condition of Education Report* and the Statewide Condition of Education Advisory Council recommendations, specific, district-by-district comparisons are not made.

The *Annual Condition of Education Report* preface is a recent addition to the report, designed to provide background information and to provide context for the report in terms of a demographic, economic, and social landscape.

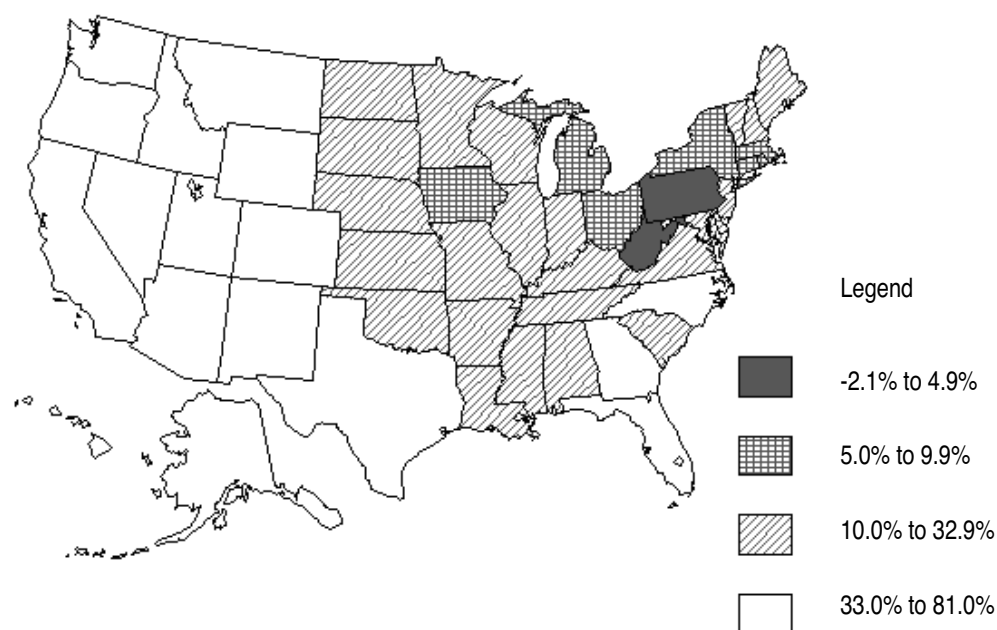
The focus for these areas, like the other sections of the report, is based on the changes, which have taken place over the past several years, or are projected to occur in the future.

Population and demographics characteristics encompass general population trends and projections, population distributions by age groups and gender, and the distribution of age 65 and above population. Areas included in the economic characteristics are workforce, per capita income, and wage growth. Social characteristics provided include poverty indicators, out-of-wedlock teen births, and adult literacy.

# Population and Demographics...

## U.S. Population

FIGURE 1P — U.S. BY STATE PROJECTED POPULATION CHANGE  
1990-2015



Source: U.S. Census Bureau, Projections of Total Populations of States, Series A, 1998,  
<[www.census.gov/population/www/projections/stpro.html](http://www.census.gov/population/www/projections/stpro.html)>.

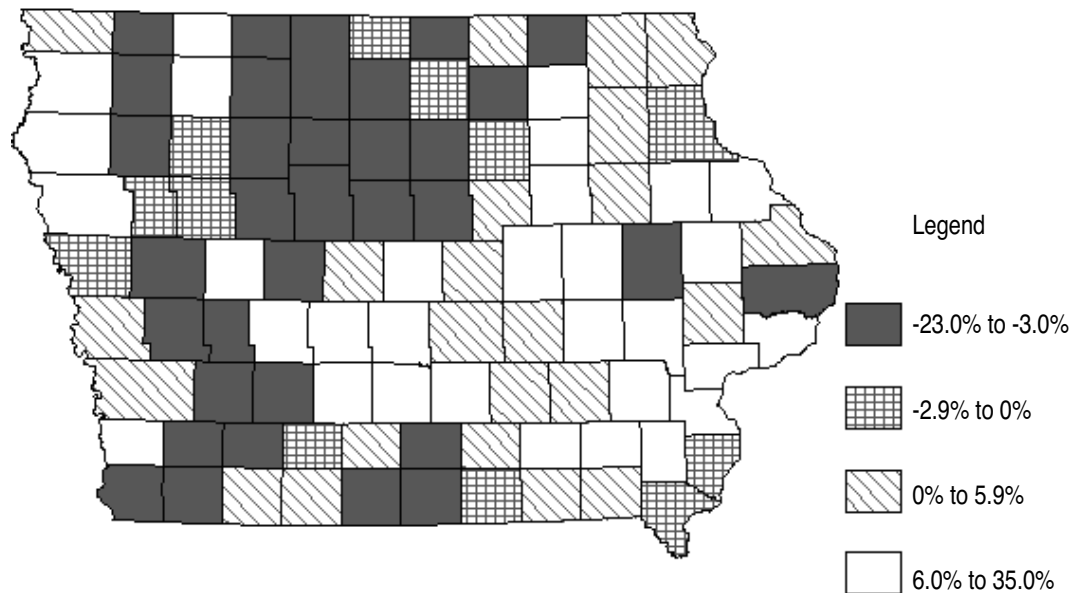
- The U.S. population is expected to grow by 24.7 percent from 1990 to 2015.
- States in the southeast and the west (including northwest and southwest) are expected to register the greatest increases in population, between 33 and 81 percent, for this 25-year period.
- Iowa, with a projected growth rate of 7.8 percent, is one of seven states in the five to 9.9 percent growth range.



# Population and Demographics...

## Iowa Population

FIGURE 2P — IOWA PROJECTED POPULATION CHANGE  
1990-2015



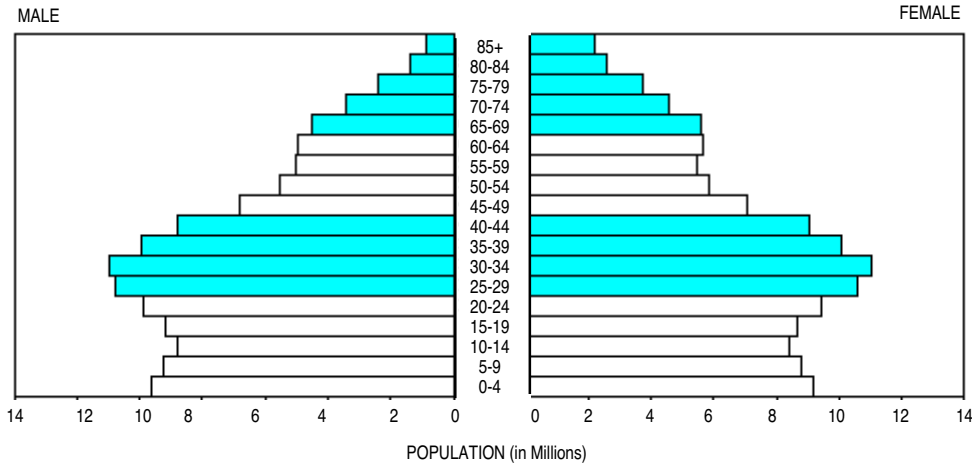
Source: Woods and Poole Economics, Inc., 1998 State Profile.

- Forty-five of Iowa's 99 counties are expected to lose population in the 25-year period from 1990 to 2015.
- About 31 percent of Iowa's 99 counties are expected to increase in population from six to 35 percent. These counties are generally those of the urban metropolitan statistical areas (MSA's) or adjacent to those areas.
- The remaining 23 counties are projected to increase in population by less than six percent.

# Population and Demographics...

## U.S. Population

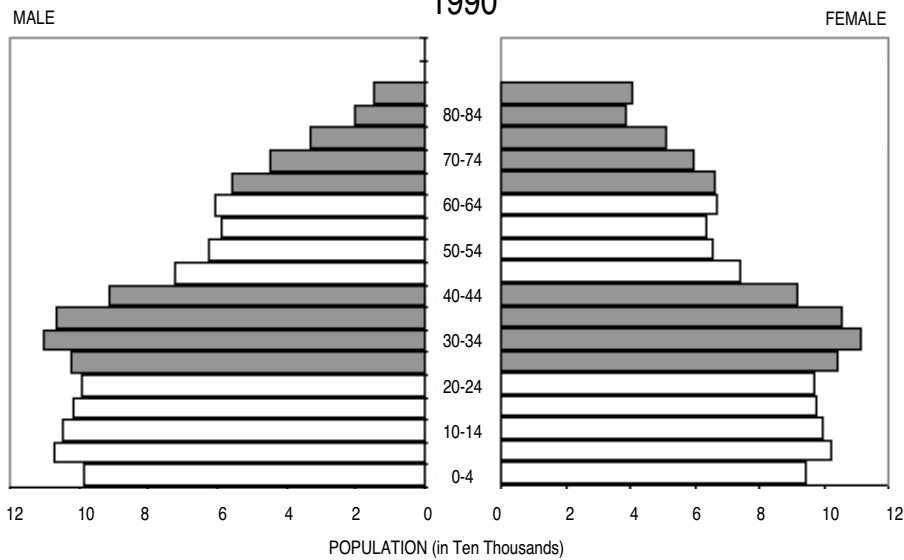
FIGURE 3P — U.S. POPULATION BY AGE AND GENDER PYRAMID  
1990



SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, 1990 CENSUS.

## Iowa Population

FIGURE 4P — IOWA POPULATION BY AGE AND GENDER PYRAMID  
1990



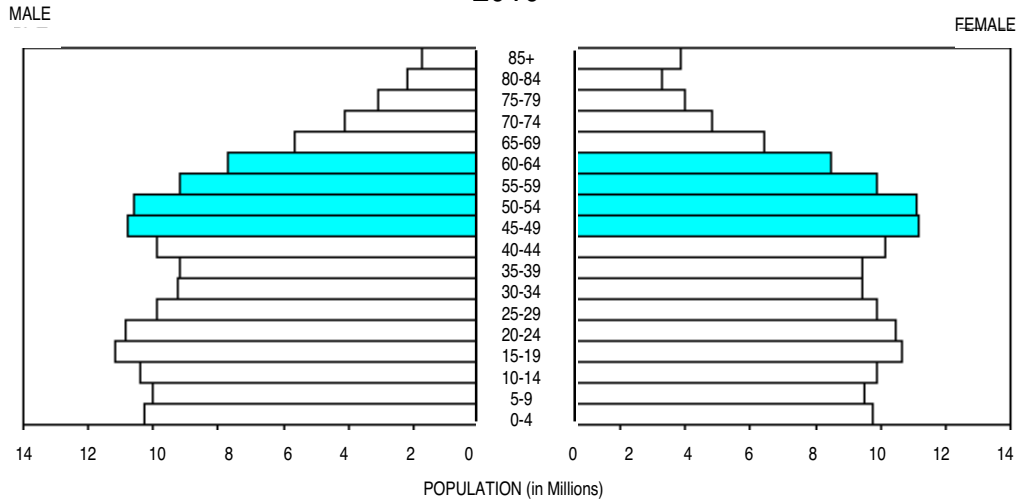
SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, 1990 CENSUS.

- The baby boom population, reflected in the population pyramids, covering age groups 25 through 44 for 1990, tended to represent the largest population counts by five-year age groups for the U.S., and for Iowa.
- As reported in the 1990 Census, the age group 65 and above still represented the smallest population counts of the age groupings.
- A baby “boomlet”, resulting from offspring of the “boomers”, is noted for children under five, and the five to nine age groups for both Iowa and the U.S.

# Population and Demographics...

## U.S. Population

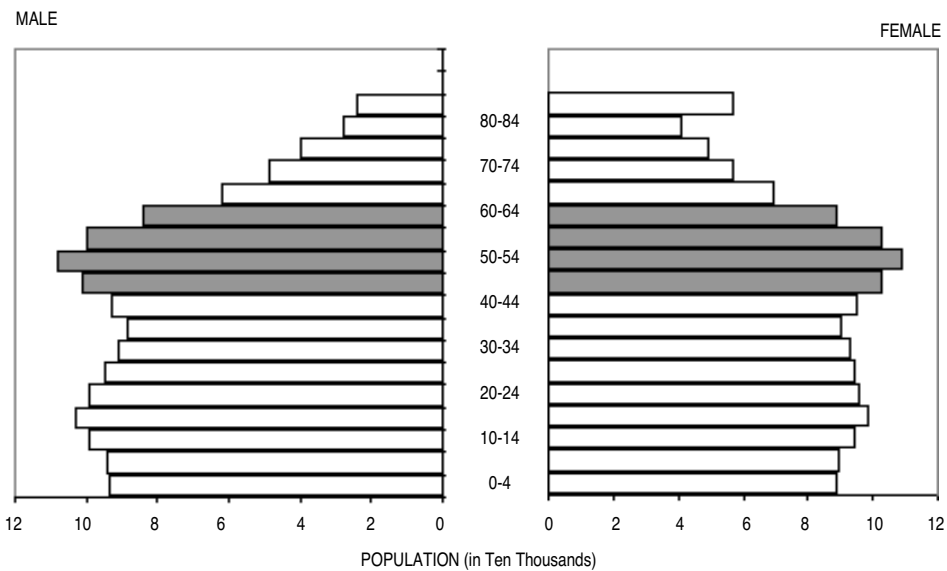
FIGURE 5P — U.S. PROJECTED POPULATION PYRAMID 2010



SOURCE: U.S. CENSUS BUREAU, INTERNATIONAL DATA BASE, 1998.

## Iowa Population

FIGURE 6P — IOWA PROJECTED POPULATION PYRAMID 2010



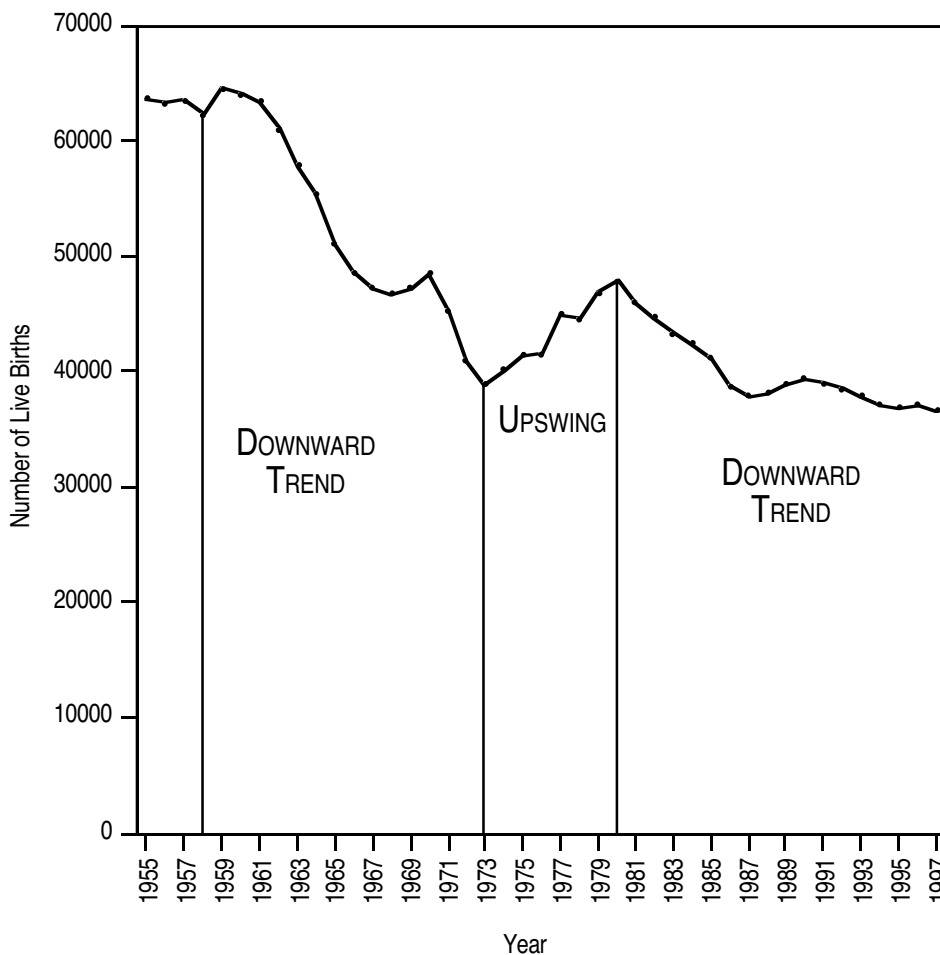
SOURCE: U.S. CENSUS BUREAU, SERIES A POPULATION PROJECTIONS, 1998.

- The U.S. and Iowa population pyramids, based upon gender-age distributions of population for the U.S. and Iowa, show the projected population change from pyramid-shaped distributions to more rectangular from the base (lowest age groups) to the top (highest age groups).
- The rectangularization of the gender-age distributions is projected to progress as the U.S. and Iowa population continue to live longer.

# Population and Demographics...

## Iowa Births

FIGURE 7P — IOWA RESIDENT LIVE BIRTHS  
1955 - 1997



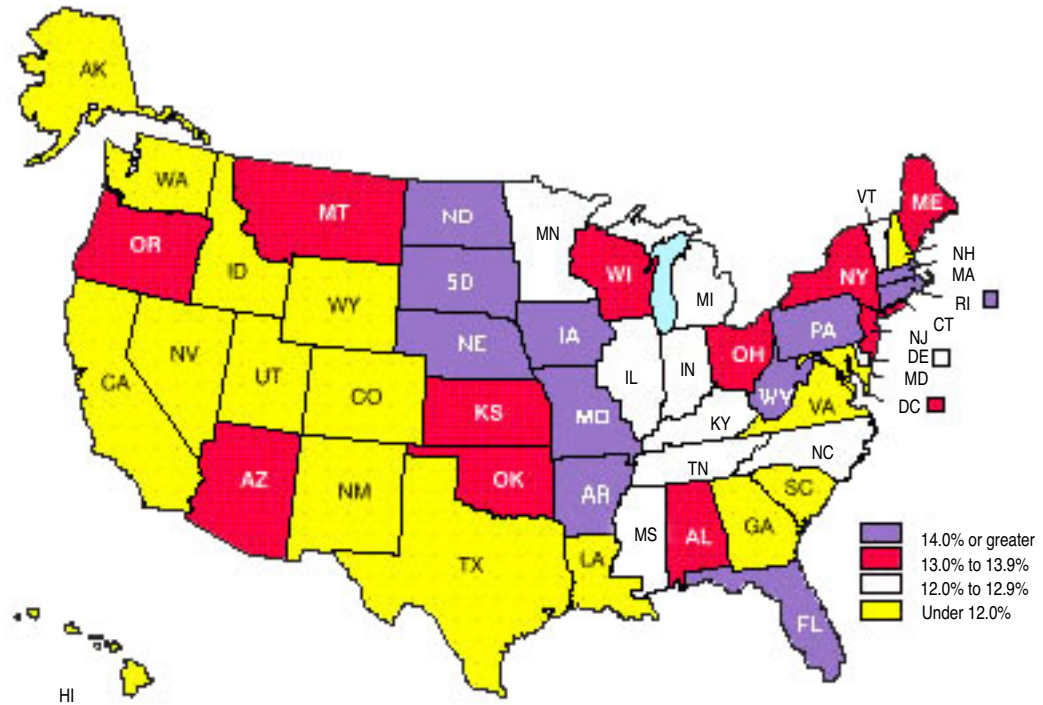
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, CENTER FOR HEALTH STATISTICS, RESIDENT LIVE BIRTHS, 1955-1997.

- Iowa resident live births increased slightly from 36,790 in 1995, to 37,130 in 1996, then decreased to 36,641 in 1997. These changes are within the general downward trend exhibited after the upswing in 1974, to the 1980 twenty year peak in births at 47,797. The first downswing since 1955 began after 1959 when the number of Iowa resident live births recorded was 64,473.
- The downward trend in births is consistent with the decreased representation of lower age groups to total population, depicted in the Iowa population pyramids of Figure 4P.
- It is anticipated, from the Iowa population pyramids, that the number of births will begin to stabilize over the next few years.

# Population and Demographics...

## U.S. Age

FIGURE 8P — PERCENT OF STATE POPULATIONS AGE 65 AND OVER  
1996



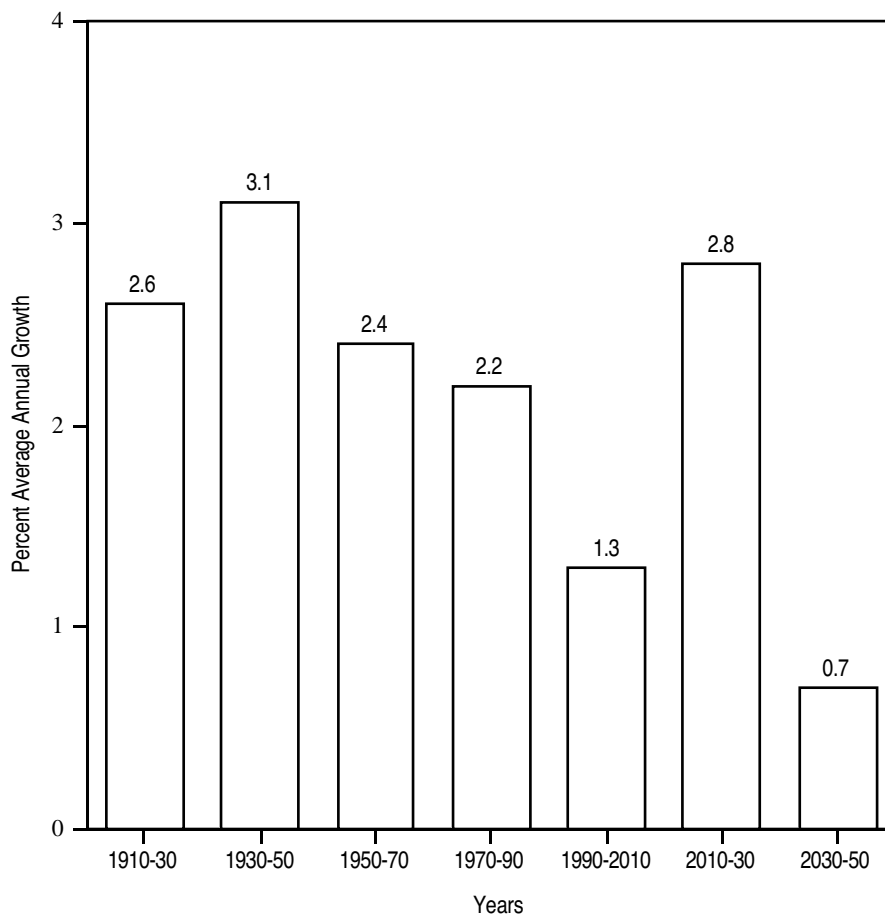
SOURCE: U.S. CENSUS BUREAU, 1998.

- Iowa's 1996 estimated population, age 65 and over, represents 15.2 percent of the states' total population. Iowa ranked in the top 10 states in the nation in the percent of population age 65 and over.
- For states bordering Iowa, the percent of the total population, age 65 and over, was generally one to two percentage points below Iowa.

# Population and Demographics...

## U.S. Growth Rate

FIGURE 9P — U.S. AVERAGE ANNUAL POPULATION GROWTH RATE (IN PERCENTAGES) OF ELDERLY POPULATION 1910-1930 TO 2030-2050



SOURCE: U.S. CENSUS BUREAU, POPULATION PROJECTIONS OF THE UNITED STATES BY AGE, SEX, RACE, AND HISPANIC ORIGIN: 1910-2050, CURRENT POPULATION REPORTS, P25-104.

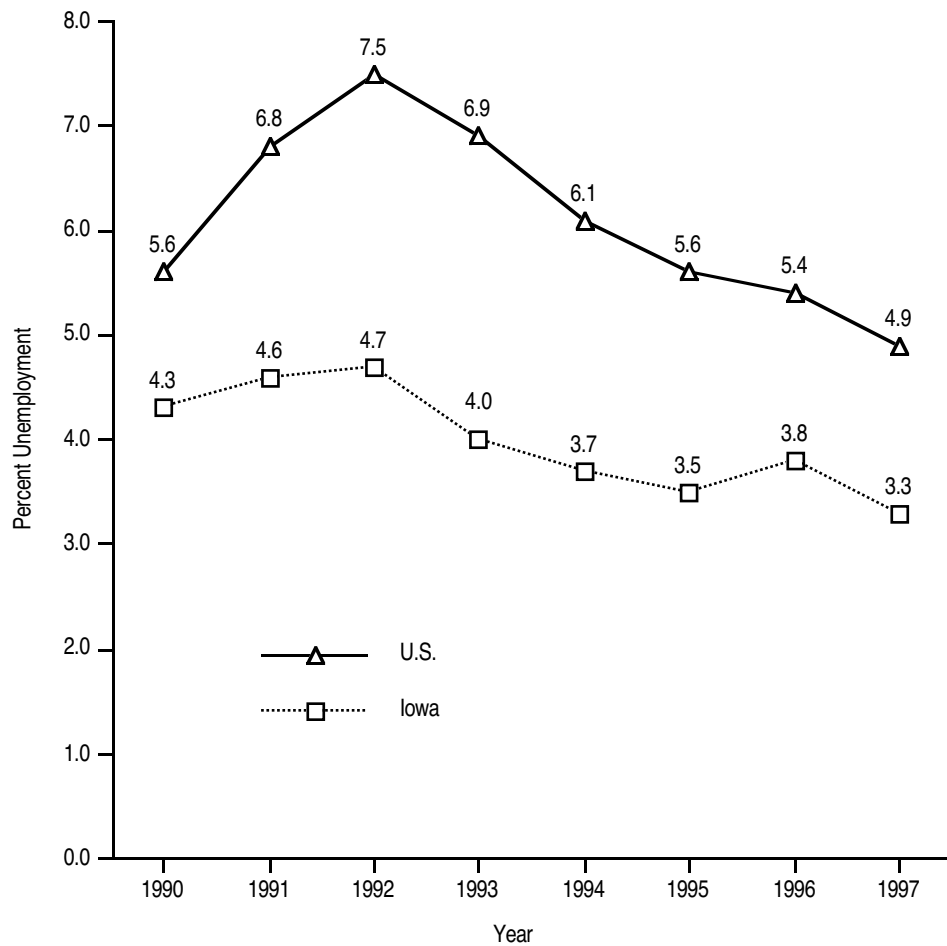
NOTE: ELDERLY INCLUDES POPULATION AGE 65 AND OVER.

- According to the U.S. Census Bureau, the average U.S. annual population growth rate will explode between 2010 - 2030 at an average growth rate of 2.8 percent per year. This rate is projected to more than double from the average growth rate of 1.3 percent for 1990 to 2010.

# Economics...

## Workforce

FIGURE 10P — IOWA VS. U.S.  
UNEMPLOYMENT RATES  
1990 - 1997



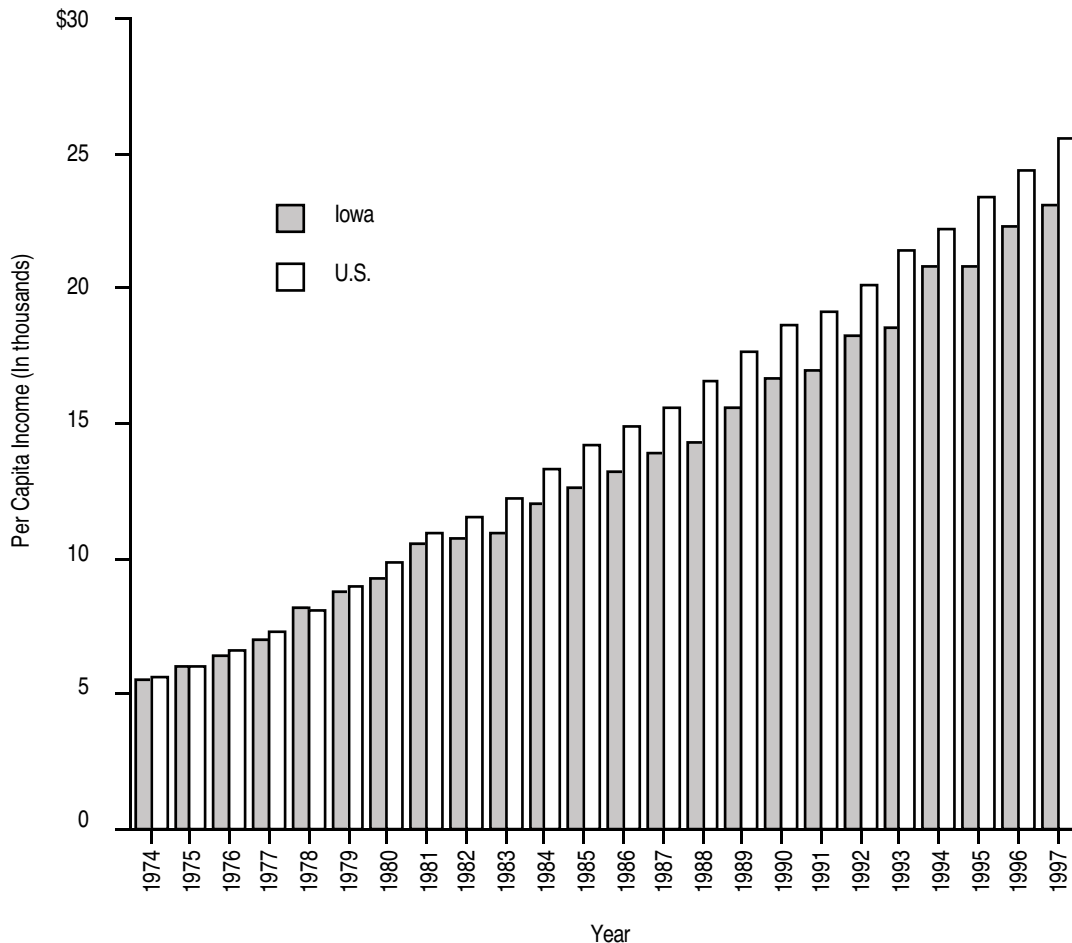
SOURCE: IOWA WORKFORCE DEVELOPMENT, LABOR MARKET INFORMATION BUREAU, AND U.S. DEPARTMENT OF LABOR AND BUREAU OF LABOR STATISTICS, 1998.

- The Iowa unemployment rate has fallen for four of the past five years, since peaking in 1992 at 4.7 percent. Similarly, the U.S. trend in unemployment has declined during the period from 1992 to 1997. The national unemployment rate has fallen more sharply.
- The unemployment rates for 1997, for both Iowa and the U.S., are the lowest they have been in this eight-year period.

# *Economics...*

## Per Capita Income

FIGURE 11P — PER CAPITA  
INCOME IN IOWA AND THE U.S.  
1974-1997



SOURCE: U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS, 1974-1997.

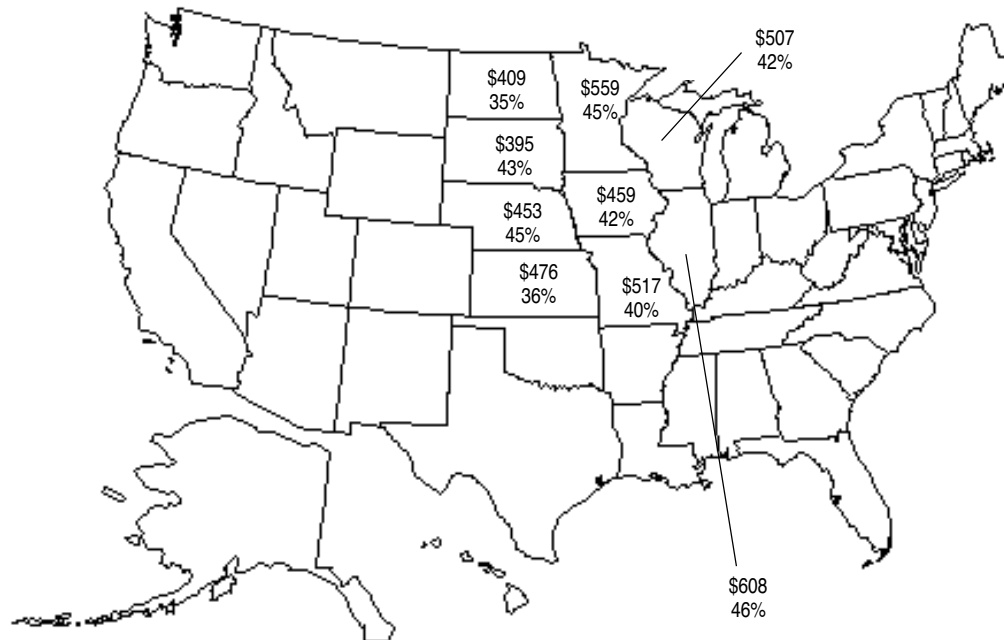
- The trend in Iowa's per capita income figures has lagged behind the nation since 1979.
- Revised figures, reported for 1996 and preliminary figures for 1997, indicate the gap between Iowa and the U.S. per capita income was about \$2,500 in 1997, compared to \$2,100 in 1996. In 1974, Iowa and the nation were nearly comparable with per capita incomes of \$5,500 and \$5,600 respectively.



# *Economics...*

## Wage Growth

FIGURE 12P — AVERAGE  
WEEKLY WAGE CHANGE  
1987-1997



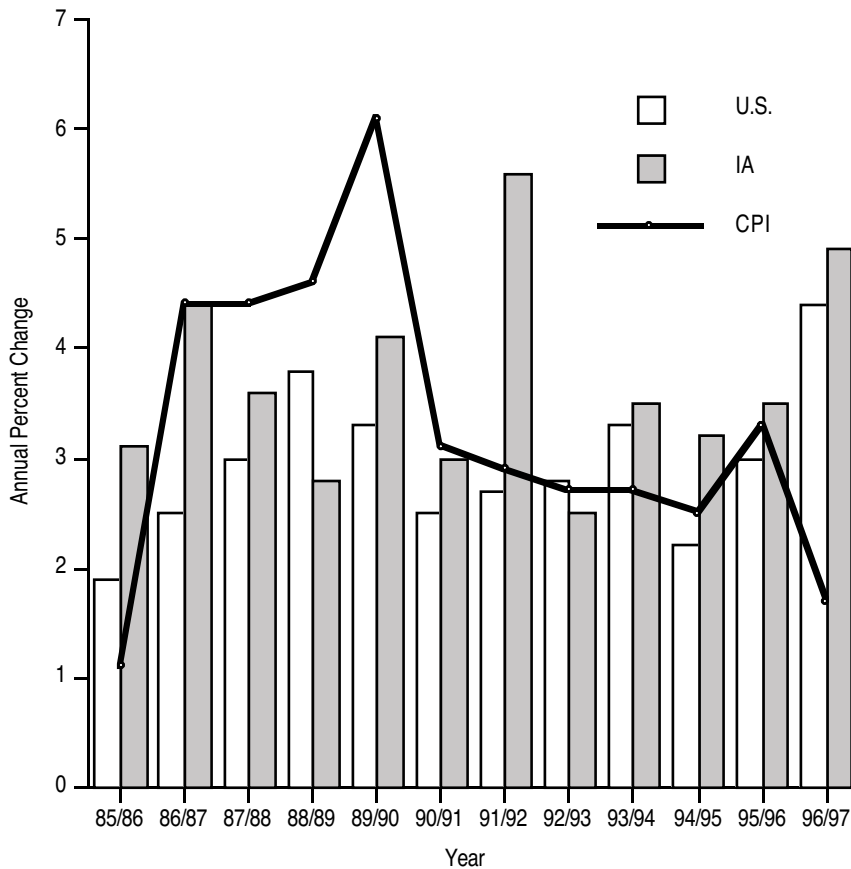
SOURCE: IOWA WORKFORCE DEVELOPMENT, AND LABOR-MARKET INFORMATION BUREAU, 1997.

- The average weekly wage for Iowa workers grew by 42 percent over the period from 1987 to 1997. Iowa tied for a ranking of 5th among nine midwest states, based on this reported increase.
- The average weekly wage for Iowa, in 1997, was \$459. Iowa's weekly wage in 1997 was surpassed by that of Illinois, \$608; Minnesota, \$559; Missouri, \$517; Wisconsin, \$507; and Kansas, \$476.

# Economics...

## Wage Growth

FIGURE 13P — WAGE GROWTH AND THE CONSUMER PRICE INDEX (CPI)  
FOR IOWA AND THE UNITED STATES, 1986 - 1997



SOURCE: IOWA WORKFORCE DEVELOPMENT, BUREAU OF LABOR STATISTICS, 1998.

- The annual percentage increase in average earnings for Iowa workers has exceeded that of the U.S. for ten of 12 years during the time period from 1986 to 1997. In 1991/92 Iowa workers experienced a 5.6 percent increase in average earnings, which was more than double the increase for the nation.
- From 1985/86 to 1996/97, Iowa's annual change in average worker earnings matched or exceeded the annual inflation rate, as measured by the change in the Consumer Price Index (CPI), seven times in 12 years.
- From 1987/88 through 1990/91, inflation surpassed the increases in Iowa wages.
- In 1991/92, and from 1993/94 through 1996/97, Iowa's annual average wage increases exceeded the inflation rate as measured by the CPI Index, with the most marked difference of 3.2 percentage points in 1996/97. U.S. workers wage growth surpassed the inflation rate of the CPI Index for the years 1985/86, 1992/93, 1993/94, and 1996/97.

# Social...

## Poverty

TABLE 1P — NUMBER AND RATE PER THOUSAND OF AID TO FAMILIES WITH DEPENDENT CHILDREN (AFDC) FOR IOWA AND MIDWEST STATES

State	1997 AFDC Recipients	Percent Change in AFDC Recipients from 1993 to 1997	1997 Population	Rate of AFDC Recipients Per 1,000 Population 1997
Iowa	78,076	-23%	2,852,423	27.4
Illinois	599,629	-13%	11,895,849	50.4
Kansas	57,526	-34%	2,594,840	22.2
Minnesota	159,865	-17%	4,685,449	34.1
Missouri	208,132	-20%	5,402,058	38.5
Nebraska	36,490	-24%	1,656,870	22.0
N. Dakota	11,904	-37%	640,883	18.6
S. Dakota	14,050	-31%	737,973	19.0
Wisconsin	123,755	-49%	5,169,677	23.9
U.S.	11,360,000	-20%	267,636,061	42.4

SOURCE: IOWA DEPARTMENT OF HUMAN SERVICES, RESEARCH AND STATISTICS, JANUARY 1997.

NOTE: POPULATION IS BASED ON 1997 U.S. CENSUS BUREAU ESTIMATES.

- The number of Iowa recipients of Aid to Families with Dependent Children (AFDC), in 1997 was 78,076; a decrease of 23 percent from 1993, and a decrease of 15 percent from the previous year (not shown). This compares with a 20 percent decrease in recipients for the U.S. for the 1993-97 time period, and an 11 percent decrease from 1996.
- Illinois continued to have the greatest number of AFDC recipients for the midwest states with a 1997 figure of 599,629, down by 65,000 from 1996.
- Iowa continued to rank fourth out of nine midwest states in the rate-per-thousand AFDC recipients at 27.4.

# Social...

## Poverty

TABLE 2P — PERCENT OF IOWA PUBLIC SCHOOL STUDENTS ELIGIBLE FOR FREE AND REDUCED PRICE LUNCHES 1993-94 AND 1997-98

Enrollment <sup>1</sup> Category	1993-94 Percent <sup>2</sup> of Free and Reduced Eligible Students	1997-98 Percent of Free and Reduced Eligible Students
<250	35.8	40.3
250-399	33.9	31.8
400-599	25.3	25.4
600-999	23.9	25.8
1,000-2,499	23.6	24.4
2,500-7,499	20.7	22.9
7,500+	29.7	35.2
State Total	25.4	27.6

SOURCE: IOWA DEPARTMENT OF EDUCATION, BUREAU OF FOOD AND NUTRITION, CLAIM FILES.

NOTES: <sup>1</sup>ENROLLMENT CATEGORIES ARE BASED ON CERTIFIED ENROLLMENTS.

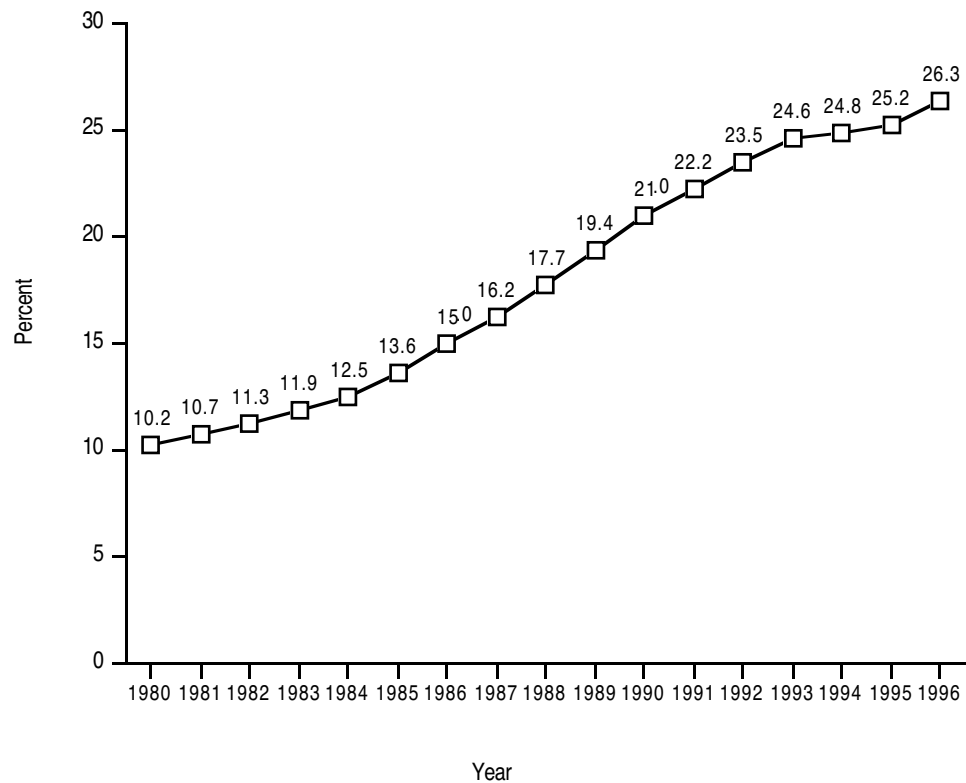
<sup>2</sup>PERCENTAGES ARE BASED ON DIVIDING FREE AND REDUCED ELIGIBLE STUDENTS BY THE BASIC EDUCATIONAL DATA SURVEY HEAD COUNT TAKEN ON THE THIRD FRIDAY IN SEPTEMBER OF EACH SCHOOL YEAR.

- Statewide, the percentage of Iowa public school students eligible for free and reduced price lunches increased by more than two percentage points to 27.6 percent over the period from 1993-94 to 1997-98
- The percentage of Iowa public school students eligible for free and reduced price lunches generally increased across enrollment categories from 1993-94 to 1997-98.
- The two largest percentage point increases in the percent of students eligible for free and reduced price lunches occurred for districts with enrollments under 250 and for districts with enrollments of 7,500 or more.

# Social...

## Out-of-Wedlock Births

FIGURE 14P — IOWA, OUT-OF-WEDLOCK BIRTHS  
AS A PERCENT OF TOTAL RESIDENT LIVE BIRTHS



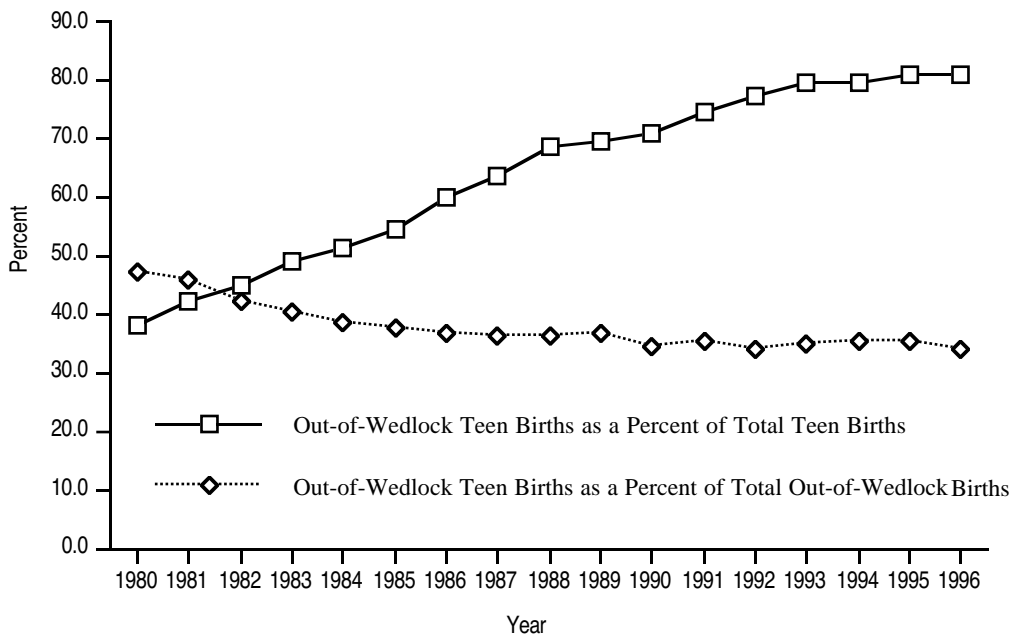
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, CENTER FOR HEALTH STATISTICS, RESIDENT LIVE BIRTHS, 1980-1996.

- The percent of Iowa out-of-wedlock live births has continued to rise. For the 17-year span from 1980 to 1996, the increase was about 16 percentage points.
- Since 1994, the increase has slowed, with an average yearly change of .75 percentage points.
- From 1995 to 1996, there was an increase in the percentage of out-of-wedlock live births to total live births of 1.1 percentage points, which exceeded the annual average change since 1994.

# Social...

## Teen Births

FIGURE 15P— IOWA, OUT-OF-WEDLOCK TEEN BIRTHS AS A PERCENT OF TOTAL OUT-OF-WEDLOCK BIRTHS AND TOTAL TEEN BIRTHS



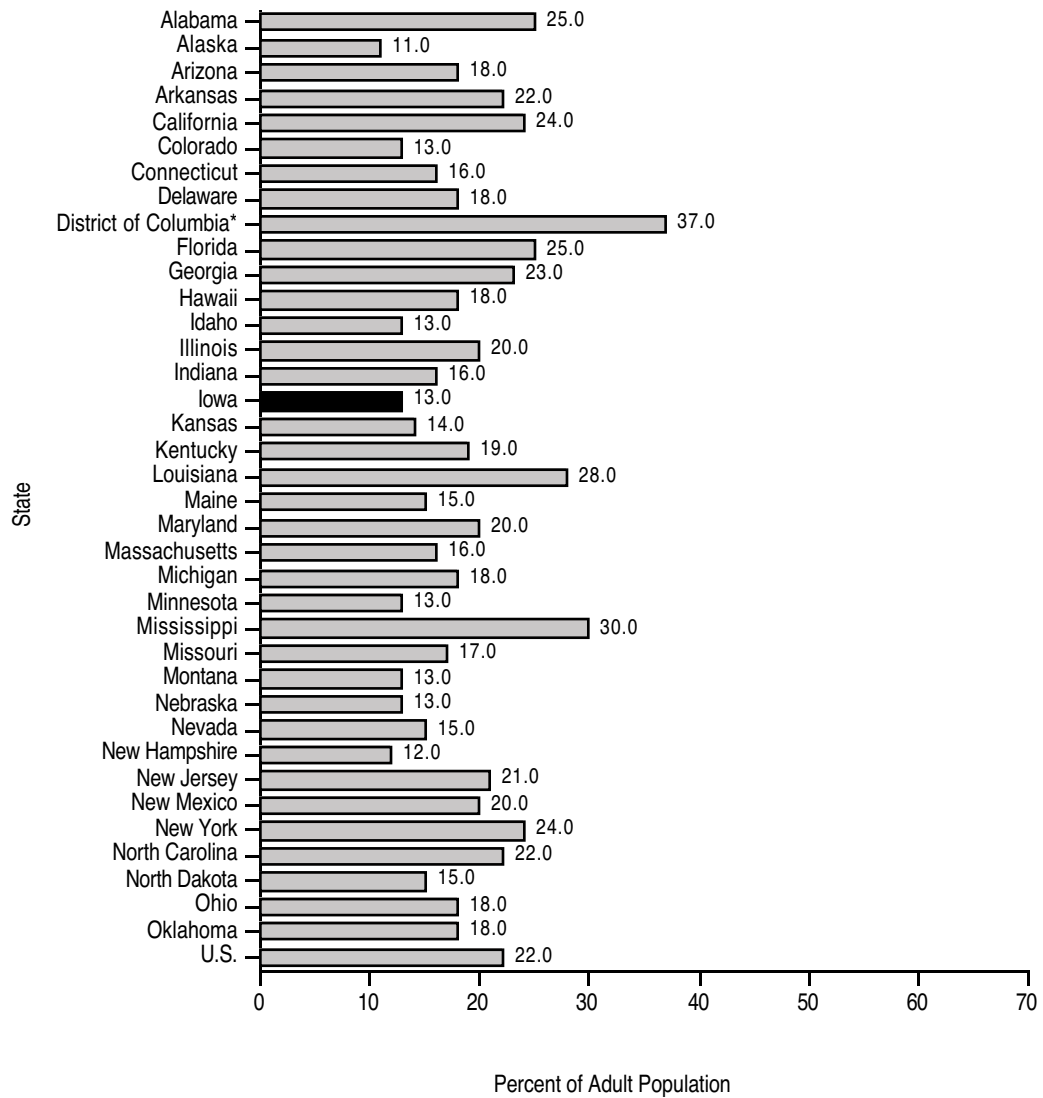
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, CENTER FOR HEALTH STATISTICS, RESIDENT LIVE BIRTHS, 1980-1996.

- The percent of out-of-wedlock live births to teens, as a percent of total teen births, more than doubled from 38.2 percent in 1980, to 80.8 percent in 1996.
- There has been a general downward trend in the time period from 1980 to 1996, in out-of-wedlock teen births as a percent of total out-of-wedlock births. This represented a decrease of 13.3 percentage points.
- Total out-of-wedlock live births have more than doubled, from 4,895 in 1980, to 9,951 in 1996, and out-of-wedlock teen births have increased by about 48 percent from 2,241 to 3,311.

# Social...

## Adult Literacy

FIGURE 16P — PERCENT OF ADULT POPULATION AT LITERACY LEVEL 1<sup>1</sup> BY STATE



SOURCE: NATIONAL INSTITUTE FOR LITERACY, NATIONAL ADULT LITERACY SURVEY (NALS), 1993, THE STATE OF LITERACY IN AMERICA, 1998.

Note: <sup>1</sup>Denotes the lowest of five literacy levels defined by the NALS study. At this level, all adults displayed difficulty using certain reading, writing, and computational skills considered necessary for functioning in everyday life.

- The National Adult Literacy Study (NALS) reports a total of 22 percent, or about 42 million of 191 million U.S. adults (age 16 or older) at the lowest level of literacy. Adults performing at this level displayed difficulty using certain reading, writing, and computational skills considered necessary for functioning in everyday life.
- Iowa was listed as one of the top eight states in literacy with only 13 percent of the adult population estimated at the lowest literacy level.
- Alaska and New Hampshire were the only states to show a lower percentage of their adult populations performing at the lowest literacy level. There were five states which tied Iowa on this measure: Colorado, Idaho, Minnesota, Montana, and Nebraska.

# Contents...

## GRADE PK-12

### ENROLLMENT

Enrollment Trends .....	1
Projected Enrollment .....	2
Distribution of Public School Students and Districts .....	3
Approved Nonpublic Schools .....	4
Ethnic Distribution of Students .....	4
Weighted Non-English Speaking Students & Limited English Proficient Students .....	5
Weighted Non-English Speaking Students .....	7
Limited English Proficient Students .....	8
Open Enrollment .....	9
Early Childhood Education .....	10
Special Education Enrollments .....	12

### STAFF

Licensed Staff .....	13
Teachers' Characteristics .....	13
Teachers' Salaries .....	14
Teacher Salary Comparisons by Years of Experience .....	15
Teachers' Assignments .....	16
Principals' Characteristics .....	17
Principals' Salaries .....	17
Superintendents' Characteristics .....	18
Superintendents' Salaries .....	19
Gender Comparisons for Teachers and Principals .....	21
Area Education Agency Staff .....	22
Instructional Aides .....	24
Pupil-Teacher Ratio .....	25

### PROGRAM

Curriculum Unit Offerings .....	27
Foreign Language Enrollments .....	28
Higher Level Mathematics Enrollments .....	30
Calculus .....	30
Trigonometry .....	32
Higher Level Science Enrollments .....	33
Chemistry .....	33
Physics .....	35
Technology .....	36
Expenditures for Computer Hardware and Software .....	36
Availability of Computers .....	38
Automated Student Information Systems and Electronic Data Interchange .....	41

### STUDENT PERFORMANCE

Iowa Testing Programs .....	43
Iowa Tests of Basic Skills (ITBS) .....	43
Iowa Tests of Educational Development (ITED) .....	46
ITBS and ITED Performance Level Distributions .....	51



# Contents...

Achievement Levels for Reading Comprehension .....	52
Achievement Levels for Mathematics .....	56
ITBS and ITED Performance Levels by Gender .....	59
American College Testing (ACT) Assessments .....	61
ACT Composite Score Comparisons of Iowa and the Nation .....	61
ACT Score Comparisons for English, Mathematics, Reading and Science Reasoning ..	62
ACT Composite Score Comparisons of Iowa and Midwest States .....	63
ACT Scores for Core and Non-core Students .....	64
Distribution of ACT Scores .....	65
ACT Scores by Grade .....	66
ACT Scores by Gender .....	68
ACT Scores by Enrollment Category .....	69
Iowa Student ACT Scores Compared to High School Performance .....	71
ACT Scores by Planned Educational Majors .....	72
Scholastic Assessment Tests (SAT) .....	73
Advanced Placement .....	77
Linking the 1995 Third International Mathematics and Science Study (TIMSS) and the 1996 National Assessment of Educational Progress (NAEP) .....	80
Postsecondary Enrollment Options .....	81
Pursuit of Postsecondary Education/Training .....	83
Dropouts .....	85
High School Completion Rates of 18-24-Year-Olds Not Currently Enrolled in High School .....	89

## FINANCE

Function Category Expenditures .....	91
Object Category Expenditures .....	92
Revenues .....	94
Expenditures Per Pupil .....	96
State Aid .....	97
Property Taxes .....	98
Income Surtaxes .....	99
Total Elementary and Secondary Education Budgets .....	99

## COMMUNITY COLLEGES

Access .....	103
Quality .....	104
Responsiveness .....	104
History of Iowa's Community Colleges .....	104
Major Initiative for Fiscal Year 1998 .....	106
Community College Funding .....	106
Management Information System .....	107
The Community College Student .....	107
Community College Instructional Programs .....	110
The major instructional programs offered by the community colleges .....	110
Community Colleges are Authorized to offer five degrees .....	111
Funding of Iowa's Community Colleges .....	113
Revenues .....	113
Expenditures .....	114
Iowa Community Colleges' Role in Economic Development .....	115
Vocational Education .....	116

# *Contents...*

Funding .....	116
Use of Funds .....	117
Enrollment .....	117
Vocational Education Goals .....	117
Achievement of Iowa Vocational Education Goals .....	118
Vocational Student Organizations .....	118
Single Parents, Displaced Homemakers, and Single Pregnant Women .....	119
Adult Single Parent/Displaced Homemaker Programs .....	119
Adolescent Parenting Programs .....	119
Sex Equity .....	120
Criminal Offenders in Correction Institutions .....	120
Tech Prep .....	120

## *Acknowledgments...*

The authors of the Annual *Condition of Education Report* wish to thank the staff of the Iowa Department of Education who contributed to the production of this report. A special acknowledgment is extended to individuals outside the department who made important contributions in sharing their data and thoughts with us. They included: Dr. David Frisbie, Dr. Robert Forsyth, and Dr. Timothy Ansley, Iowa Testing Programs; and Dr. Robert Ziomek, American College Testing Program.

# Enrollment

Enrollment in Iowa schools has undergone a number of changes in the past three decades. Iowa public and nonpublic school combined enrollments peaked in 1969-70 at 738,913 students and then experienced a 20 year decline. The decline ended in 1988-89 and was followed by eight consecutive years of increasing enrollments. During the 1997-98 school year, enrollments decreased slightly. The composition of Iowa's student population has also experienced substantial change in composition over the past decade, with significant increases in limited English proficient students as well as increases in minority student populations.

The enrollment section describes changes in student demographics with respect to enrollment trends, projected enrollments, distributions of students by race/ethnicity, growth in the number of non-English speaking students, open enrollment trends, changes in early childhood enrollments, and special education enrollments.

## Enrollment Trends

The data in Table 1 reflects trends in Iowa public and nonpublic enrollments since the 1985-86 school year. After eight consecutive increases in public school enrollments, totaling nearly 29,000 students, enrollments declined slightly in the 1997-98 school year. Over the recent eight year period of increasing public school enrollments, increases averaged about .73 percent per year or about 3,600 students per year.

Nonpublic school enrollments since 1985-86 have shown steady declines through the 1997-98 school year. The decline in nonpublic school enrollments since 1985-86 represented an 11.44 percent decrease and accounted for a loss of more than 5,600 students.

**Table 1**

---

### IOWA PUBLIC AND NONPUBLIC SCHOOL ENROLLMENTS 1985-86 TO 1997-98

---

Year	Public	Nonpublic
1985-86	485,332	49,026
1986-87	481,205	48,520
1987-88	478,859	47,228
1988-89	476,771	47,373
1989-90	478,210	46,033
1990-91	483,396	45,562
1991-92	491,451	45,865
1992-93	495,342	45,229
1993-94	497,009	45,328
1994-95	500,592	44,752
1995-96	504,505	44,563
1996-97	505,523	44,302
1997-98	505,130	43,417

---

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES AND CERTIFIED ENROLLMENT FILES.

---

Changes in public school enrollments by grade level are presented in Table 2. A comparison of 1985-86 and 1997-98 enrollments reflects that enrollments for all grade levels, except kindergarten and first grade, increased across the period. The largest percentage increases for the period occurred for grades six and seven. Enrollments for kindergarten and first grade decreased by nearly 11 percent and 5.58 percent respectively.

Enrollments in 1997-98, compared to the previous school year reflected decreases in kindergarten and first grade, in grades five and six, and in grades eight through ten. All other grades reflected increases from the previous school year, with the largest increase occurring for grade 12.

**Table 2**

<b>IOWA PUBLIC SCHOOL ENROLLMENT BY GRADE LEVEL 1985-86, 1996-97, AND 1997-98</b>					
<b>Grade Level</b>	<b>1985-86</b>	<b>1996-97</b>	<b>1997-98</b>	<b>1996-97 to 1997-98 % Change</b>	<b>1985-86 to 1997-98 % Change</b>
K	40,925	37,101	36,486	-1.66%	-10.85%
1	38,110	36,614	35,982	-1.73	-5.58
2	35,387	35,706	36,314	1.70	2.62
3	34,508	35,004	35,521	1.48	2.94
4	32,977	34,918	34,950	0.09	5.98
5	33,327	36,450	34,921	-4.19	4.78
6	32,038	37,604	36,680	-2.46	14.49
7	32,653	37,890	38,136	0.65	16.79
8	35,136	38,801	37,631	-3.02	7.10
9	39,688	40,892	40,806	-0.21	2.82
10	39,337	40,277	39,679	-1.48	0.87
11	37,203	38,093	38,235	0.37	2.77
12	35,906	35,650	36,808	3.25	2.51
Other*	18,137	20,523	22,981	(NA)	(NA)
State	485,332	505,523	505,130	-0.08	4.08

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES.

NOTE: \*OTHER REFERS PRIMARILY TO SPECIAL EDUCATION STUDENTS NOT ASSOCIATED WITH A GIVEN GRADE LEVEL. THIS IS NOT A COUNT OF THE NUMBER OF SPECIAL EDUCATION STUDENTS IN THE STATE.

## Projected Enrollment

Enrollment projections are made for public school districts using a cohort survival methodology. The trend, calculated as an average cohort survival ratio, was used to estimate enrollments for grades one through twelve. To estimate kindergarten enrollments, live births are compared to kindergarten enrollment (e.g., 1992 live births are compared to 1997-98 kindergarten enrollments). Ratios are calculated and the average ratio from the five most current calculations is applied to the last known birth figures to estimate kindergarten enrollments. Five year projections of public school enrollments are depicted in Table 3. Public school enrollments are projected to decrease over the next five years dropping below the 500,000 student level in the school year 2000-2001. Nonpublic school enrollments are also projected to continue decreasing, as they have over the past 20 years.

**Table 3**

<b>PROJECTED IOWA PUBLIC AND NONPUBLIC SCHOOL ENROLLMENTS 1998-99 TO 2002-03</b>		
<b>Year</b>	<b>Public</b>	<b>Nonpublic</b>
1998-1999	505,031	43,403
1999-2000	501,603	43,194
2000-2001	497,125	42,697
2001-2002	493,315	42,288
2002-2003	489,522	42,003

SOURCE: IOWA DEPARTMENT OF EDUCATION, PUBLIC AND NONPUBLIC SCHOOL ENROLLMENT PROJECTIONS.

## Distribution of Public School Students and Districts

The distribution of public school districts and students is presented in Table 4. In 1985-86, 54 percent of public school districts had enrollments of fewer than 600 students, compared to 38.5 percent of districts in 1997-98. Districts under 600 enrollment represented 17.7 percent of the student population in 1985-86, compared to 11.4 percent in 1997-98.

Substantial changes in the distribution of students and districts occurred for districts with enrollments under 400. These districts accounted for 8.1 percent of public school students and 32.5 percent of all districts in 1985-86, compared to 4.3 percent of all students and 19.6 percent of districts in 1997-98.

The number of school districts decreased by nearly 14 percent from 1985-86 to 1997-98, while the number of students increased by 4.1 percent. The average district enrollment increased from 1,111 in 1985-86 to 1,340 in 1997-98, while the median district enrollment increased from 560 in 1985-86 to 697 in 1997-98.

**Table 4**

<b>District Enrollment Category</b>	<b>1985-86</b>				<b>1997-98</b>			
	<b>Districts N</b>	<b>%</b>	<b>Students N</b>	<b>%</b>	<b>Districts N</b>	<b>%</b>	<b>Students N</b>	<b>%</b>
<250	52	11.9%	10,124	2.1%	23	6.1%	4,521	0.9%
250-399	90	20.6	29,060	6.0	51	13.5	17,108	3.4
400-599	94	21.5	46,544	9.6	71	18.9	35,757	7.1
600-999	97	22.2	72,595	15.0	112	29.7	84,801	16.8
1,000-2,499	72	16.5	109,551	22.5	86	22.8	130,208	25.8
2,500-7,499	24	5.5	95,189	19.6	25	6.6	99,314	19.6
7,500+	8	1.8	122,269	25.2	9	2.4	133,421	26.4
State	437		485,332		377		505,130	

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES.

## Approved Nonpublic Schools

The number of approved nonpublic schools in Iowa has remained relatively stable over the last two decades. In 1997-98, there were 210 approved nonpublic schools. Only three nonpublic schools were PK-12 or K-12 schools. Twenty-nine nonpublic schools operated high schools, while 53 and 51 nonpublic schools were K-8 and PK-8 respectively. Nonpublic enrollments accounted for 7.9 percent of Iowa's total school enrollment in 1997-98, compared to 9.2 percent in 1985-86.

## Ethnic Distribution of Students

The ethnic distribution of Iowa's public school student population has changed significantly over the period from 1985-86 to 1997-98 (Table 5). Minority student enrollment increased more than 81 percent. Hispanic student enrollments represented the most substantial increase, more than tripling during the period. In 1985-86 minority public school enrollment comprised 4.7 percent of PK-12 enrollments, compared to 8.2 percent in 1997-98. In contrast, majority enrollment decreased by .6 percent over the same period.

**Table 5**

### IOWA PUBLIC SCHOOL ENROLLMENTS BY RACIAL/ETHNIC GROUP 1985-86, 1996-97, AND 1997-98

Racial/ Ethnic Group	1985-86		1996-97		1997-98		%Change 1996-97 to 1997-98	%Change 1985-86 to 1997-98
	N	%	N	%	N	%		
American Indian	1,090	0.2%	2,255	0.5%	2,447	0.5%	8.5%	124.5%
Hispanic	4,069	0.8	11,774	2.3	12,903	2.6	9.6	217.1
Asian	5,310	1.1	7,953	1.6	8,080	1.6	1.6	52.2
African American	12,308	2.5	17,177	3.4	17,821	3.5	3.7	44.8
White	462,555	95.4	462,053	92.2	459,803	91.8	-0.5	-0.6

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES  
NOTE: INCLUDES PK-GRADE 12 AND UNGRADED SPECIAL EDUCATION STUDENTS.

Minority student enrollments in nonpublic schools also reflected increases from 1985-86 to 1997-98 (Table 6). In 1985-86, minority enrollment in nonpublic schools represented 2.5 percent of total nonpublic enrollments, compared to four percent in 1997-98. Total minority enrollment in nonpublic schools increased by 56.5 percent over the time period from 1985-86 to 1997-98 while enrollments for non-minority students decreased across the same time period by nearly eight percent.

**Table 6**


---

**IOWA NONPUBLIC SCHOOL ENROLLMENTS BY RACIAL/ETHNIC GROUP  
1985-86, 1996-97, AND 1997-98**

---

Racial/ Ethnic Group	1985-86		1996-97		1997-98		%Change 1996-97 to 1997-98	%Change 1985-86 to 1997-98
	N	%	N	%	N	%		
American Indian	42	0.1%	59	0.1%	81	0.2%	37.3%	92.9%
Hispanic	527	1.1	744	1.6	752	1.6	1.1	42.7
Asian	344	0.7	496	1.1	499	1.1	0.6	45.1
African American	273	0.6	521	1.1	524	1.1	0.6	91.9
White	48,372	97.5	45,238	96.1	44,545	96.0	-1.5	-7.9

---

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES.  
NOTE: INCLUDES PK-GRADE 12 STUDENTS.

---

Table 7, from the *Digest of Education Statistics, 1997*, published by the U.S. Department of Education, compares public school student distributions by race/ethnicity for the fall of 1986 and the fall of 1995. In 1986, the average minority enrollment for the nation was 29.6 percent, compared to 35.1 percent in 1995. From 1986 through 1995, only four other states in the nation had a lower percentage of minority students than Iowa. The figures in Table 7 reflect that Iowa's minority enrollment represented 5.4 percent of total public school enrollment in 1986, compared to 7.3 percent in 1995, up from 6.9 percent in 1994. During the period from 1986 to 1995, only three of 50 states reported a decline in minority enrollments, one reported no change, and the remaining 46 reported increases. The District of Columbia remained the same.

## **Weighted Non-English Speaking Students and Limited English Proficient Students**

This section provides information on students whose primary language is not English. Weighted non-English speaking students are eligible to generate additional money for districts in which they are enrolled. Limited English proficient students are defined as students whose primary language is not English and include both students who generate additional dollars for their education as well as those who are not eligible to generate additional funds. Limited English proficient students represent public as well as nonpublic students, while weighted non-English students represent only public school student counts.



Table 7

**ENROLLMENT IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS,  
BY RACE/ETHNICITY AND STATE: FALL 1986 AND FALL 1995**

State or other area	Percent distribution, fall 1986		Percent distribution, fall 1995						Minority Enrollment % Change 1986 to 1995
	White <sup>1</sup>	Total Minority	White <sup>1</sup>	Total Minority	African American	Hispanic	Asian	American Indian	
<b>United States .....</b>	<b>70.4</b>	<b>29.6</b>	<b>64.8</b>	<b>35.1</b>	<b>16.8</b>	<b>13.5</b>	<b>3.7</b>	<b>1.1</b>	<b>+5.6</b>
Alabama .....	62.0	38.0	62.1	37.8	36.0	0.5	0.6	0.7	-0.1
Alaska .....	65.7	34.3	63.7	36.2	4.6	2.7	4.4	24.5	+2.0
Arizona .....	62.2	37.8	56.9	43.2	4.3	30.0	1.7	7.2	+5.3
Arkansas .....	74.7	25.3	73.9	26.2	23.6	1.5	0.7	0.4	+0.8
California .....	53.7	46.3	40.4	59.6	8.8	38.7	11.2	0.9	+13.3
Colorado .....	78.7	21.3	72.5	27.5	5.5	18.4	2.5	1.1	+6.2
Connecticut .....	77.2	22.8	72.0	28.0	13.5	11.8	2.4	0.3	+5.2
Delaware .....	68.3	31.7	64.7	35.3	29.4	4.0	1.7	0.2	+3.6
District of Columbia .....	4.0	96.0	4.0	96.0	87.6	7.0	1.4	( <sup>2</sup> )	0.0
Florida .....	65.4	34.6	57.5	42.6	25.3	15.3	1.8	0.2	+7.9
Georgia .....	60.7	39.3	58.2	41.7	37.8	2.2	1.6	0.1	+2.5
Hawaii .....	23.5	76.5	22.9	77.2	2.6	4.9	69.3	0.4	+0.6
Idaho .....	92.6	7.4	88.4	11.5	0.6	8.4	1.2	1.3	+4.2
Illinois .....	69.8	30.2	63.6	36.4	21.1	12.2	3.0	0.1	+6.2
Indiana .....	88.7	11.3	85.6	14.4	11.1	2.3	0.8	0.2	+3.1
<b>Iowa .....</b>	<b>94.6</b>	<b>5.4</b>	<b>92.7</b>	<b>7.3</b>	<b>3.3</b>	<b>2.1</b>	<b>1.5</b>	<b>0.4</b>	<b>+1.9</b>
Kansas .....	85.6	14.4	82.6	17.4	8.5	6.0	1.8	1.1	+3.0
Kentucky .....	89.2	10.8	89.1	10.9	9.8	0.4	0.6	0.1	+0.1
Louisiana .....	56.5	43.5	51.0	48.9	46.0	1.1	1.3	0.5	+5.5
Maine .....	98.3	1.7	97.3	2.7	0.8	0.4	0.9	0.6	+1.0
Maryland .....	59.7	40.3	57.5	42.4	35.0	3.3	3.8	0.3	+2.2
Massachusetts .....	83.7	16.3	78.5	21.5	8.2	9.3	3.8	0.2	+5.2
Michigan .....	76.4	23.6	76.4	23.6	18.4	2.7	1.5	1.0	0.0
Minnesota .....	93.9	6.1	87.4	12.6	4.8	2.0	3.9	1.9	+6.5
Mississippi .....	43.9	56.1	47.7	52.3	51.0	0.3	0.6	0.4	-3.8
Missouri .....	83.4	16.6	81.7	18.3	16.1	1.0	1.0	0.2	+1.7
Montana .....	92.7	7.3	87.5	12.5	0.5	1.4	0.8	9.8	+5.2
Nebraska .....	91.4	8.6	87.2	13.0	5.9	4.4	1.3	1.4	+4.2
Nevada .....	77.4	22.6	66.5	33.4	9.8	17.2	4.5	1.9	+10.9
New Hampshire .....	98.0	2.0	96.7	3.4	0.9	1.2	1.1	0.2	+1.3
New Jersey .....	69.1	30.9	62.5	37.6	18.5	13.5	5.4	0.2	+6.6
New Mexico .....	43.1	56.9	39.5	60.6	2.4	46.8	1.0	10.4	+3.6
New York .....	68.4	31.6	56.9	43.0	20.2	17.4	5.0	0.4	+11.5
North Carolina .....	68.4	31.6	64.6	35.4	30.7	1.9	1.3	1.5	+3.8
North Dakota .....	92.4	7.6	90.8	9.3	0.8	1.1	0.8	6.6	+1.6
Ohio .....	83.1	16.9	82.2	17.8	15.3	1.4	1.0	0.1	+0.9
Oklahoma .....	79.0	21.0	69.4	30.7	10.5	3.9	1.3	15.0	+9.6
Oregon .....	89.8	10.2	85.3	14.8	2.6	6.8	3.4	2.0	+4.5
Pennsylvania .....	84.4	15.6	80.6	19.4	14.0	3.5	1.8	0.1	+3.8
Rhode Island .....	87.9	12.1	78.9	21.1	7.0	10.3	3.3	0.5	+9.0
South Carolina .....	54.6	45.4	56.3	43.8	42.1	0.7	0.8	0.2	-1.7
South Dakota .....	90.6	9.4	83.7	16.2	0.9	0.7	0.7	13.9	+6.9
Tennessee .....	76.5	23.5	75.3	24.7	23.1	0.7	0.8	0.1	+1.2
Texas .....	51.0	49.0	46.4	53.6	14.3	36.7	2.3	0.3	+4.6
Utah .....	93.7	6.3	90.4	9.6	0.7	5.3	2.2	1.4	+3.3
Vermont .....	98.4	1.6	97.3	2.7	0.7	0.4	1.0	0.6	+1.1
Virginia .....	72.6	27.4	66.6	33.4	26.5	3.2	3.5	0.2	+6.0
Washington .....	84.5	15.5	78.3	21.6	4.7	7.8	6.5	2.6	+6.2
West Virginia .....	95.9	4.1	95.2	4.8	4.0	0.3	0.4	0.1	+0.7
Wisconsin .....	86.6	13.4	83.2	16.8	9.4	3.3	2.8	1.3	+3.4
Wyoming .....	90.7	9.3	89.3	10.6	1.0	6.1	0.8	2.7	+1.4
<b>Other Areas</b>									
American Samoa .....	—	—	—	100.0	—	—	100.0	—	—
Guam .....	—	—	6.7	93.3	1.3	0.5	91.5	—	—
Northern Marianas .....	—	—	0.7	99.3	—	—	99.3	—	—
Puerto Rico .....	—	—	—	100.0	—	100.0	—	—	—
Virgin Islands .....	—	—	0.9	99.1	84.5	14.3	0.4	—	—

<sup>1</sup>Excludes persons of Hispanic origin.

<sup>2</sup>Less than 0.05 percent

—Data not available.

Note: The 1986-87 data were derived from the 1986 Elementary and Secondary School Civil Rights sample survey of public school districts. Because of rounding, details may not add to totals.

SOURCE: U.S. DEPARTMENT OF EDUCATION, DIGEST OF EDUCATION STATISTICS, 1997.

## Weighted Non-English Speaking Students

Weighted non-English speaking student counts for 1993-94, 1996-97, and 1997-98 are compared in Table 8. The percentage of non-English speaking students generating additional funds for school districts increased by 56.3 percent over the period from 1993-94 to 1997-98 and was up 13.2 percent in 1997-98 over the previous school year. Increases in the number of weighted non-English speaking students occurred for all but the smallest enrollment category from 1993-94 to 1997-98. Weighted non-English speaking students in 1997-98 accounted for 1.2 percent of the total enrollment for public schools.

**Table 8**

**DISTRIBUTION OF IOWA WEIGHTED NON-ENGLISH SPEAKING  
PUBLIC SCHOOL STUDENTS<sup>1</sup> BY ENROLLMENT CATEGORY  
1993-94, 1996-97, AND 1997-98**

Enrollment Category	1993-94		1996-97		1997-98		Percent Change in Non-English Enrollment	
	Basic Enrollment Total	Non-English Enrollment	Basic Enrollment Total	Non-English Enrollment	Basic Enrollment Total	Non-English Enrollment	1993-94 to 1997-98	1996-97 to 1997-98
<250	6,956	17	4,818	11	4,521	12	-29.4%	9.1%
250-399	17,794	21	15,324	40	17,108	56	166.7	40.0
400-599	47,617	72	37,716	101	35,757	101	40.3	0.0
600-999	79,260	229	88,577	500	84,801	502	119.2	0.4
1,000-2,499	119,988	706	126,738	948	130,208	1,243	76.1	31.1
2,500-7,499	94,422	488	99,346	878	99,314	835	71.1	-4.9
7,500+	130,970	2,252	133,004	2,750	133,421	3,167	40.6	15.2
State	497,007	3,785	505,523	5,228	505,130	5,916	56.3	13.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES, 1993-94, 1996-97, AND 1997-98.

NOTE: <sup>1</sup>FIGURES REPRESENT A COUNT OF NON-ENGLISH SPEAKING STUDENTS ELIGIBLE FOR GENERATING ADDITIONAL FUNDS FOR THEIR EDUCATION.

## Limited English Proficient Students

The change in the number of limited English proficient students in Iowa's public and nonpublic schools is reflected in Figure 1. This population of students includes all students whose primary language is not English, whether or not the student generates additional money for the district in which he or she resides. Figure 1 indicates a steady growth in limited English proficient students for the years ending 1987 through 1998. The number of limited English proficient students enrolled in public and nonpublic schools was 2.8 times higher in 1997-98 than in 1986-87. The average percentage increase in limited English proficient students since 1993-94 has been 13.3 percent, a growth of about 755 students per year. The 1998 figures reflected an increase of 9.6 percent over the previous year.

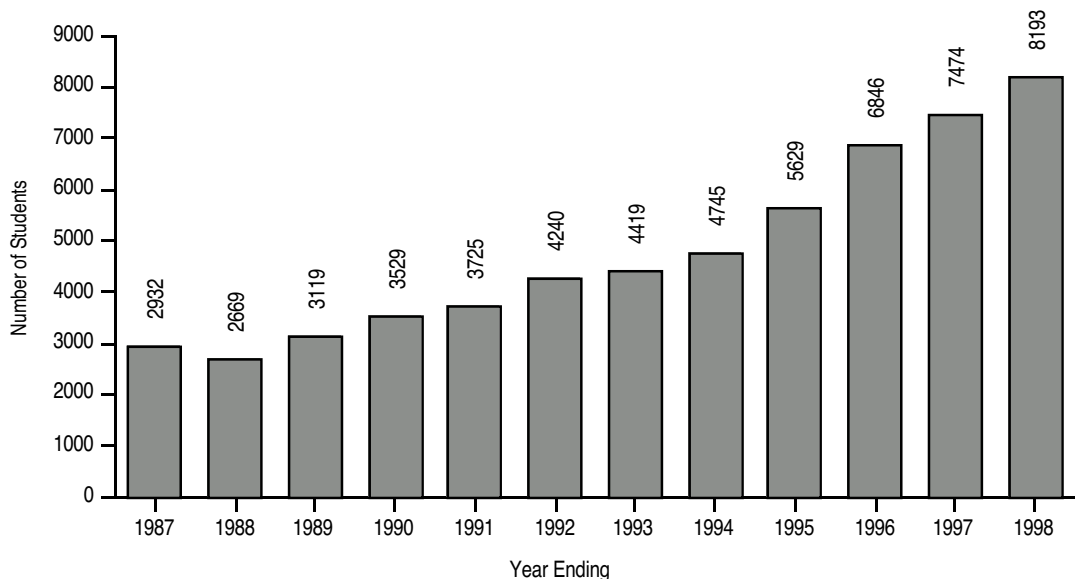
The growth in Iowa's limited English proficient student population mirrors the national trend (Figure 2).

**Figure 1**

---

### TRENDS IN ENROLLMENTS OF LIMITED ENGLISH PROFICIENT PUBLIC AND NONPUBLIC STUDENTS IN IOWA 1986-87 TO 1997-98

---



---

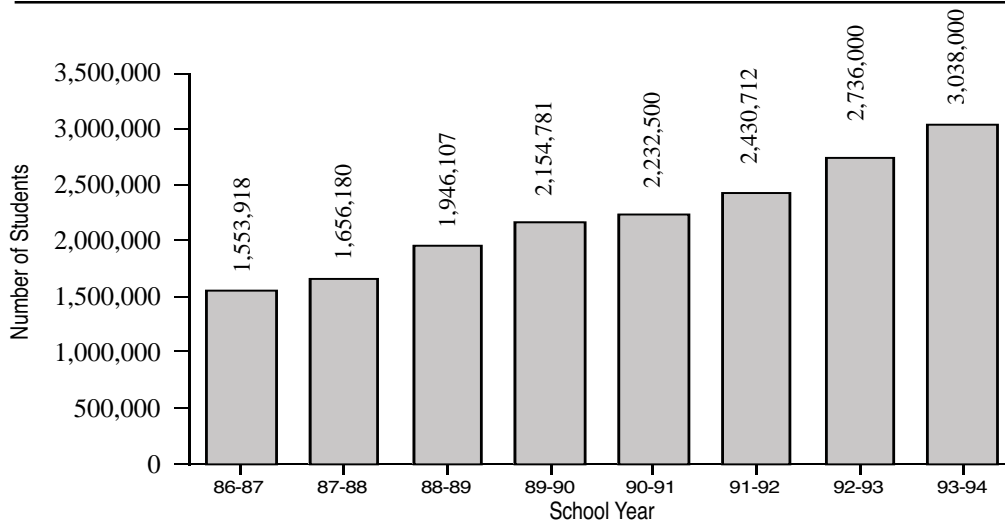
SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, LIMITED ENGLISH PROFICIENT STUDENT FILE.

---

In Iowa, the largest limited English proficient enrollments were reported by Des Moines and Sioux City at 1,879 and 1,568 respectively. The combined limited English proficient enrollment of these two districts represented 42.1 percent of the total public limited English proficient enrollment in 1998. The three school districts reflecting the greatest percentages of limited English proficient students were Storm Lake, 32 percent; West Liberty, 28 percent; and Columbus with 22 percent.

**Figure 2**

**TRENDS IN ENROLLMENTS OF LIMITED ENGLISH PROFICIENT  
PUBLIC AND NONPUBLIC STUDENTS IN THE NATION  
1986-87 TO 1993-94**



SOURCE: DONLY, B., ET. AL. (1995). *SUMMARY OF BILINGUAL EDUCATION STATE EDUCATIONAL AGENCY PROGRAM SURVEY OF STATES' LEP PERSONS AND AVAILABLE EDUCATIONAL SERVICES 1993-94.*  
NOTE: PREPARED UNDER CONTRACT FOR THE U.S. DEPARTMENT OF EDUCATION BY DEVELOPMENT ASSOCIATES, INC.: ARLINGTON, VA.

**Open Enrollment**

In 1997-98, 15,221 students were open enrolled in Iowa schools. This represents more than a 9.2 percent increase from the previous year and a 26.8 percent increase since 1995-96. Table 9 reflects net changes in open enrollment. Three enrollment categories experienced net increases due to open enrollment in 1997-98. These included districts with enrollments of 400-599, 1,000-2,499, and 2,500-7,499.

**Table 9**

**NET OPEN ENROLLMENT CHANGE IN IOWA PUBLIC SCHOOLS  
BY ENROLLMENT CATEGORY  
1990-91, 1995-96 TO 1997-98**

Enrollment Category	Net Enrollment Change			Open Enrollment Out	
	1990-1991	1995-1996	1996-1997	1997-1998	1997-1998
<250	-236	-539	-509	-441	574
250-399	-264	-462	-449	-325	1,214
400-599	-50	216	380	354	1,642
600-999	66	59	-17	-40	3,365
1,000-2,499	370	1,101	1,121	1,165	3,350
2,500-7,499	45	633	515	534	2,461
7,500+	-67	-1,087	-1,124	-1,334	2,615

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES, 1990-91, 1995-96 TO 1997-98.

## Early Childhood Education

During the 1996-97 school year, 40.9 percent or 155 school districts offered preschool programs, compared to 38.5 percent in the previous school year (Table 10). The total number of preschool children served decreased from the previous year by 6.3 percent. All districts in the largest enrollment category provided preschool programs in 1996-97, while 64 percent of districts with enrollments of 2,500-7,499 provided preschool programs and 58.3 percent of districts with enrollments under 250 provided preschool programs.

**Table 10**

### IOWA PUBLIC SCHOOL PRESCHOOL PROGRAMS OFFERED AND PRESCHOOL AND KINDERGARTEN ENROLLMENTS BY ENROLLMENT CATEGORY — 1996-97

Enrollment Category	Number of Districts	Districts Offering Preschool Programs		Children in Preschool Programs		Number of Kndgrtn Children	Preschool Children as a Percent of Kndgrtn Children
		Number	%	Number	%		
<250	24	14	58.3%	90	1.8%	295	30.5%
250-399	46	21	45.7	378	7.5	1,031	36.7
400-599	76	27	35.5	410	8.1	2,669	15.4
600-999	116	40	34.5	888	17.5	6,354	14.0
1,000-2,499	83	28	33.7	1,001	19.8	9,375	10.7
2,500-7,499	25	16	64.0	679	13.4	7,245	9.4
7,500+	9	9	100.0	1,612	31.9	10,132	15.9
State	379	155	40.9	5,058	NA	37,101	13.6

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, EARLY CHILDHOOD EDUCATION FILE.

If an equal distribution of early childhood population across school districts is assumed, examining the ratio of preschool children to kindergarten population can provide an indication of the proportion of preschool children served in preschool programs. Table 10 depicts that an estimated 13.6 percent of preschool children statewide were served in preschool programs in 1996-97, compared to 14.5 percent in 1995-96 and 17 percent in 1994-95.

Nearly three-fourths of Iowa public school districts reported offering all-day, everyday, two semester kindergarten programs in 1997-98 compared to 68.1 percent in the previous year and just over one in four during the 1985-86 school year (Table 11).

**Table 11**

**NUMBER AND PERCENT OF IOWA PUBLIC SCHOOL DISTRICTS OFFERING ALL-DAY, EVERYDAY, TWO SEMESTER KINDERGARTEN PROGRAMS — 1985-86 TO 1997-98**

Year	Number of Districts	Percent of Districts
1985-1986	110	25.2%
1986-1987	120	27.5
1987-1988	134	30.7
1988-1989	151	34.9
1989-1990	163	37.8
1990-1991	180	41.9
1991-1992	199	46.8
1992-1993	219	52.4
1993-1994	228	57.4
1994-1995	242	62.1
1995-1996	257	66.9
1996-1997	258	68.1
1997-1998	279	74.0

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POLICIES AND PROCEDURES FILES.

The number and percent of school districts offering all-day everyday, two semester kindergarten programs in 1997-98 is presented in Table 12 by enrollment category.

**Table 12**

**IOWA PUBLIC SCHOOL KINDERGARTEN PROGRAM TYPE — 1997-98**

Enrollment Category	Number of Districts	Kindergarten Program Type		Number of Districts
		All-Day, Everyday, Two Semesters	Percent in Category	
<250	23	20	87.0%	3
250-399	51	44	86.3	7
400-599	71	52	73.2	19
600-999	112	93	83.0	19
1,000-2,499	86	57	66.3	29
2,500-7,499	25	10	40.0	15
7,500+	9	3	33.3	6
State	377	279	74.0	98

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POLICIES AND PROCEDURES FILE, 1997-98.

For the 1997-98 school year the percentage of districts within the seven standard enrollment categories offering all-day, everyday, two semester kindergarten programs tended to decrease as enrollment categories increased. In general, districts with enrollments under 1,000 had substantially higher percentages of all-day, everyday, two semester kindergarten programs than districts with enrollments of 1,000 or more.

## Special Education Enrollments

Public school enrollments in special education increased by 3.23 percent in 1997-98 over the previous school year. The average increase in special education enrollment over the past five years was 3.68 percent. Public school special education enrollment has increased by nearly 18,000 students since 1985-86. Special education enrollments as a percent of the total certified enrollment increased from 8.63 percent in 1985-86 to 11.82 percent in 1997-98.

**Table 13**

### SPECIAL EDUCATION ENROLLMENT IN IOWA PUBLIC SCHOOLS 1985-86 THROUGH 1997-98

Year	Certified Enrollment	Annual % Change in Cert. Enrollment	Special Education Enrollment	Annual % Change in Spec. Ed. Enrollment	Special Ed. Enrollment as a % of Cert. Enr.
1985-1986	485,332	—	41,892	—	8.63%
1986-1987	481,205	-0.85%	42,360	1.12%	8.80%
1987-1988	478,859	-0.49%	42,625	0.63%	8.90%
1988-1989	476,771	-0.44%	43,290	1.56%	9.08%
1989-1990	478,210	0.30%	44,585	2.99%	9.32%
1990-1991	483,396	1.08%	46,593	4.50%	9.64%
1991-1992	491,451	1.67%	48,201	3.45%	9.81%
1992-1993	495,342	0.79%	49,848	3.42%	10.06%
1993-1994	497,009	0.34%	51,022	2.36%	10.27%
1994-1995	500,592	0.72%	53,151	4.17%	10.62%
1995-1996	504,505	0.78%	55,514	4.45%	11.00%
1996-1997	505,523	0.20%	57,845	4.20%	11.44%
1997-1998	505,130	-0.08%	59,711	3.23%	11.82%

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILES AND DECEMBER 1 SPECIAL EDUCATION FILES.

# Staff

Staff information contained in the *Condition of Education Report* provides data on the characteristics of teachers, principals, superintendents, teacher aides and other area education agency staff. This information is provided for public school districts as well as for nonpublic schools and area education agencies. Data are provided for the most recent two-year period and for the 1985-86 baseline school year as well. Where possible, comparisons are made with comparable national and regional data as well as by enrollment categories.

## Licensed Staff

During the 1997-98 school year, nearly 46,500 licensed full-time and part-time staff provided educational services to 548,547 public and nonpublic school students in Iowa. The licensed staff counts represent staff reported on the annual Basic Educational Data Survey by public school districts, nonpublic schools and area education agencies.

## Teachers' Characteristics

The number of full-time public school and nonpublic school teachers and selected characteristics are presented in Table 14. The number of full-time public school teachers increased about one percent over the previous school year to nearly 32,000, while the number of full-time nonpublic school teachers showed a slight decline. Compared to 1985-86 baseline data, 1997-98 teacher counts for full-time public school teachers, represented an increase of 4.77 percent. Teacher counts for nonpublic schools dropped slightly over the same period.

**Table 14**

CHARACTERISTICS OF IOWA FULL-TIME TEACHERS 1985-86, 1996-97, AND 1997-98						
Characteristics	Public			Nonpublic		
	85-86	96-97	97-98	85-86	96-97	97-98
Average Age	39.9	42.3	42.3	36.6	39.1	39.4
Percent Female	63.5	68.5	68.9	77.5	78.8	78.6
Percent Minority	1.2	1.6	1.6	0.5	0.8	1.0
Percent Advanced Degree	29.0	27.8	28.2	16.0	12.0	12.9
Average Total Experience	13.9	15.8	15.6	11.0	12.1	12.2
Average District Experience	10.6	12.3	12.1	5.7	8.0	8.1
Number of Full-Time Teachers	30,499	31,629	31,954	2,419	2,363	2,355

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES. (INCLUDES AEA TEACHERS).

Compared to the 1985-86 public school baseline figures, average age, total experience, and district experience all reflected increases in 1997-98. The percent of female teachers has also increased from 63.5 percent in 1985-86 to 68.9 percent in 1997-98. The percentage of public school teachers with advanced degrees has decreased slightly from the 1985-86 baseline figure of 29 percent to 28.2 percent and was up slightly over the previous school year. The percentage of minority teachers in 1997-98 remained the same as in the 1996-97 school year, up only slightly from the 1985-86 figure of 1.2 percent. Trends in full-time teacher characteristics for nonpublic schools generally paralleled trends for public school teachers with the exception of a 3.1 percentage point decrease in the percent of nonpublic teachers with advanced degrees.



## Teachers' Salaries

Teacher salaries reported in the *Condition of Education Report*, are taken from the Basic Educational Data Survey provided annually to the Department of Education by Iowa schools and area education agencies. The reported salaries reflect the total contract amount received in a given school year. Contract salaries reported may include amounts paid to teachers for non-teaching duties such as coaching or sponsorship of student activities or clubs, etc.

Table 15 reflects average teacher salaries for the 1985-86, 1996-97, and 1997-98 school years. Average total experience and the percentage of teachers with advanced degrees beyond the baccalaureate are also reported in Table 15. On average, salaries for full-time public school teachers in Iowa have increased over 57 percent since 1985-86. The rate of increase varies across enrollment categories from 50.7 percent in the smallest districts to 57.1 percent in districts with enrollments of 250-399. The range in average salaries across enrollment categories in 1997-98 was \$12,565 compared to a range of \$7,694 in 1985-86.

In 1985-86, teachers in the smallest districts earned only 75.4 percent of the state average salary. This decreased to 72.3 percent in 1997-98. The two factors primarily impacting salaries are education level and years of experience. Table 15 reflects the relationship of these two factors across enrollment categories. Nearly five times as many teachers in the largest school districts had advanced degrees and the average total experience for teachers in the largest districts was 5.5 years greater than for teachers in the smallest school districts.

**Table 15**

### AVERAGE SALARIES, ADVANCED DEGREE, AND TOTAL EXPERIENCE DISTRIBUTION OF IOWA FULL-TIME PUBLIC SCHOOL TEACHERS BY ENROLLMENT CATEGORY

Enrollment Category	Average Salary			% Salary Change 1985-86 to 1997-98	% with Advanced Degree 1997-98	Average Years Total Experience 1997-98
	1985-86	1996-97*	1997-98*			
<250	\$16,347	\$24,418	\$24,641	50.7%	8.4%	10.5
250-399	17,971	27,332	28,236	57.1	12.2	13.6
400-599	19,198	29,182	29,865	55.6	14.2	14.3
600-999	20,079	30,366	31,135	55.1	18.5	15.0
1,000-2,499	21,616	33,095	33,789	56.3	24.6	16.0
2,500-7,499	23,835	35,918	36,576	53.5	34.9	16.5
7,500+	24,041	36,242	37,206	54.8	41.2	16.0
State	21,690	33,275	34,084	57.1	28.2	15.6

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES, 1985-86, 1996-97, AND 1997-98.  
NOTE: \*DOES NOT INCLUDE PHASE III FUNDS.

## Teacher Salary Comparisons by Years of Experience

Salary comparisons among full-time public school teachers with comparable experience and degree levels are presented in Tables 16-18. Comparisons are made for teachers with baccalaureate degrees and for teachers with advanced degrees for three experience levels; five years or less, six to ten years, and more than ten years experience. Substantial differences were evident across enrollment categories in both 1985-86 and in 1997-98 for both degree level categories and for all three experience levels. Comparisons reflect that average salaries tended to increase with each successive increase in enrollment category. In general, teachers with baccalaureate degrees in enrollment categories with less than 1,000 students had average salaries which fell below the state average. Teachers with advanced degrees in enrollment categories with less than 2,500 student generally had average salaries below the state average in both 1985-86 and 1997-98.

**Table 16**

### AVERAGE SALARY COMPARISON FOR IOWA PUBLIC SCHOOL FULL-TIME TEACHERS WITH TOTAL EXPERIENCE OF FIVE YEARS OR LESS 1985-86 vs. 1997-98

Enrollment Category	Baccalaureate Degree Level		Advanced Degree Level	
	1985-86	1997-98	1985-86	1997-98
<250	\$14,659	\$21,195	\$15,782	\$22,331
250-399	15,434	22,915	16,753	24,957
400-599	15,775	23,501	17,226	25,708
600-999	16,017	24,054	17,731	29,855
1,000-2,499	16,403	24,932	19,500	28,085
2,500-7,499	17,191	26,424	20,057	31,312
7,500+	17,156	26,453	21,143	32,551
State	16,211	25,051	19,545	30,718

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

**Table 17**

### AVERAGE SALARY COMPARISON FOR IOWA PUBLIC SCHOOL FULL-TIME TEACHERS WITH TOTAL EXPERIENCE OF SIX TO TEN YEARS 1985-86 vs. 1997-98

Enrollment Category	Baccalaureate Degree Level		Advanced Degree Level	
	1985-86	1997-98	1985-86	1997-98
<250	\$16,218	\$25,026	\$16,704	\$22,800
250-399	17,423	26,750	18,537	27,147
400-599	18,419	27,889	19,704	29,123
600-999	18,874	28,517	20,026	30,329
1,000-2,499	19,543	30,041	21,360	32,670
2,500-7,499	20,570	31,470	23,174	35,391
7,500+	20,686	32,057	23,104	37,244
State	19,335	30,017	21,919	34,652

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

**Table 18**

**AVERAGE SALARY COMPARISON FOR IOWA PUBLIC SCHOOL  
FULL-TIME TEACHERS WITH TOTAL EXPERIENCE OF MORE THAN TEN YEARS  
1985-86 vs. 1997-98**

Enrollment Category	Baccalaureate Degree Level		Advanced Degree Level	
	1985-86	1997-98	1985-86	1997-98
<250	\$17,821	\$27,483	\$18,985	\$28,593
250-399	19,324	30,918	21,260	32,739
400-599	20,559	32,570	22,583	35,265
600-999	21,381	33,436	23,632	36,627
1,000-2,499	22,495	35,686	25,440	39,834
2,500-7,499	23,804	37,308	28,044	44,043
7,500+	23,594	37,619	28,110	44,674
State	22,196	35,262	26,528	41,813

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

## Teachers' Assignments

Table 19 presents the average number of teaching assignments for teachers in grades 9-12. Statewide, the average number of assignments for 9-12 teachers increased from 2.71 assignments in 1985-86 to over three assignments per teacher in 1997-98. Average assignments for 1997-98 also reflected increases over the 1996-97 school year, except in the largest districts. Substantial differences in the average number of teaching assignments across the various enrollment categories existed, both in 1985-86 and in 1997-98. In 1985-86, teachers in the smallest school districts were assigned to teach nearly twice the number of assignments, on average, than teachers in the largest districts. In 1997-98, teachers in the smallest districts taught, on average, more than two and one-half times the average number of assignments than their counterparts in the largest school districts. For the three years that data are shown, the average number of assignments for teachers in grades 9-12 increased in all enrollment categories, except for the largest enrollment category.

**Table 19**

**AVERAGE NUMBER OF TEACHING ASSIGNMENTS FOR IOWA FULL-TIME  
PUBLIC SCHOOL TEACHERS GRADES 9-12 BY ENROLLMENT CATEGORY**

Enrollment Category	1985-86	1996-97	1997-98
<250	3.76	4.92	5.02
250-399	3.56	4.07	4.51
400-599	3.33	3.94	4.23
600-999	3.14	3.64	3.84
1,000-2,499	2.61	2.98	3.05
2,500-7,499	2.07	2.37	2.42
7,500+	1.98	2.09	1.91
State	2.71	3.02	3.11

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

## Principals' Characteristics

Following the trend of school district reorganization, the number of full-time public school principals in Iowa has decreased slightly since the 1985-86 school year, declining from 1,223 to 1,189 in 1997-98. With respect to the characteristics of age, experience, and advanced degrees, averages for principals have changed relatively little compared to 1985-86 figures. The percentage of minority principals serving public schools increased from 1.6 percent in 1985-86 to 3.3 percent in 1997-98. The most substantial change in principal characteristics has been the increase in the percentage of women public school principals. This percentage has more than tripled since 1985-86 (Table 20).

**Table 20**

### CHARACTERISTICS OF IOWA FULL-TIME PRINCIPALS 1985-86, 1996-97, AND 1997-98

Characteristics	Public			Nonpublic		
	1985-86	1996-97	1997-98	1985-86	1996-97	1997-98
Average Age	46.6	47.4	47.5	46.0	47.9	47.7
Percent Female	8.7	25.8	27.1	49.5	44.8	46.2
Percent Minority	1.6	2.8	3.3	0	0	0.8
Percent Advanced Degree	98.9	98.0	98.1	97.7	89.6	90.9
Average Total Experience	21.9	22.8	22.8	21.5	22.7	22.2
Average District Experience	13.2	11.6	11.3	6.0	6.6	7.0
Number of Principals	1,223	1,198	1,189	177	134	132

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

There has been little change in the characteristics with respect to nonpublic school principals since 1985-86, except for a decrease in the percentage of principals with advanced degrees. Compared to public school principals, nonpublic school principals are generally similar with respect to the characteristics compared in Table 20, with one exception, over 46 percent of nonpublic principal positions were held by women compared to just over 27 percent in public schools.

## Principals' Salaries

In 1997-98, salaries of full-time public school principals averaged just over \$57,000, an increase of 3.3 percent over the average salary during the previous school year (Table 21). Comparing 1997-98 average salaries of public school principals to the average salaries of principals in 1985-86, there was a 61.6 percent increase on a statewide basis. In 1997-98, average teacher salaries represented 59.7 percent of the average salary earned by public school principals compared to 61.4 percent in 1985-86.

**Table 21**

**AVERAGE SALARY OF IOWA FULL-TIME PUBLIC SCHOOL  
PRINCIPALS BY ENROLLMENT CATEGORY  
1985-86, 1996-97, AND 1997-98**

Enrollment Category	Average Salary			% Change 1985-86 to 1997-98
	1985-86	1996-97	1997-98	
<250	\$26,399	\$39,440	\$40,564	53.7%
250-399	28,387	44,855	46,983	65.5
400-599	31,095	46,678	48,522	56.0
600-999	33,428	50,177	51,987	55.5
1,000-2,499	36,427	56,013	57,742	58.5
2,500-7,499	39,465	61,893	63,150	60.0
7,500+	39,584	63,340	65,460	65.4
State	35,313	55,231	57,060	61.6

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

Salaries for principals varied considerably across enrollment categories in all three years as shown in Table 21. In 1985-86, the range in average salaries across enrollment categories was \$13,185, compared to nearly \$25,000 in 1997-98. For all years shown in Table 21, substantial incremental increases in average salary were reflected with each subsequently larger enrollment category.

## Superintendents' Characteristics

On average, public school superintendents are older and have more years of total experience than both principals and teachers (Table 22). In contrast, the average tenure in a school district is less for public school superintendents than for both principals and teachers. The percentage of superintendents representing minorities is also lower than for principals and for teachers.

**Table 22**

**CHARACTERISTICS OF IOWA FULL-TIME PUBLIC  
SCHOOL SUPERINTENDENTS —1985-86, 1996-97, AND 1997-98**

Characteristics	1985-86	1996-97	1997-98
Average Age	48.7	51.5	51.7
Percent Female	1.6	4.4	3.0
Percent Minority	0	1.2	1.2
Percent Specialists/Doctorate Degree	46.9	45.2	47.1
Average Total Experience	23.6	25.8	26.1
Average District Experience	8.8	6.7	6.7

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

## Superintendents' Salaries

Table 23 displays average salaries for public school superintendents for 1985-86, 1996-97, and 1997-98. In 1997-98, the average salary for superintendents statewide was \$70,337. This represented an increase of 3.8 percent over the previous school year compared to increases in average salaries of principals and teachers of 3.3 percent and 2.4 percent respectively. Since the 1985-86 school year, average salary increases for superintendents have outpaced increases for both principals and teachers, rising 72.8 percent statewide compared to increases for principals and teachers of 61.6 percent and 57.1 percent respectively.

**Table 23**

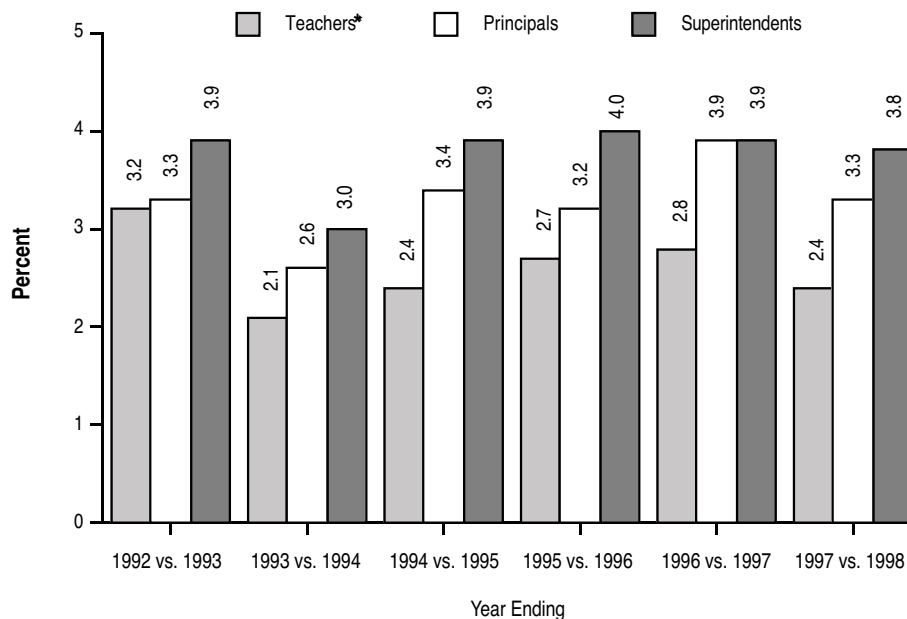
<b>AVERAGE SALARY OF IOWA FULL-TIME PUBLIC SCHOOL SUPERINTENDENTS BY ENROLLMENT CATEGORY 1985-86, 1996-97, AND 1997-98</b>				
Enrollment Category	Average Salary			% Change 1985-86 to 1997-98
	1985-86	1996-97	1997-98	
<250	\$33,597	\$51,112	\$47,071	40.1%
250-399	34,060	56,805	59,486	74.7
400-599	39,213	60,166	62,739	60.0
600-999	41,482	64,980	67,546	62.8
1,000-2,499	47,288	74,257	76,819	62.4
2,500-7,499	55,110	89,787	92,590	68.0
7,500+	62,235	104,516	108,721	74.7
State	40,710	67,747	70,337	72.8

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.

Average salaries for superintendents, as well as salaries for principals and teachers, varied considerably across enrollment categories. In 1985-86, the range in average salaries across enrollment categories for superintendents was \$28,638, increasing to \$61,650 in 1997-98. Superintendents, on average, earned 23 percent more than principals and more than twice as much as teachers in 1997-98.

**Figure 3**

**YEARLY SALARY PERCENTAGE INCREASES FOR IOWA FULL-TIME PUBLIC SCHOOL TEACHERS, PRINCIPALS, AND SUPERINTENDENTS**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILES.  
 NOTE: \*DOES NOT INCLUDE PHASE III FUNDS.

**Table 24**

**AVERAGE SALARY COMPARISON OF IOWA FULL-TIME PUBLIC SCHOOL TEACHERS, PRINCIPALS AND SUPERINTENDENTS BY ENROLLMENT CATEGORY 1997-98**

Enrollment Category	Teachers*	Principals	Superintendents
<250	\$24,641	\$40,564	\$47,071
250-399	28,236	46,983	59,486
400-599	29,865	48,522	62,739
600-999	31,135	51,987	67,546
1,000-2,499	33,789	57,742	76,819
2,500-7,499	36,576	63,150	92,590
7,500+	37,206	65,460	108,721
State	34,084	57,060	70,337

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, 1997-98.  
 NOTE: \*DOES NOT INCLUDE PHASE III FUNDS.

# Gender Comparisons for Teachers and Principals

Gender differences with respect to the characteristics of age, minority representation, advanced degrees, experience and salary for the 1997-98 school year are shown in Table 25 and Table 26 for full-time Iowa public school teachers and principals. Data for the 1997-98 school year mirror results for the previous school year. In general, female teachers were slightly younger, had less experience, and had lower salaries than their male counterparts. The percentage of males and females with advanced degrees was nearly equal for principals, while for teachers more than one-third of males had degrees beyond the baccalaureate, compared to just over one-fourth of females holding advanced degrees.

**Table 25**

<b>GENDER COMPARISON OF IOWA FULL-TIME PUBLIC SCHOOL TEACHERS — 1997-98</b>		
Characteristics	Female	Male
Average Age	42.2	42.6
Percent Minority	1.5	1.8
Percent Advanced Degree	26.1	33.5
Average Total Experience	14.8	17.3
Average District Experience	11.4	13.7
Average Salary*	\$33,261	\$35,904

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE.  
NOTE: \*DOES NOT INCLUDE PHASE III FUNDS.

**Table 26**

<b>GENDER COMPARISON OF IOWA FULL-TIME PUBLIC SCHOOL PRINCIPALS — 1997-98</b>		
Characteristics	Female	Male
Average Age	46.8	47.8
Percent Minority	4.0	3.0
Percent Advanced Degree	99.1	97.8
Average Total Experience	20.5	23.6
Average District Experience	9.2	12.2
Average Salary	\$55,519	\$57,632

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE.



## Area Education Agency Staff

Fifteen area education agencies (AEAs) across Iowa provide services to Iowa public and nonpublic schools. Categories of assistance include special education, educational media, and other educational services. Nearly 2,200 licensed AEA staff were employed by the 15 AEAs during the 1997-98 school year.

Selected characteristics of AEA staff are presented in Table 27. The composition of AEA staff, in general, parallels the distribution of public school teachers, with about 73 percent female, and 1.2 percent minority representation. Nearly 77 percent of AEA licensed staff held advanced degrees. The average salary of AEA licensed staff is nearly \$41,000, or nearly \$7,000 higher than the average salary for full-time public school teachers.

**Table 27**

### CHARACTERISTICS OF IOWA FULL-TIME LICENSED AEA STAFF 1997-98 SCHOOL YEAR

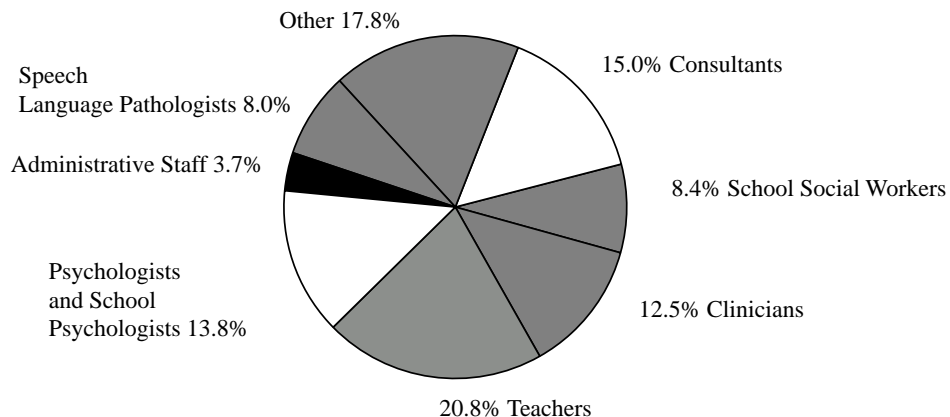
Percent Female	72.7
Percent Minority	1.2
Percent staff with advanced degrees	76.8
Average years total experience	17.0
Average number of contract days	198.2
Average Age	44.4
Average Salary	\$40,951

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, 1997-98.

Figure 4 and Table 28 reflect the distribution of AEA licensed staff for the 1997-98 school year by type of position. The five position categories representing the largest percentages of AEA staff include: teachers, 20.8 percent; consultants, 15.0 percent; clinicians, 12.5 percent; psychologists and school psychologists, 13.8 percent; school social workers, 8.4 percent; and speech pathologists, 8 percent. The five categories constitute 78.5 percent of all AEA licensed staff (see Table 28).

**Figure 4**

### PERCENT OF IOWA FULL-TIME AEA LICENSED STAFF BY POSITION, 1997-98



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, 1997-98.

NOTE: ADMINISTRATIVE STAFF INCLUDES ADMINISTRATIVE ASSISTANTS, ADMINISTRATORS, ASSISTANT DEAN/DIRECTORS, DIRECTORS, AND PRINCIPALS.

**Table 28**

**DISTRIBUTION OF IOWA FULL-TIME AEA LICENSED STAFF  
BY POSITION, 1997-98**

Position	Number	Percent
Administrative Assistant	4	0.2
Administrator	22	1.0
Assistant Dean/Director	10	0.5
Clinician	275	12.5
Consultant	330	15.0
Coordinator	86	3.9
Department Head	14	0.6
Director	40	1.8
Educational Strategist	6	0.3
Home Intervention PK Teacher	49	2.2
Hospital/Home Teacher	4	0.2
Instructor/Consultant	106	4.8
Integration Teacher	40	1.8
Itinerant Teacher	74	3.4
Librarian	9	0.4
Manager	1	0.0
Pre School Teacher	21	1.0
Principal	5	0.2
Psychologist	37	1.7
Resource Teacher	85	3.9
School Audiologist Specialist	8	0.4
School Social Worker	184	8.4
School Psychologist	266	12.1
School Audio Consultant	17	0.8
Self-contained Special Education 2.2 Teacher	78	3.6
Self-contained Special Education 3.6 Teacher	85	3.9
Special Education District Developed Delivery System	12	0.5
Speech Language Pathologists	176	8.0
Specialist	33	1.5
Supervisor	53	2.4
Teacher	18	0.8
Therapist	50	2.2
<b>Total</b>	<b>2,198</b>	<b>100.0</b>

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, 1997-98.

Table 29 reflects the distribution of public school district enrollment and licensed staff by AEA. AEA 11 is the largest AEA in terms of the percent of school districts served, enrollment, and licensed staff. AEA 4 is the smallest AEA in terms of the percent of students served and the percent of licensed staff.

**Table 29**

<b>DISTRIBUTION OF IOWA PUBLIC SCHOOL DISTRICTS, ENROLLMENT AND TOTAL FULL-TIME LICENSED STAFF BY AEAs, 1997-98</b>						
AEA	Districts		Enrollment		Licensed Staff	
	N	%	N	%	N	%
1	25	6.6%	34,488	6.8%	2,513	6.6%
2	24	6.4	22,032	4.4	1,760	4.6
3	19	5.0	12,938	2.6	1,001	2.6
4	14	3.7	11,223	2.2	898	2.3
5	31	8.2	25,731	5.1	2,126	5.5
6	16	4.2	17,122	3.4	1,355	3.5
7	23	6.1	32,336	6.4	2,461	6.4
9	22	5.8	51,807	10.3	3,935	10.3
10	33	8.8	62,887	12.5	4,510	11.8
11	56	14.9	113,961	22.6	8,342	21.8
12	24	6.4	31,487	6.2	2,434	6.4
13	31	8.2	33,548	6.6	2,587	6.8
14	22	5.8	12,364	2.4	1,025	2.7
15	24	6.4	24,360	4.8	1,923	5.0
16	13	3.5	18,846	3.7	1,405	3.7
State	377		505,130		38,275	

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, STAFF FILE, AND CERTIFIED ENROLLMENT FILE, 1997-98.

## Instructional Aides

The number of full-time equivalent (FTE) instructional aides employed in public school districts has increased 138 percent since 1985-86, rising from an FTE of 2,668.6 to 6,341.6 in 1997-98 (Table 30). Substantial increases in the number of aides have occurred across all but the smallest enrollment category. The greatest percentage increase in the number of instructional aides was reported by districts in the enrollment category 600-999. In 1997-98, statewide, there was one instructional aide for approximately every 80 students compared to about one instructional aide for every 182 students in 1985-86.

**Table 30**

Enrollment Category	Number of Full-time Equivalent Aides		% Change in FTE Aides 1985-86 to 1997-98
	1985-86	1997-98	
<250	40.1	39.4	-1.8%
250-399	124.2	225.5	81.6
400-599	167.5	305.4	82.3
600-999	249.1	920.3	269.5
1,000-2,499	605.9	1,657.2	173.5
2,500-7,499	625.7	1,418.5	126.7
7,500+	856.1	1,775.3	107.4
State	2,668.6	6,341.6	137.6

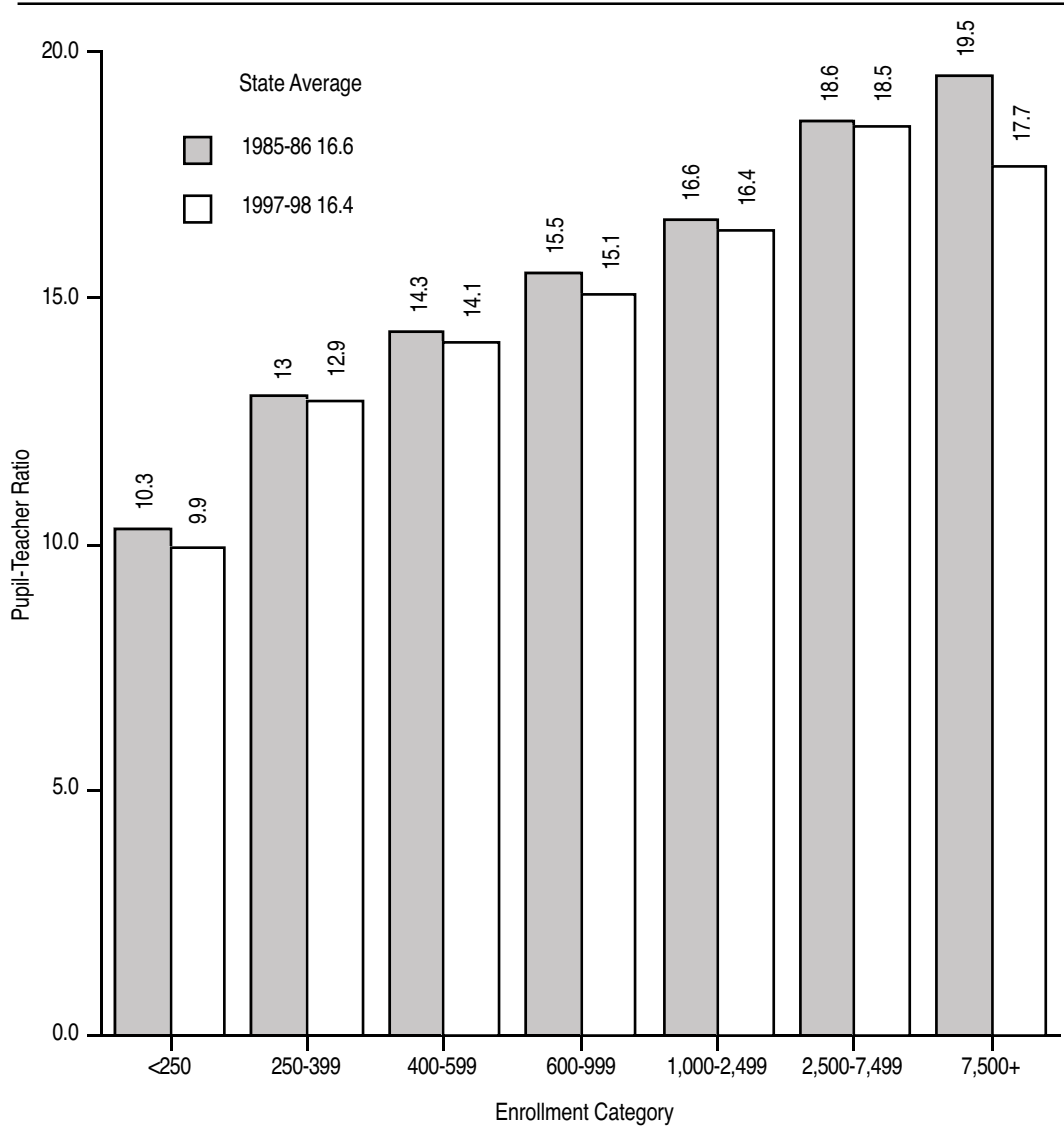
SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POLICIES AND PROCEDURES FILES.

# Pupil-Teacher Ratio

Figure 5 displays pupil-teacher ratios by enrollment category for Iowa public school districts for 1985-86, and for 1997-98. Pupil-teacher ratio was derived by dividing the sum of K-12 enrollments, exclusive of ungraded special education students, by the sum of full-time equivalent regular program teachers in grades K-12. The pupil-teacher ratio in 1997-98 was 16.4 to one, compared to 16.6 to one in 1985-86. Generally, pupil-teacher ratios reflected increases corresponding to increases in enrollment categories. With the exception of the largest enrollment category, pupil-teacher ratios in 1997-98 had decreased only slightly compared to pupil-teacher ratios in 1985-86.

**Figure 5**

## K-12 PUPIL-TEACHER RATIOS FOR IOWA PUBLIC SCHOOLS 1985-86 AND 1997-98



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILES.  
 NOTE: PUPIL-TEACHER RATIOS DO NOT INCLUDE SPECIAL EDUCATION TEACHERS OR UNGRADED SPECIAL EDUCATION STUDENTS.

Table 31 compares pupil-teacher ratios for Iowa, the nation, and for other Midwest states. Two sets of ratios are presented. One set is based upon average daily membership (ADM) and one is based upon average daily attendance (ADA). Iowa ranked 29th and 31st in the nation, comparing pupil-teacher ratios based on ADM and ADA respectively, according to figures from *Rankings of the States*, a publication of the National Education Association.

**Table 31**

**PUPIL-TEACHER RATIOS FOR IOWA AND  
MIDWEST STATES — (1996-97)\***

State	Pupil Teacher Ratio in Average Daily Membership (ADM)	Pupil Teacher Ratio in Average Daily Attendance (ADA)
Illinois	16.1	15.0
Iowa	15.2	14.5
Iowa's Rank in Nation	29	31
Kansas	14.3	13.6
Minnesota	17.2	16.1
Missouri	NA	13.9**
Nebraska	14.3**	13.6**
North Dakota	15.1	14.5
South Dakota	13.9	13.2
Wisconsin	16.0	15.0
Nation	NA	15.8

SOURCE: NATIONAL EDUCATION ASSOCIATION, RANKINGS OF THE STATES 1997.

NOTE: \*INCLUDES PUBLIC ELEMENTARY AND SECONDARY SCHOOLS ONLY.

\*\*COMPUTED FROM NEA RESEARCH ESTIMATES DATABANK.

# Program

Included in the program section of the *Condition of Education Report* is information on course offerings in six accreditation areas. The average units offered and taught are presented for multiple years and are also reported by enrollment category. In addition, the number and estimated percentage of students enrolled in higher level mathematics and science, and in foreign language courses is included. A technology section is also provided with information on computer hardware and software expenditures as well as a profile on the status of technology in Iowa schools with respect to computer availability, Internet access, and electronic data interchange.

## Curriculum Unit Offerings

Displayed in Table 32 is the average number of units offered and taught in Iowa public schools for the years 1985-86 and 1995-96 through 1997-98, for each of six accreditation areas. In 1997-98, for each of the six subject areas reported, an increase in units offered and taught was noted over the previous school year.

**Table 32**

### AVERAGE UNITS OFFERED AND TAUGHT IN IOWA PUBLIC SCHOOL DISTRICTS

Subject Area	Revised Minimum Unit Standards		Average Number Units Taught		
	1989-90	1985-86	1995-96	1996-97	1997-98
English/Language Arts	6	6.9	9.0	8.9	9.8
Mathematics	6	7.2	9.0	9.0	9.9
Science	5	5.6	7.0	7.0	8.0
Social Studies	5	4.9	6.4	6.4	7.6
Foreign Language	4	3.6	6.4	6.2	6.8
Health/P.Ed.	2	1.3	2.4	2.4	3.1

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.  
NOTE: WAIVER PROVISIONS ARE AVAILABLE UNDER SPECIAL CIRCUMSTANCES.

Tables 33 and 34 reflect that average units offered and taught generally increased with each successively larger enrollment category for both 1985-86, and for the 1997-98 school year. Over the period from 1985-86 to 1997-98, the largest increases, in terms of percentage point gains, occurred for foreign language in the largest enrollment category, an increase of 6.6 percentage points. Districts in the largest enrollment category also realized percentage point increases of 5.0 and 4.6 for social studies and science respectively. The largest percentage point increases in mathematics, 4.9, occurred for districts with enrollments of 2,500-7,499.

**Table 33**

**AVERAGE CURRICULUM UNITS OFFERED AND TAUGHT IN  
IOWA PUBLIC SCHOOL DISTRICTS — 1985-86**

Subject Area	Enrollment Category						
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
English/Language Arts	5.0	5.6	6.3	6.6	8.2	11.4	17.7
Mathematics	6.4	6.4	6.8	7.0	8.0	9.8	12.7
Science	4.6	4.8	5.2	5.7	6.2	8.1	9.6
Social Studies	4.2	4.4	4.7	4.8	5.6	6.5	8.8
Foreign Language	2.1	2.3	2.5	3.2	4.9	9.8	14.9

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILE.  
NOTE: WAIVER PROVISIONS ARE AVAILABLE UNDER SPECIAL CIRCUMSTANCES.

**Table 34**

**AVERAGE CURRICULUM UNITS OFFERED AND TAUGHT IN  
IOWA PUBLIC SCHOOL DISTRICTS — 1997-98**

Subject Area	Enrollment Category						
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
English/Language Arts	7.8	6.9	7.1	7.6	10.3	15.3	20.9
Mathematics	7.3	7.7	7.6	8.2	9.8	14.7	16.0
Science	5.3	6.3	5.9	6.7	7.8	12.4	14.2
Social Studies	5.5	6.0	5.8	6.1	7.2	10.8	13.8
Foreign Language	3.7	4.0	4.2	4.5	7.1	12.3	21.5

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILE.  
NOTE: WAIVER PROVISIONS ARE AVAILABLE UNDER SPECIAL CIRCUMSTANCES.

## Foreign Language Enrollments

A comparison of foreign language enrollments, on the basis of estimated percentages of students enrolled, is presented in Table 35 for the three most current school years for which data are available and for the base year 1985-86. In 1997-98, more than 81,000 students statewide were enrolled in foreign language courses compared to 46,791 enrolled in 1985-86. The estimated percentage of public school students in grades 9-12, enrolled in foreign language courses, increased from 30.8 percent in 1985-86 to 52.2 percent in 1997-98. Substantial increases in the estimated percentage of Iowa public school students taking foreign language courses occurred across all enrollment categories.

**Table 35**

**TOTAL IOWA PUBLIC SCHOOL ENROLLMENT IN ALL FOREIGN  
LANGUAGE COURSES BY ENROLLMENT CATEGORY — GRADES 9-12**

Enrollment Category	1985-86		1995-96		1996-97		1997-98	
	Number of Students	Estimated Percent Enrolled	Number of Students	Estimated Percent Enrolled	Number of Students	Estimated Percent Enrolled	Number of Students	Estimated Percent Enrolled
<250	658	20.4%	268	38.2%	263	37.0%	272	39.7%
250-399	1,667	18.2	2,093	43.0	2,031	41.7	2,016	39.6
400-599	2,769	18.9	5,947	40.9	5,792	41.0	5,820	43.3
600-999	5,079	21.8	11,641	45.6	12,512	47.1	12,289	46.8
1,000-2,499	10,536	30.2	20,378	50.8	21,733	53.2	22,330	52.5
2,500-7,499	13,018	42.7	16,845	57.6	16,751	56.0	16,571	55.3
7,500+	13,064	35.9	19,049	50.8	19,923	52.6	21,890	58.3
State	46,791	30.8	76,221	50.0	79,005	51.0	81,188	52.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM AND ENROLLMENT FILES.  
NOTE: PERCENTS ARE ESTIMATED WITH AN ASSUMPTION THAT FOREIGN LANGUAGE COURSES ARE NORMALLY TAKEN IN GRADES 9-12.

Table 36 reports foreign language enrollments by specific languages for the 1997-98 school year. As in previous years, the vast majority of students taking foreign language were enrolled in Spanish. Just under 15 percent of Iowa public school students were enrolled in French, and just over eight percent were enrolled German. Enrollments in all other foreign languages represented less than three percent of the total number of students enrolled in foreign languages.

**Table 36**

**1997-98 FOREIGN LANGUAGE ENROLLMENT FOR IOWA PUBLIC  
SCHOOLS BY LANGUAGE — GRADES 9-12**

Language	Number of Districts	Number of Pupils Enrolled	Estimated Percent of Students Enrolled
Spanish	333	60,610	74.7%
French	100	11,938	14.7
German	75	6,743	8.3
Japanese	9	551	0.7
Russian	12	357	0.4
Latin	5	285	0.4
Chinese	3	13	<0.1
Italian	2	65	<0.1
All Others	-	626	-

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILE.



# Higher Level Mathematics Enrollments

## Calculus

Data in Table 37 and Figure 6 indicate that the estimated percentage of public school twelfth graders, enrolled in calculus, has increased steadily from 5.6 percent in 1985-86, to over 16 percent in 1997-98. The estimated percentage of students enrolled in calculus varied across enrollment categories from 10.5 percent in the less than 250 enrollment category to 20.3 percent in the enrollment category of 7,500 and above (Table 38). There were 5,980 public school students enrolled in calculus in 1997-98; of these, 51.9 percent were males and 48.1 percent were females. About 74 percent of the state's 377 school districts reported students enrolled in calculus.

**Table 37**

---

### IOWA PUBLIC SCHOOL ENROLLMENT IN CALCULUS

---

Year	Number of Students Enrolled	Estimated Percent of Students Enrolled
1985-86	2,004	5.6%
1991-92	2,471	7.8
1992-93	3,528	10.7
1993-94	3,864	11.9
1994-95	4,094	12.0
1995-96	4,183	12.1
1996-97	5,050	14.2
1997-98	5,980	16.2

---

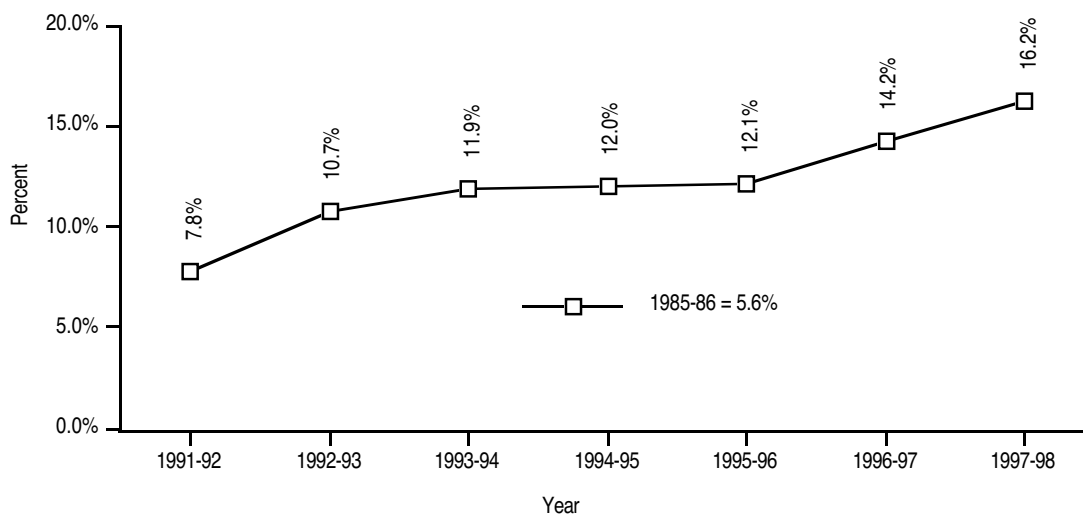
SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT CALCULUS IS NORMALLY TAKEN IN GRADE 12.

---

**Figure 6**

**ESTIMATED PERCENT OF IOWA PUBLIC SCHOOL  
TWELFTH GRADERS ENROLLED IN CALCULUS**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM AND ENROLLMENT FILES.  
NOTE: ESTIMATED PERCENTS ARE BASED THE ON ASSUMPTION THAT CALCULUS IS NORMALLY TAKEN IN GRADE 12.

**Table 38**

**1997-98 IOWA PUBLIC SCHOOL ENROLLMENT IN CALCULUS  
BY ENROLLMENT CATEGORY**

	State	Enrollment Category						
		<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Number of Districts	278	5	25	60	81	75	23	9
Pupils Enrolled	5,980	18	142	513	814	1,692	1,062	1,739
Estimated Percent	16.2	10.5	11.0	15.8	12.7	16.5	15.5	20.3
Males	3,104	13	69	269	405	857	587	904
Females	2,876	5	73	244	409	835	475	835

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM AND ENROLLMENT FILES.  
NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT CALCULUS IS NORMALLY TAKEN IN GRADE 12.

## Trigonometry

In 1985-86, an estimated 9.2 percent of public school eleventh graders were enrolled in trigonometry (Table 39). Enrollment in trigonometry in 1991-92, was an estimated 15 percent. The estimated percentage of students enrolled over the next four years generally declined. Over the last two school years enrollment in trigonometry showed an increase, rising to 15.2 percent in 1997-98 (Figure 7).

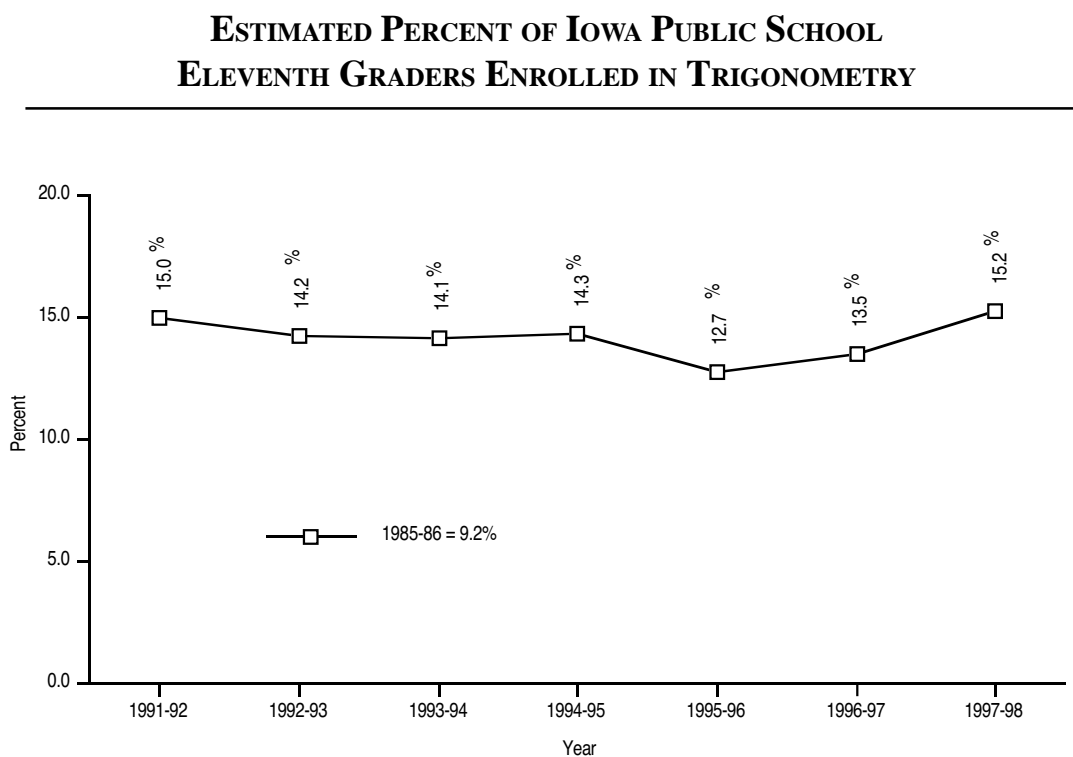
**Table 39**

IOWA PUBLIC SCHOOL ENROLLMENT IN TRIGONOMETRY		
Year	Number of Students	Estimated Percent of Students
1985-86	5,107	9.2%
1991-92	4,984	15.0
1992-93	4,663	14.2
1993-94	4,915	14.1
1994-95	5,046	14.3
1995-96	4,677	12.7
1996-97	5,161	13.5
1997-98	5,819	15.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT TRIGONOMETRY IS NORMALLY TAKEN IN GRADE 11.

**Figure 7**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT TRIGONOMETRY IS NORMALLY TAKEN IN GRADE 11.

Statewide, more than 5,800 public school students were enrolled in trigonometry. Gender representation in trigonometry was about equal (Table 40). The range in the estimated percentage of students enrolled in trigonometry, across enrollment categories, was from 5.2 percent in districts under 250 enrollment, to 16.2 percent in districts with enrollments of 1,000-2,499.

**Table 40**

<b>1997-98 IOWA PUBLIC SCHOOL ENROLLMENT IN TRIGONOMETRY BY ENROLLMENT CATEGORY</b>								
	State	Enrollment Category						
		<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Pupils Enrolled	5,819	8	183	499	1,011	1,701	992	1,425
Estimated Percent	15.2	5.2	14.7	15.1	15.5	16.2	13.4	15.7
Males	2,898	5	87	244	495	838	516	713
Females	2,921	3	96	255	516	863	476	712

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM AND ENROLLMENT FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT TRIGONOMETRY IS NORMALLY TAKEN IN GRADE 11.

## Higher Level Science Enrollments Chemistry

The percentage of students enrolled in chemistry is estimated, based on the assumption that chemistry is generally taken by students in the eleventh grade. In 1985-86, nearly 18,000 Iowa public school students were enrolled in chemistry (Table 41). This represented an estimated 48.2 percent. By 1991-92, substantial increases in chemistry enrollment and the estimated percentage of students enrolled were reported. In 1997-98, more than 25,500 students were reported to be enrolled in chemistry, representing an estimated 66.8 percent. Over the period from 1991-92 through 1997-98, the estimated percentage of students enrolled in chemistry has seen fluctuations of about one to five percentage points from one year to the next (Figure 8).

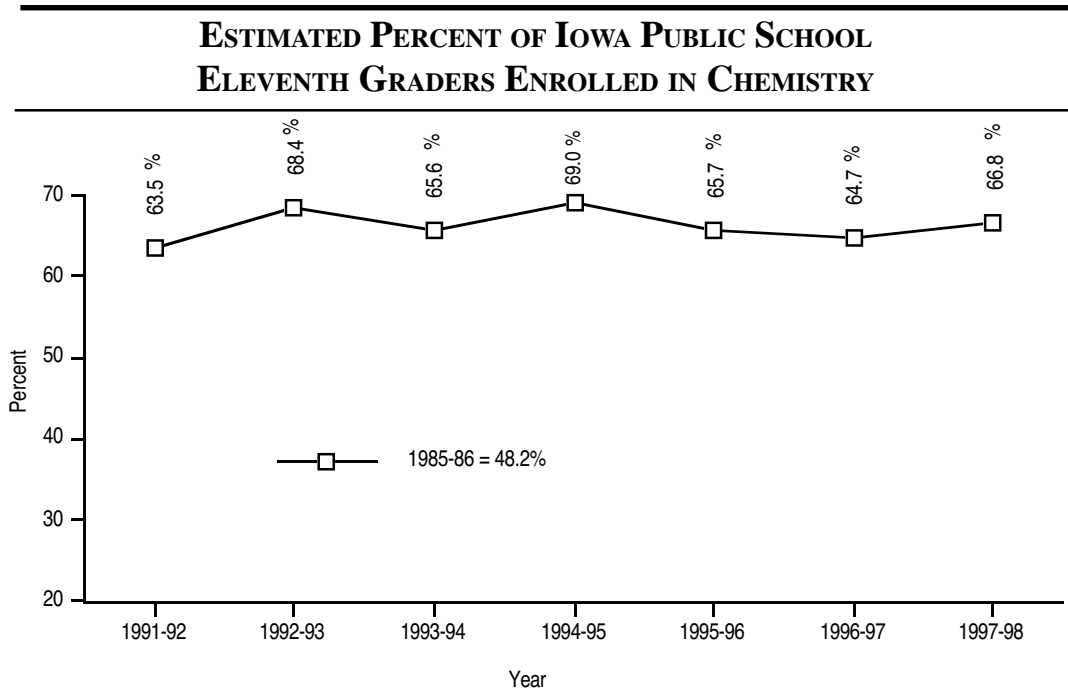
**Table 41**

<b>IOWA PUBLIC SCHOOL ENROLLMENT IN CHEMISTRY</b>		
Year	Number of Students	Estimated Percent of Students
1985-86	17,945	48.2%
1991-92	21,180	63.5
1992-93	22,521	68.4
1993-94	22,860	65.6
1994-95	24,432	69.0
1995-96	24,234	65.7
1996-97	24,641	64.7
1997-98	25,536	66.8

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT CHEMISTRY IS NORMALLY TAKEN IN GRADE 11.

**Figure 8**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT CHEMISTRY IS NORMALLY TAKEN IN GRADE 11.

The variability in the estimated percentage of students enrolled in chemistry, across enrollment categories, is reflected in Table 42. The estimated percentage of public school students enrolled in chemistry ranged from 52.9 percent in the smallest enrollment category to nearly 80 percent in districts with enrollments of 2,500-7,499. The estimated percentage of students enrolled in chemistry for districts with enrollments under 600 all fell below the percentage for the state as a whole, as did the percentage for the enrollment category 1,000-2,499. In terms of gender enrollment in chemistry, more females than males were enrolled. In 1997-98, just over 53 percent of students enrolled in chemistry were females, compared to 49.5 percent in 1985-86.

**Table 42**

**1997-98 IOWA PUBLIC SCHOOL ENROLLMENT IN CHEMISTRY  
BY ENROLLMENT CATEGORY**

	State	Enrollment Category						
		<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Number of Districts	342	7	40	73	104	85	24	9
Pupils Enrolled	25,536	82	712	1,933	4,360	6,416	5,902	6,131
Estimated Percent	66.8	52.9	57.1	58.5	66.9	61.0	79.9	67.4
Males	11,904	38	324	888	1,986	3,008	2,809	2,851
Females	13,632	44	388	1,045	2,374	3,408	3,093	3,280

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM AND ENROLLMENT FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT CHEMISTRY IS NORMALLY TAKEN IN GRADE 11.

## Physics

Physics enrollment in Iowa public schools totaled 11,695 students (Table 43). The estimated percentage of students enrolled in physics during the 1997-98 school year was 31.8 percent, down slightly from the previous year, and down 2.2 percentage points from the high in 1993-94 of 34 percent. Compared to the 1985-86 school year, the estimated percentage of students enrolled in physics increased 7.5 percentage points (Table 43 and Figure 9).

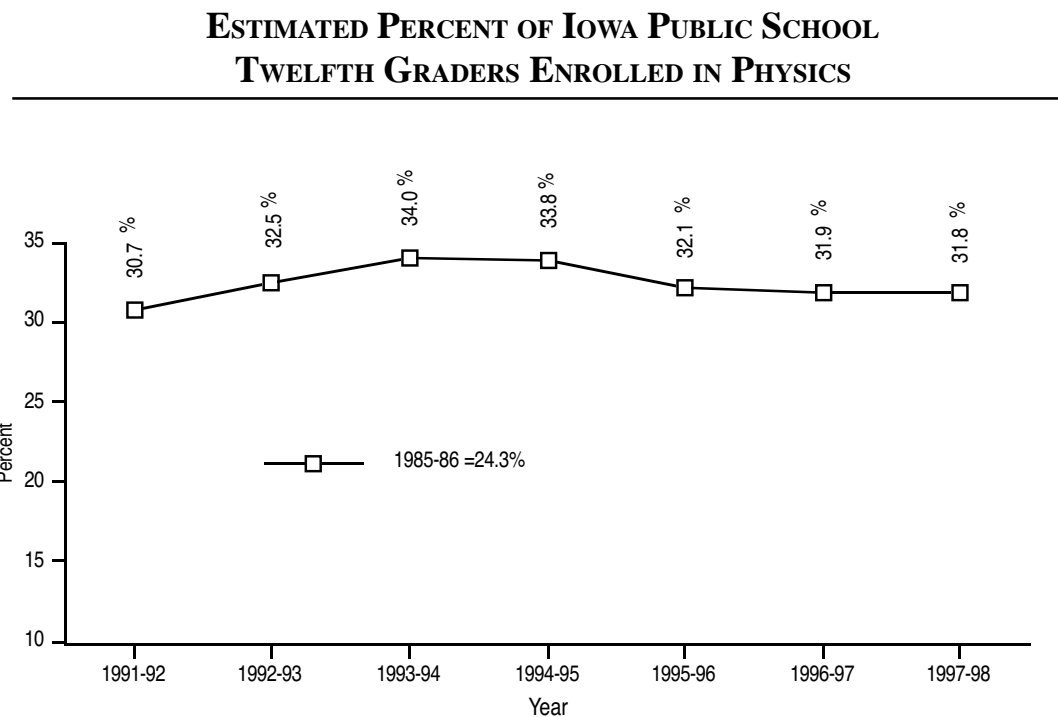
**Table 43**

IOWA PUBLIC SCHOOL ENROLLMENT IN PHYSICS		
Year	Number of Students	Estimated Percent of Students
1985-86	9,051	24.3%
1991-92	9,723	30.7
1992-93	10,714	32.5
1993-94	11,062	34.0
1994-95	11,505	33.8
1995-96	11,107	32.1
1996-97	11,363	31.9
1997-98	11,695	31.8

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT PHYSICS IS NORMALLY TAKEN IN GRADE 12.

**Figure 9**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM FILES.

NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT PHYSICS IS NORMALLY TAKEN IN GRADE 12.

Table 44 presents the number and estimated percentage of Iowa students enrolled in physics by enrollment category. The highest percentage of students enrolled in physics attended districts with enrollments of 2,500 and above. In 1997-98, 54 percent of students taking physics were males, compared to 60.8 percent in 1985-86. The lowest estimated percentage of twelfth graders enrolled in physics were from districts with less than 250 enrollment and the highest from districts with enrollments of 2,500-7,499.

**Table 44**

**1997-98 IOWA PUBLIC SCHOOL ENROLLMENT IN PHYSICS  
BY ENROLLMENT CATEGORY**

	State	Enrollment Category						
		<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Number of Districts	335	5	38	71	102	86	24	9
Pupils Enrolled	11,695	23	285	938	1,788	2,664	2,833	3,164
Estimated Percent	31.8	13.4	22.1	28.8	27.9	25.9	41.4	37.0
Males	6,326	15	150	519	979	1,481	1,533	1,649
Females	5,369	8	135	419	809	1,183	1,300	1,515

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, CURRICULUM AND ENROLLMENT FILES.  
NOTE: ESTIMATED PERCENTS ARE BASED ON THE ASSUMPTION THAT PHYSICS IS NORMALLY TAKEN IN GRADE 12.

## Technology

Information presented in the technology section is based on data received from Iowa public school districts through the annual Basic Educational Data Survey (BEDS). Components reported in the technology section include expenditures for computer hardware and software, the number of computers available for student use, the student-to-computer ratio, and a comparison of school Internet access.

### Expenditures for Computer Hardware and Software

Expenditures for computer hardware and software for the five-year period from 1992-93 through 1996-97, are presented in Table 45 and Figure 10. On a total expenditure basis, expenditures for software and hardware combined in 1996-97 were up more than 135 percent compared to 1992-93, and up nearly 54 percent over the previous year. On a per pupil basis, expenditures increased from \$40.67 in 1992-93, to nearly \$94.00 in 1996-97, an increase of 130 percent. Per pupil expenditures for combined hardware and software in 1996-97 were also up over 53 percent from 1995-96 figures. Computer software expenditures have increased 28.7 percent since 1992-93, while computer hardware expenditures increased about 176 percent over the same period.

**Table 45**

**TOTAL EXPENDITURES AND PER PUPIL EXPENDITURES FOR COMPUTER SOFTWARE AND HARDWARE\* IN IOWA PUBLIC SCHOOLS  
FOUR-YEAR COMPARISON**

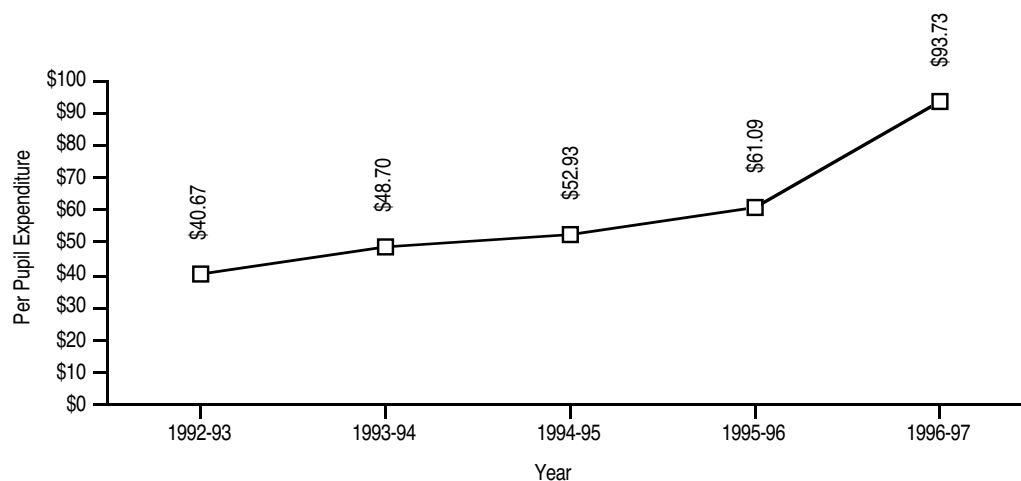
Year	No. of Districts	Total Enrollment	Software		Hardware		Software & Hardware	
			Total Spent	Per Pupil Spent	Total Spent	Per Pupil Spent	Total Spent	Per Pupil Spent
1992-93	418	495,342	\$5,581,237	\$11.27	\$14,562,080	\$29.40	\$20,143,317	\$40.67
1993-94	397	497,009	\$3,957,878	\$7.96	\$20,244,041	\$40.73	\$24,201,919	\$48.70
1994-95	390	500,592	\$5,448,978	\$10.88	\$21,049,364	\$42.05	\$26,498,342	\$52.93
1995-96	384	504,505	\$5,303,893	\$10.51	\$25,513,948	\$50.57	\$30,817,841	\$61.09
1996-97	379	505,531	\$7,182,899	\$14.21	\$40,201,374	\$79.52	\$47,384,273	\$93.73

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORTS. (PER PUPIL EXPENDITURES BASED ON CERTIFIED ENROLLMENT).

NOTE: \*INCLUDES ADMINISTRATIVE, INSTRUCTIONAL, AND ALL OTHER SOFTWARE AND HARDWARE PURCHASED.

**Figure 10**

**PER PUPIL EXPENDITURES FOR COMPUTER SOFTWARE AND HARDWARE  
IN IOWA PUBLIC SCHOOLS**



SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORT AND CERTIFIED ENROLLMENT FILES.

Expenditures in 1996-97, for computer hardware and software, are compared by enrollment category in Table 46. Per pupil expenditures for computer software varied from an average of \$12 per pupil in districts with enrollments of 600-2,499 to \$22 per pupil in districts with enrollments of 250-399. Average hardware expenditures ranged from \$59 per pupil in districts with enrollments of 7,500 and above, to \$93 per pupil in districts with enrollments of 400-599. In five enrollment categories, at least one district in each category reported no expenditures for computer software, and in all but the largest enrolment category at least one district within each enrollment category reported no expenditures for computer hardware.



Table 46

**IOWA PUBLIC SCHOOL TOTAL AND AVERAGE EXPENDITURES  
FOR COMPUTER SOFTWARE AND HARDWARE 1996-97\***

Enrollment Category	Number of Districts	Total Enrollment	Software				Hardware			
			Total Spent	Minimum	Maximum	Per Pupil Average	Total Spent	Minimum	Maximum	Per Pupil Average
<250	24	4,819	\$68,918	\$0	\$25,915	\$14	\$332,327	\$0	\$38,092	\$69
250-399	46	15,324	\$340,815	\$0	\$76,314	\$22	\$1,261,366	\$0	\$120,952	\$82
400-599	76	37,714	\$674,950	\$0	\$90,149	\$18	\$3,505,210	\$0	\$141,535	\$93
600-999	116	88,578	\$1,104,501	\$0	\$65,139	\$12	\$7,898,397	\$0	\$336,896	\$89
1,000-2,499	83	126,744	\$1,540,396	\$0	\$75,680	\$12	\$11,604,063	\$0	\$449,429	\$92
2,500-7,499	25	99,347	\$1,345,579	\$11,121	\$122,640	\$14	\$7,753,105	\$0	\$1,040,646	\$78
7,500+	9	133,005	\$2,107,740	\$66,033	\$900,152	\$16	\$7,846,906	\$2,522	\$2,480,350	\$59
State	379	505,531	\$7,182,899	\$0	\$900,152	\$14	\$40,201,374	\$0	\$2,480,350	\$80

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORT, 1995-96. (PER PUPIL EXPENDITURES BASED ON CERTIFIED ENROLLMENT).

NOTE: \*INCLUDES ADMINISTRATIVE, INSTRUCTIONAL, AND ALL OTHER SOFTWARE AND HARDWARE PURCHASED.

### Availability of Computers

A comparison of the availability of computers for student use is presented for the years 1995-96, 1996-97, and 1997-98, in Table 47. The total number of computers for student use in Iowa public schools has increased by more than 80 percent in the period from 1995-96 to 1997-98. The number of computer in 1997-98, increased by 13.7 percent over the previous year. On a statewide basis, the ratio of students to computers has decreased from 7.2 in 1995-96, to 5.2 in 1997-98. From 1995-96 to 1997-98, improvements in the ratio of students to computers occurred for all enrollment categories.

Table 47

**NUMBER OF COMPUTERS BY ENROLLMENT CATEGORY  
1995-96, 1996-97, AND 1997-98**

	Enrollment Category							
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	State
<b>1995-96</b>								
Number of Districts Reporting	22	43	74	91	72	22	7	331
Number of Computers	829	2,778	6,043	11,258	13,989	10,010	9,371	54,278
Certified Enrollment	4,509	13,102	36,043	68,185	104,286	82,049	82,983	391,157*
Pupils per Computer	5.4	4.7	6.0	6.1	7.6	8.2	8.9	7.2
<b>1996-97</b>								
Number of Districts Reporting	24	46	76	116	83	25	9	379
Number of Computers	1,155	3,813	7,904	18,206	21,910	16,910	17,054	86,239
Certified Enrollment	4,818	15,324	37,716	88,577	126,738	99,346	133,004	505,523
Pupils per Computer	4.2	4.0	4.8	4.9	5.8	5.9	7.8	5.9
<b>1997-98</b>								
Number of Districts Reporting	23	51	71	112	86	25	9	377
Number of Computers	1,078	4,565	8,809	18,632	25,292	18,783	20,870	98,029
Certified Enrollment	4,521	17,108	35,757	84,801	130,208	99,314	133,421	505,130
Pupils per Computer	4.2	3.7	4.1	4.6	5.1	5.3	6.4	5.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, TECHNOLOGY FILES.

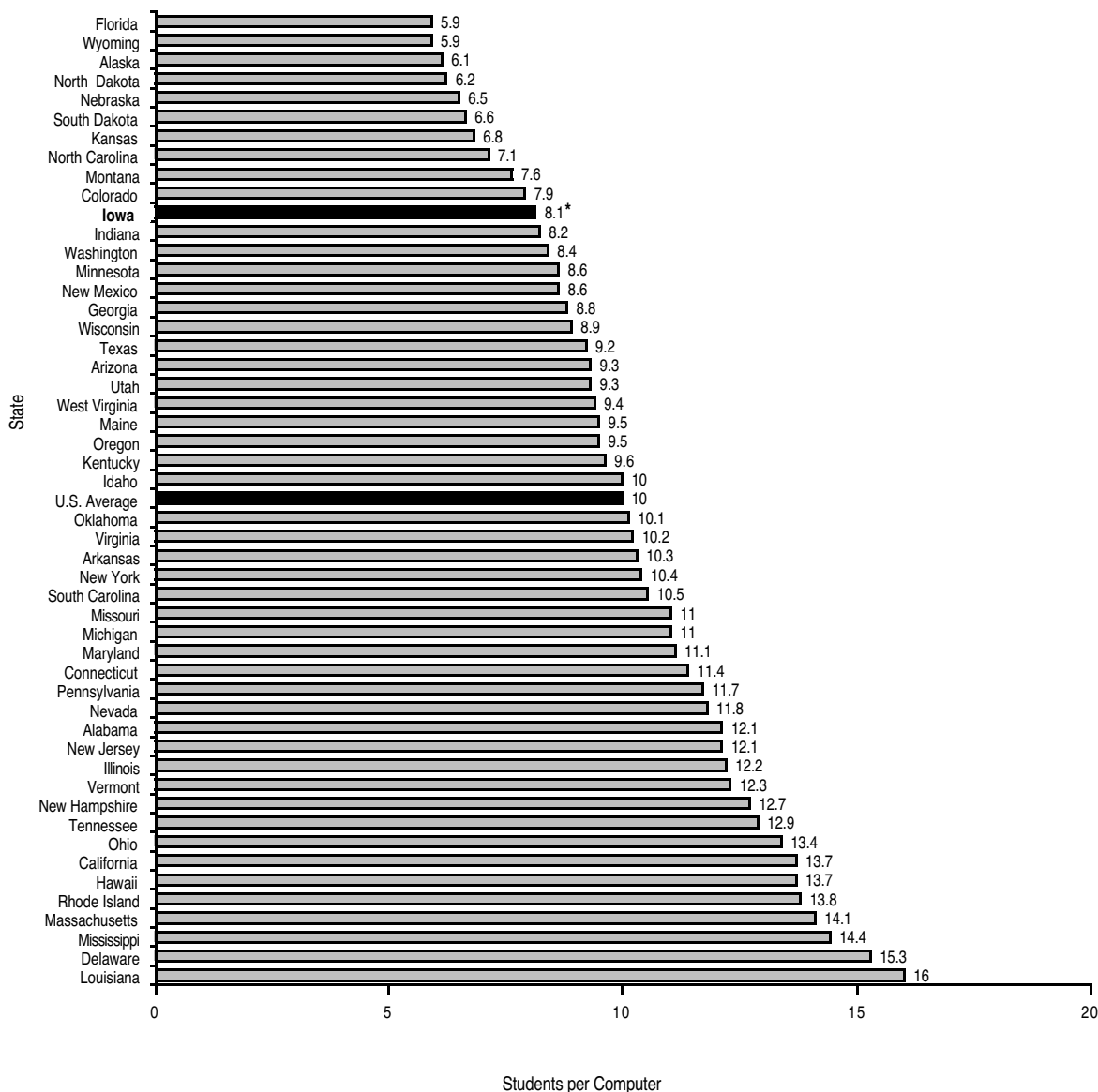
NOTES: THE NUMBER OF COMPUTERS IN 1997-98 WAS ESTIMATED, BASED ON THE PREVIOUS YEAR FOR ONE SCHOOL DISTRICT.

\*SUM OF CERTIFIED ENROLLMENT FOR DISTRICTS REPORTING IN 1995-96.

Figure 11 presents information on the number of students per computer for each state. The information reported in Figure 11 was for the year 1996-97, and was provided by Quality Education Data (QED). Figures reported indicate that the average ratio of students to computers for the nation was ten to one and that the range in ratios was 16 to one in Louisiana, to 5.9 to 1 in Florida and Wyoming. The figure of 8.1 reported for Iowa by QED differs from figures reported directly from all Iowa public school districts to the Iowa Department of Education on the annual Basic Educational Data Survey. Using the Iowa Department of Education figure for 1996-97 of 5.9 students per computer, would rank Iowa in a three-way tie for number one with Florida and Wyoming.

**Figure 11**

**NUMBER OF STUDENTS PER COMPUTER, BY STATE  
1996-97 SCHOOL YEAR**



SOURCE: EDUCATIONAL TESTING SERVICE, POLICY INFORMATION CENTER, MAY, 1997. (CITED FROM QUALITY EDUCATION DATA, 1997), COMPUTERS AND CLASSROOMS: THE STATUS OF TECHNOLOGY IN U.S. SCHOOLS.

NOTE: \*INFORMATION COLLECTED THROUGH THE BASIC EDUCATIONAL DATA SURVEY, REFLECTS A STUDENT PER COMPUTER RATIO FOR IOWA OF 5.9 TO ONE.

Table 48 provides a distribution of computers and enrollment by enrollment category for the years 1995-96 through 1997-98. In 1995-96 through 1997-98, districts with enrollments under 1,000 had a higher percentage of computers, compared to the percentage of students. In 1997-98, nearly two-thirds of all computers in Iowa public schools were in districts with enrollments of 1,000 and above. These schools accounted for about 72 percent of the state's public school enrollment.

**Table 48**

**DISTRIBUTION OF COMPUTERS AND CERTIFIED ENROLLMENTS  
IN IOWA PUBLIC SCHOOL DISTRICTS  
1995-96, 1996-97, AND 1997-98**

	Enrollment Category							State
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	
<b>1995-96</b>								
Number of Districts Reporting	22	43	74	91	72	22	7	331
Percent of Certified Enrollment	1.2	3.3	9.2	17.4	26.7	21.0	21.2	100
Percent of Computers	1.5	5.1	11.1	20.7	25.8	18.5	17.3	100
<b>1996-97</b>								
Number of Districts Reporting	24	46	76	116	83	25	9	379
Percent of Certified Enrollment	1.0	3.0	7.5	17.5	25.1	19.6	26.3	100
Percent of Computers	1.3	4.4	9.2	21.1	25.4	18.8	19.8	100
<b>1997-98</b>								
Number of Districts Reporting	23	51	71	112	86	25	9	377
Percent of Certified Enrollment	0.9	3.4	7.1	16.8	25.8	19.6	26.4	100
Percent of Computers	1.1	4.6	9.0	19.0	25.8	19.2	21.3	100

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, TECHNOLOGY FILES, AND CERTIFIED ENROLLMENT FILES.

NOTE: THE NUMBER OF COMPUTERS IN 1997-98 WAS ESTIMATED BASED ON THE PREVIOUS YEAR FOR ONE SCHOOL DISTRICT.

Table 49 presents information published by Quality Education Data (QED) on Internet usage in public schools. According to QED figures, Iowa ranked eighteenth in the nation in terms of the percent of schools with online Internet access.

QED reported that 80 percent of Iowa public schools had online access in 1997, compared to 64 percent for the nation. Compared to other midwestern states, only Nebraska and Minnesota reported a higher percentage of schools with Internet access.

**Table 49**

**PERCENT OF SCHOOL ONLINE INTERNET ACCESS  
BY STATE, 1997**

State	Percent of Schools
Nation	64%
Iowa	80%
Iowa's Rank in Nation	18
Illinois	13%
Kansas	50%
Minnesota	90%
Missouri	50%
Nebraska	100%
North Dakota	78%
South Dakota	50%
Wisconsin	75%

SOURCE: QUALITY EDUCATION DATA, INTERNET USAGE IN PUBLIC SCHOOLS, 1997, SECOND EDITION.

**Automated Student Information Systems and Electronic Data Interchange**

Electronic data interchange (EDI) is the computer-to-computer transmission of data from one entity to another utilizing standardized formats. EDI brings benefits in terms of cost reduction, time savings, and increased security.

During the 1995-96 school year, the Iowa Department of Education initiated an EDI effort with six pilot school districts and the three state Regents institutions. The EDI endeavor is known as Project EASIER (Electronic Access System for Iowa Educational Records). Project EASIER has as its primary goal, the development and implementation of a system for the collection of essential student information for state and federal reporting requirements, utilizing portions of individual student records obtained directly from school district automated student information systems.

In addition, Project EASIER supports the transfer of student records from one district to another and the transmission of electronic student transcripts from Iowa high schools to postsecondary institutions. To date, Project EASIER involves more than one-hundred Iowa school districts and four participating postsecondary institutions. A prerequisite to participation is the presence of an automated student information system at the local school district level.

Table 50 reflects the number and percent of school districts participating in the EDI effort. The number of districts participating in the electronic transfer of student records using EDI has increased from six districts, or about two percent of Iowa school districts in 1995-96, to 101 districts in 1998-99. This represents nearly 27 percent of Iowa's 375 public school districts.

**Table 50**

---

**PARTICIPATION OF IOWA PUBLIC SCHOOL DISTRICTS IN  
ELECTRONIC DATA INTERCHANGE (EDI)  
1995-96 TO 1998-99**

---

	1995-96	1996-97	1997-98	1998-99
Number of Districts	6	34	42	101*
Percent of Districts	1.6%	9%	11.1%	26.9%

---

SOURCE: IOWA DEPARTMENT OF EDUCATION, BUREAU OF PLANNING RESEARCH AND EVALUATION, 1998 EDI RECORDS.  
NOTE: \*PARTICIPATING IOWA SCHOOL DISTRICTS AS OF SEPTEMBER 1, 1998. PARTICIPATION IN ELECTRONIC DATA INTERCHANGE EFFORTS INVOLVES A NUMBER OF READINESS STAGES AND NOT ALL DISTRICTS HAVE TRANSMITTED STUDENT RECORDS ELECTRONICALLY.

---

# Student Performance

The student performance section of the *Annual Condition of Education Report* presents information on the status of Iowa students with respect to selected performance indicators. Components of the student performance section include: 1) Standardized test data, including Iowa Tests of Basic Skills (ITBS), Iowa Tests of Educational Development (ITED), American College Testing Assessment (ACT), Scholastic Assessment Tests (SAT), National Assessment of Educational Progress (NAEP), and The Third International Mathematics and Science Study (TIMSS); 2) Advanced Placement (AP); 3) Postsecondary Enrollment Options; 4) Pursuit of postsecondary education/training; 5) School dropouts in grades 7-12; and 6) High school completion rates for 18- to 24-year-olds.

## Iowa Testing Programs

Iowa Testing Programs at the University of Iowa offers Iowa schools the opportunity to test student achievement in grades K-12 on a voluntary basis. Iowa Testing Programs offers two test batteries: the Iowa Tests of Basic Skills (ITBS) for students in grades 3-8, and the Iowa Tests of Educational Development (ITED) for students in grades 9-12. The achievement tests provide Iowa educators with information for improvement of instruction and learning. Achievement reports, provided to school districts at a nominal fee, offer information for diagnostic purposes, and also describe levels of student achievement. Information provided to schools by the Iowa Testing Programs also allows schools to track achievement over time for various grade levels and attendance centers as well as at the district level. The ITBS information in this section is provided for students in grades 3-8. Information on the ITED is provided for grades 9-11. In 1997-98, all 377 Iowa public school districts used the ITBS in at least one grade level. In addition, more than 200 Iowa nonpublic schools tested.

In the 1997-98 school year, there were 377 public school districts, with 352 operating high schools. Of these 352 districts, 328 administered the ITED in one or more grades. In addition, 36 nonpublic high schools participated in the ITED Testing Program. The numbers of students who took the ITED in 1997 were as follows: grade nine, 32,887; grade ten, 23,586; grade eleven, 29,609.

### Iowa Tests of Basic Skills (ITBS)

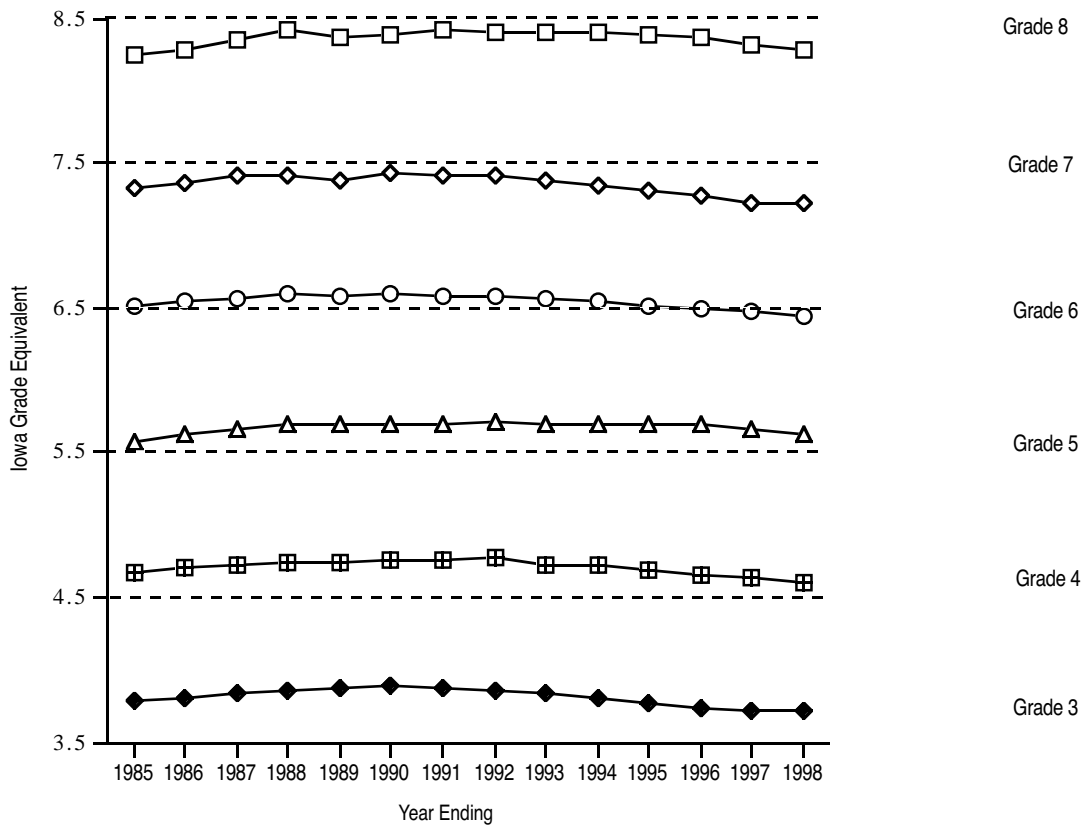
The ITBS is a battery of 13 individual tests. Tests in the battery include vocabulary, reading comprehension, capitalization, punctuation, spelling, language usage and expression, mathematics concepts and estimation, mathematics problem solving and data interpretation, mathematics computation, social studies, science, maps and diagrams, and reference materials. A composite score, which is an average of scores across all of these areas, is also provided.

ITBS scores for grades three through eight are reflected in Figure 12. Composite scores, in terms of grade equivalents, are presented for the years 1985 through 1998. Generally, composite scores for students in grades 3 - 8 began a gradual downward trend about 1990.

Grade equivalent scores used in the ITBS figures indicate how pupils performed based on a school grade and the number of months in that grade. For example, a grade equivalent score of 4.5 indicates how the typical pupil, finishing the fifth month (January) of grade four, would score.

**Figure 12**

**IOWA ITBS COMPOSITE SCORES FOR GRADES 3-8, 1985-1998  
IN TERMS OF 1965 "BASE YEAR" IOWA GRADE EQUIVALENTS**

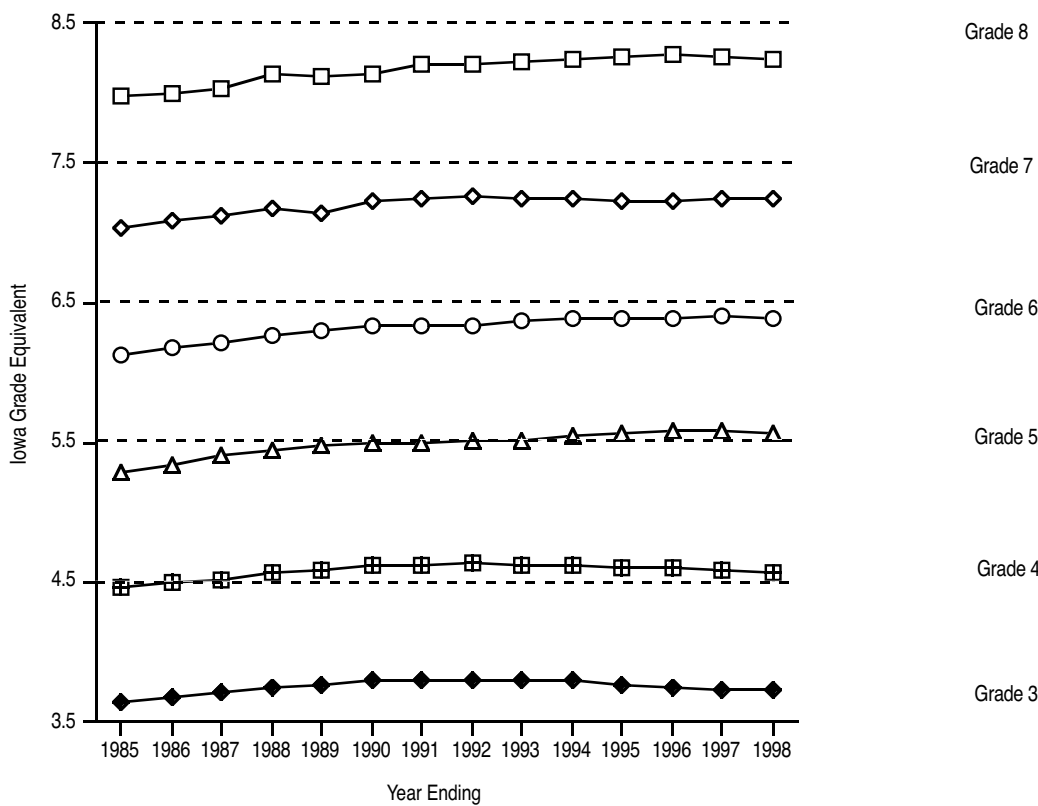


SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.  
NOTE: BASELINE IS MIDYEAR OF 1965.

Figure 13 presents ITBS Iowa grade equivalent for the Mathematics Total score. Data presented reflect that mathematics scores, in general, showed gradual increases through 1992-93 and stability across the period from 1993-1998. This score is an average of scores from the mathematics concepts and estimation, and mathematics problem solving and data interpretation.

**Figure 13**

**IOWA ITBS MATHEMATICS TOTAL SCORES FOR GRADES 3-8, 1985-1998  
IN TERMS OF 1965 "BASE YEAR" IOWA GRADE EQUIVALENTS**



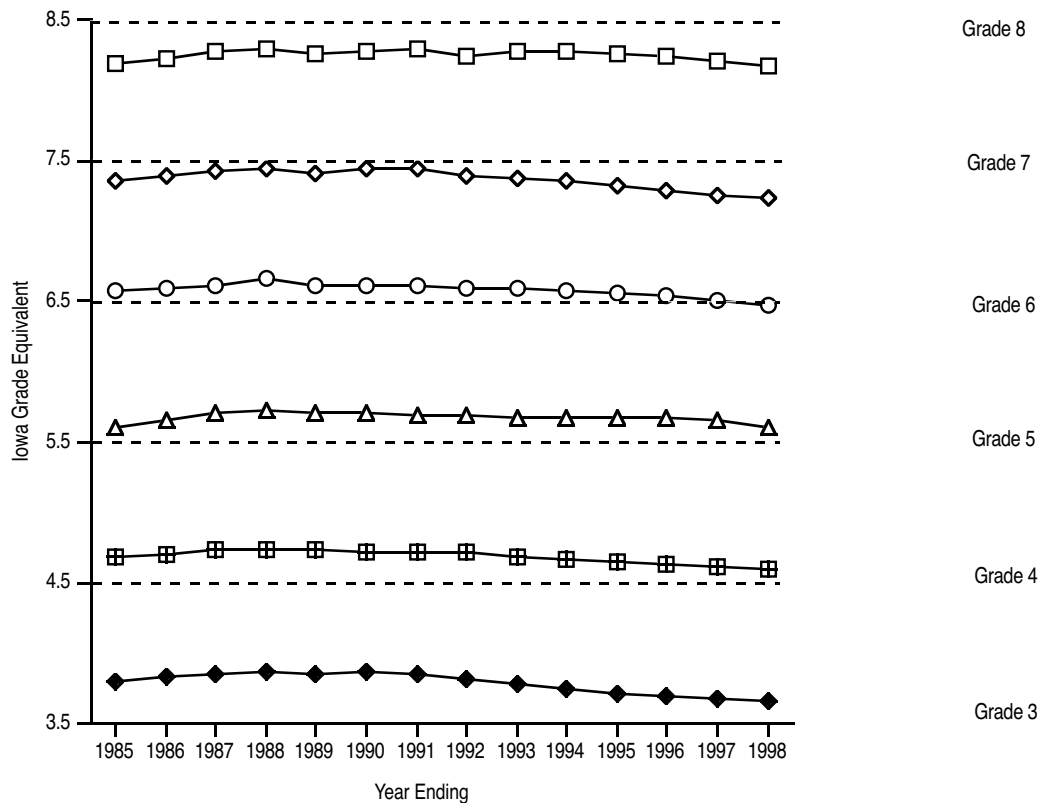
SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.  
NOTE: BASELINE IS MIDYEAR OF 1965.



ITBS reading grade equivalent scores for grades 3 through 8, shown in Figure 14, continued to show a decline in 1998, extending a general decline in reading scores for Iowa students over the past six years.

**Figure 14**

**IOWA ITBS READING SCORES FOR GRADES 3-8, 1985-1998  
IN TERMS OF 1965 "BASE YEAR" IOWA GRADE EQUIVALENTS**



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.  
NOTE: BASELINE IS MIDYEAR OF 1965.

**Iowa Tests of Educational Development (ITED)**

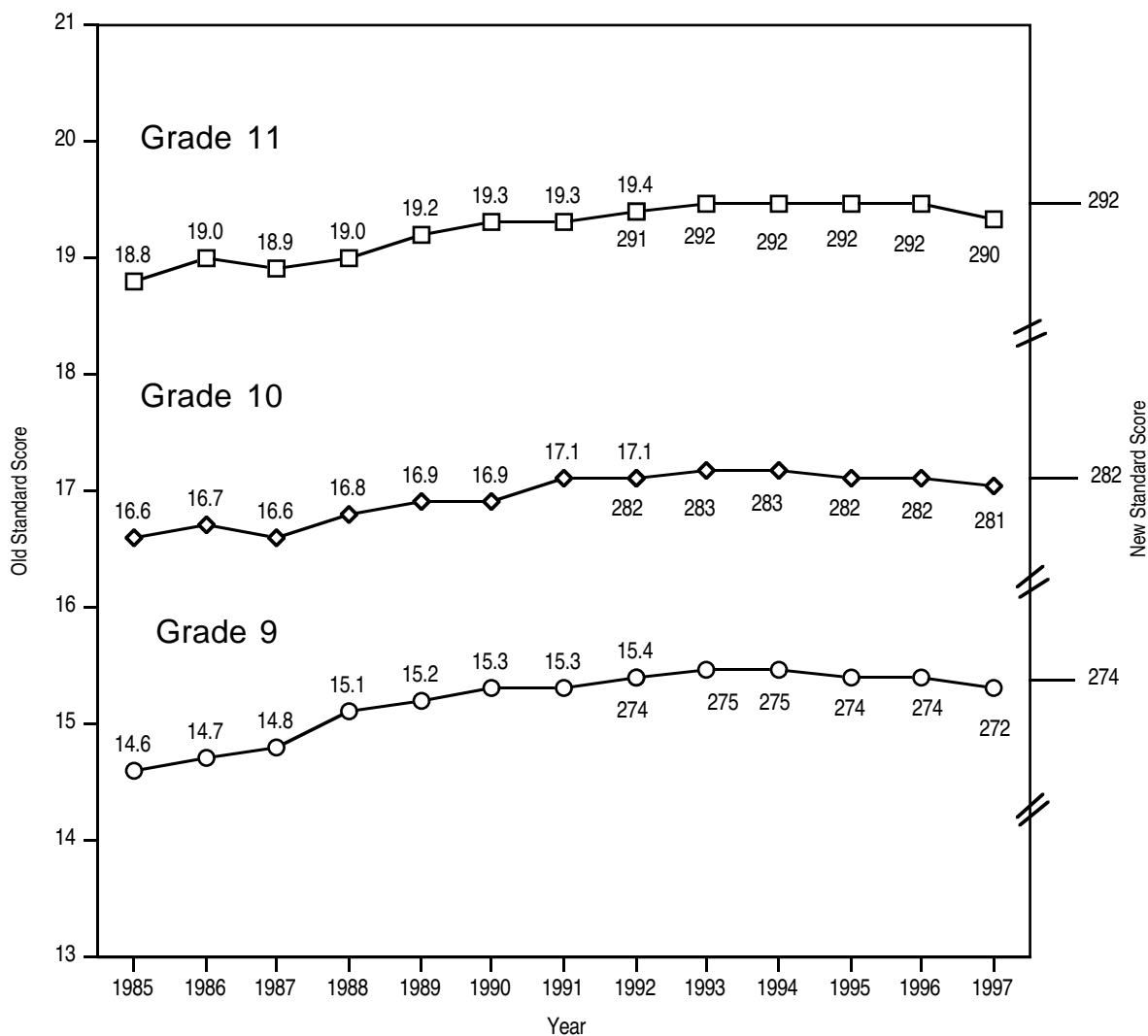
The ITED, like the ITBS, is part of a voluntary achievement testing program offered to Iowa schools by Iowa Testing Programs at the University of Iowa. The ITED is composed of seven individual tests: vocabulary, literary materials, expression, quantitative thinking, social studies, science, and sources of information. A content area reading score, which is based on excerpts from the literary materials, science, and social studies tests, are also provided.

Composite scores for the ITED are composed of an average of scores from vocabulary, expression, quantitative thinking, literary materials, social studies, science, and sources of information.

Trend data for average composite ITED scores for grades 9 through 11 are reported in Figure 15 for the years 1985 through 1997. Composite ITED scores at each of the three grade levels showed a gradual upward trend from 1985 through 1993. Since 1993, composite scores for grades 9, 10, and 11 have decreased slightly.

**Figure 15**

**IOWA ITED COMPOSITE SCORES FOR GRADES 9-11  
1985-1997**

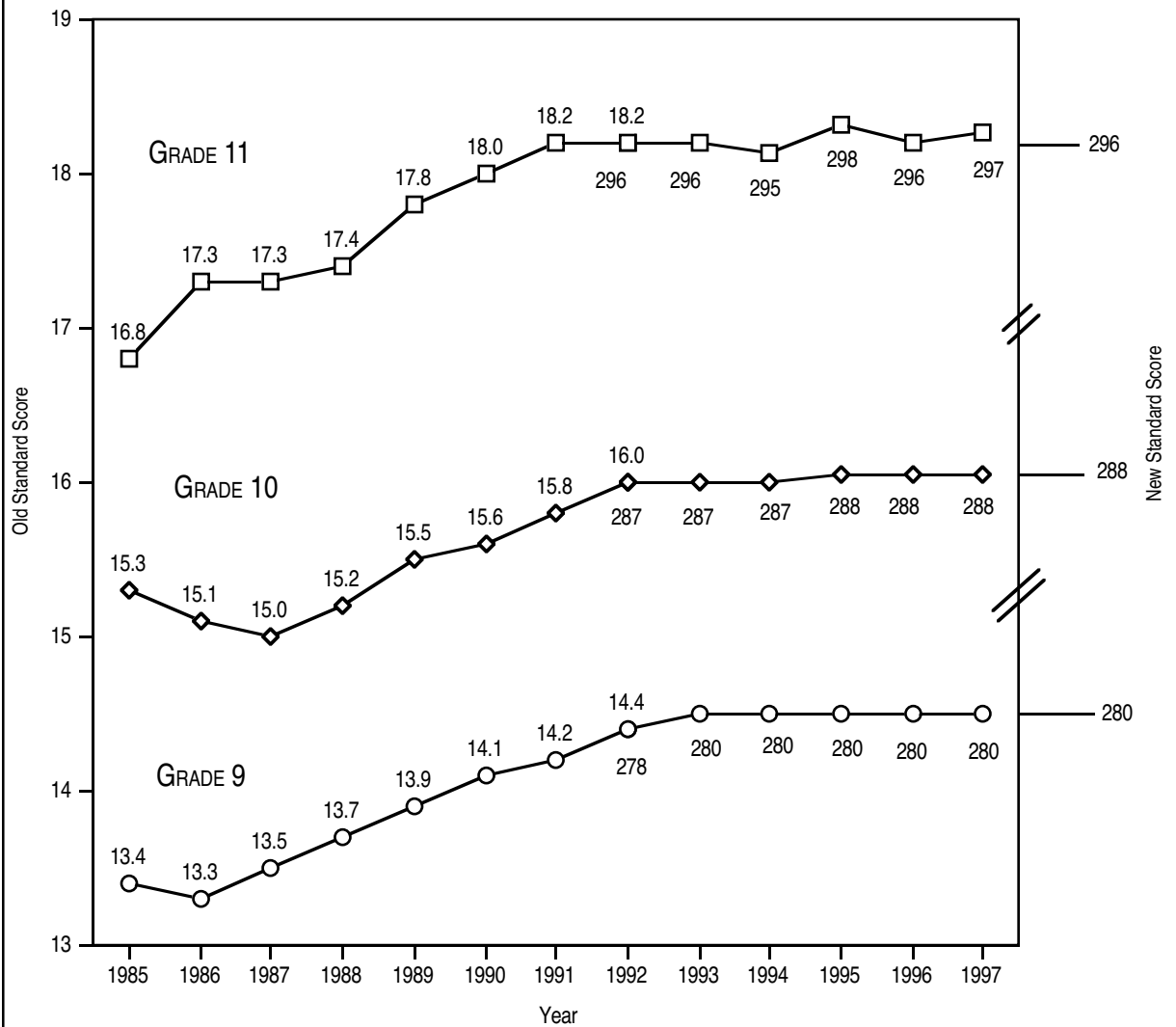


SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.  
 NOTES: IN 1993 NEW SCALE SCORES WERE DEVELOPED FOR ITED, THEREFORE BOTH OLD AND NEW SCALES ARE SHOWN SO THAT A CONSISTENT TREND LINE CAN BE PROVIDED.  
 SCORES PROVIDED ARE BASED ON FALL TESTING.

Average ITED scores for quantitative thinking for grades 9-11 are reported in Figure 16. All three grade levels reflected a general upward trend from 1987 through 1993. Since 1993, average quantitative thinking scores have, in general, been steady.

**Figure 16**

**IOWA ITED QUANTITATIVE THINKING SCORES FOR GRADES 9-11  
1985-1997**



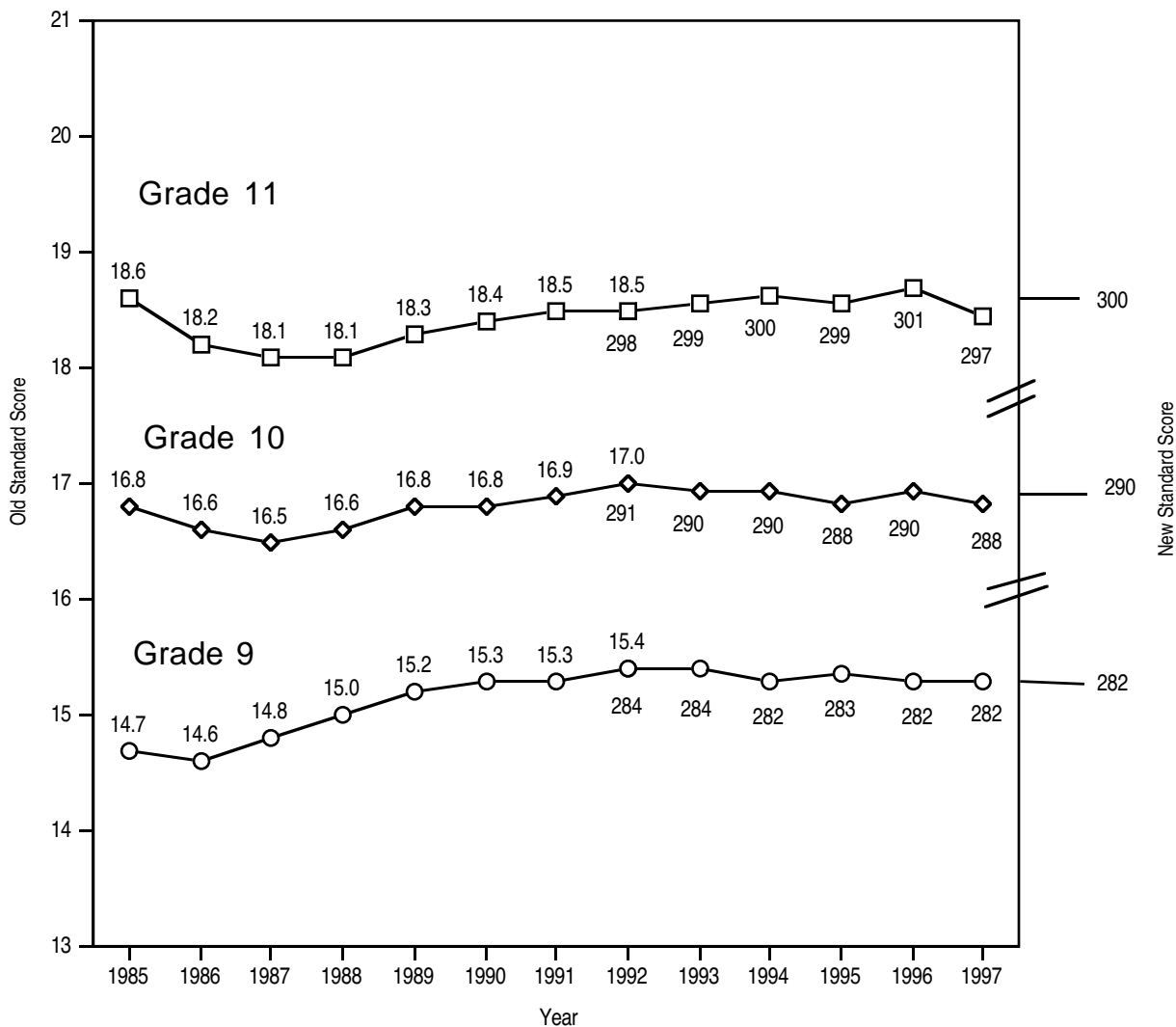
SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: IN 1993 NEW SCALE SCORES WERE DEVELOPED FOR ITED, THEREFORE BOTH OLD AND NEW SCALES ARE SHOWN SO THAT A CONSISTENT TREND LINE CAN BE PROVIDED.  
SCORES PROVIDED ARE BASED ON FALL TESTING.

Average ITED scores for science, reported in Figure 17, in general, showed increases from 1987 through 1992 for grades 9 and 10. Average scores for grade 11 continued to increase from 1987 through 1994. Since 1992, average scores for science have generally decreased slightly in grades 9 and 10.

**Figure 17**

**IOWA ITED SCIENCE SCORES FOR GRADES 9-11  
1985-1997**



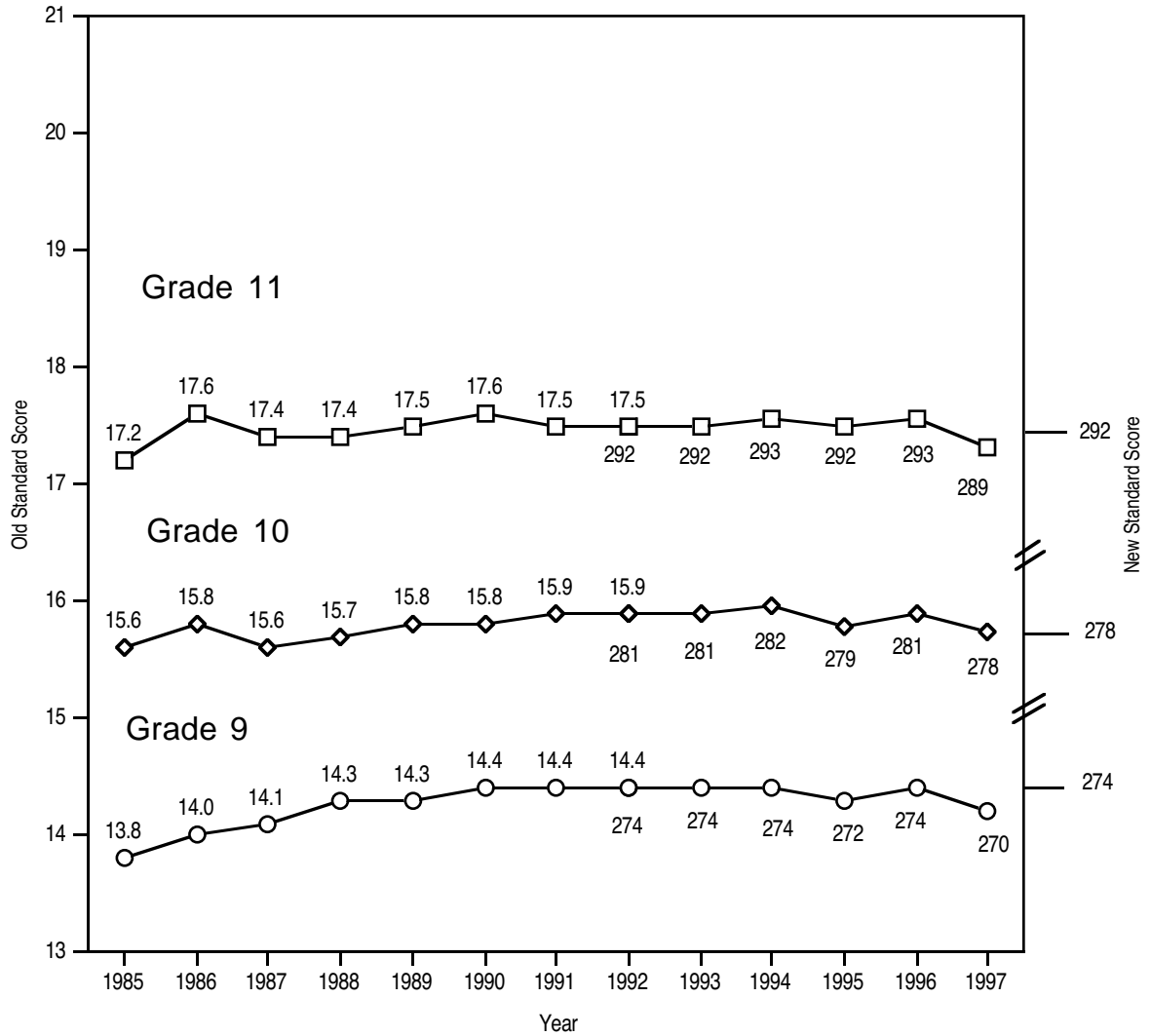
SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: IN 1993 NEW SCALE SCORES WERE DEVELOPED FOR ITED, THEREFORE BOTH OLD AND NEW SCALES ARE SHOWN SO THAT A CONSISTENT TREND LINE CAN BE PROVIDED.  
SCORES PROVIDED ARE BASED ON FALL TESTING.

Average content area reading scores for students in grades 9-11 showed an upward trend through 1994, but have shown no decided trend since 1994 (Figure 18).

**Figure 18**

**IOWA ITED CONTENT AREA READING SCORES FOR GRADES 9-11  
1985-1997**



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.  
 NOTES: IN 1993 NEW SCALE SCORES WERE DEVELOPED FOR ITED, THEREFORE BOTH OLD AND NEW SCALES ARE SHOWN SO THAT A CONSISTENT TREND LINE CAN BE PROVIDED.  
 SCORES PROVIDED ARE BASED ON FALL TESTING.

## ITBS and ITED Performance Level Distributions

The following descriptions were provided by the Iowa Testing Program staff as a guide for the interpretation of information presented in figures 19-24.

*“In this section, additional information about student performance on the ITBS and ITED reading and mathematics tests is presented. This information permits a more comprehensive view of student performance than can be obtained by examining average test scores only.*

*The data reported in the figures in this section are biennium summaries of student achievement. The purpose of these summaries is to use scores from two successive school years to describe achievement changes over time. Scores are combined for pairs of consecutive years for the biennium reporting for several reasons. The merging of test results from two years provides greater stability in the information than would be apparent if results from each single year were used. Because not all schools test every year in each of the three grades used for reporting (4, 8, and 11), annual data is subject to fluctuations due to inconsistent annual testing patterns. Two-year averages help overcome that problem.*

*Several additional pieces of information about the achievement level summaries are needed for interpretive purposes. These are outlined below:*

- 1. The approximate number of students per grade per year upon which the percentages for 1996-98 are based are: grade 4, 36,000; grade 8, 34,000; and grade 11, 27,000.*
- 2. Forms K and L of both test batteries were first used in Iowa in the 1993-94 school year. Therefore, this year was chosen to develop baseline data that schools might use for beginning to establish goals and for describing local achievement trends. The baseline biennium is 1993-95.*
- 3. The descriptions of the achievement levels — Low, Intermediate, and High — are needed in order to interpret scores based on these designations.*

4. *Comparisons of results from one grade to another are not appropriate because the corresponding descriptions of performance are not exactly the same from grade to grade. For example, 'Low' in reading does not mean the same thing at grade 4 and grade 11.*
5. *Comparisons from one subject area to another are not appropriate because the corresponding descriptions of performance are much different from subject to subject. For example, 'Low' in grade 4 reading does not mean the same thing as 'Low' in grade 4 mathematics.<sup>1</sup>*

The descriptions for high, intermediate, and low performance levels for reading and mathematics accompany each figure where achievement levels are shown.

### **Achievement Levels for Reading Comprehension**

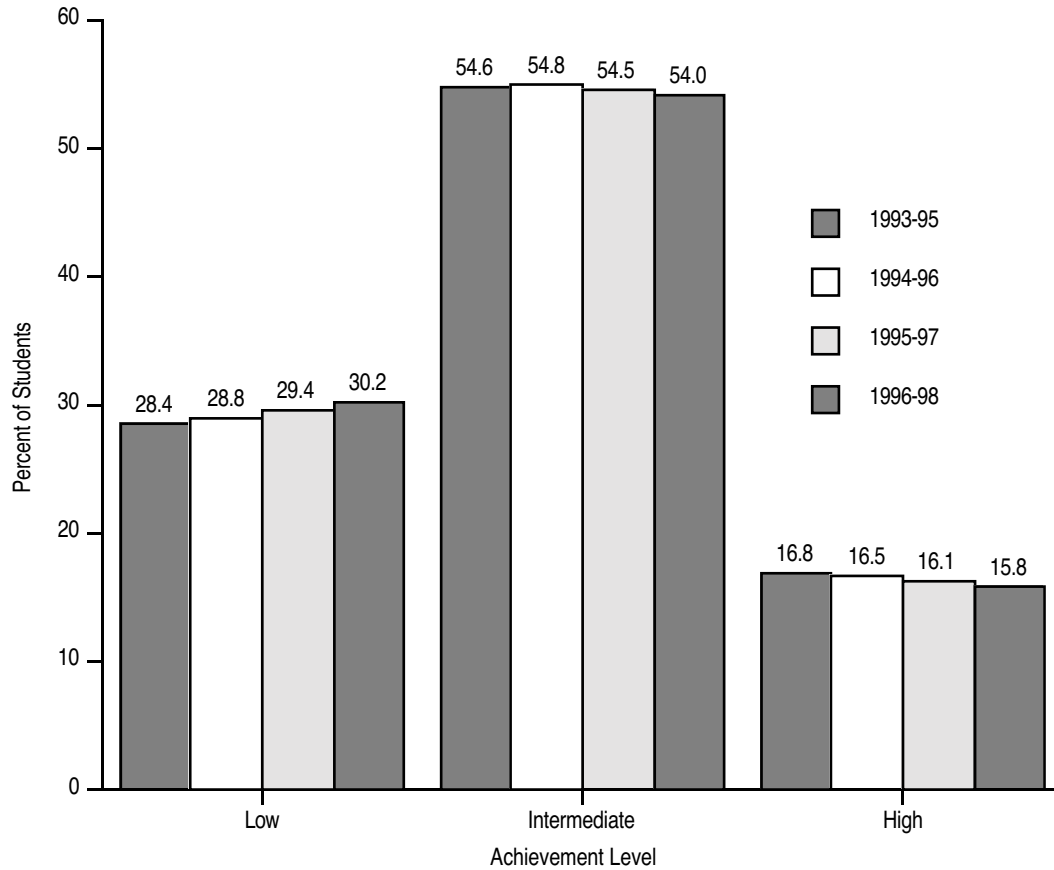
Reading achievement level distributions for Iowa fourth graders are reported in Figure 19 for four, two-year periods: 1993-95, 1994-96, 1995-97, and 1996-98. Percentages of students scoring at specific achievement levels indicate an increase in the percentage of students classified as low performers and a decrease in the percentage of students classified as high performers over the four two-year periods.

---

<sup>1</sup>Iowa Testing Programs, University of Iowa, August 1998.

Figure 19

## ITBS READING COMPREHENSION IOWA ACHIEVEMENT LEVELS GRADE 4



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 4 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITBS READING COMPREHENSION TEST:

### HIGH PERFORMANCE LEVEL

UNDERSTANDS FACTUAL INFORMATION; DRAWS CONCLUSIONS AND MAKES INFERENCES ABOUT THE MOTIVES AND FEELINGS OF CHARACTERS; IDENTIFIES THE MAIN IDEA; EVALUATES THE STYLE AND STRUCTURE OF THE TEXT; AND INTERPRETS NONLITERAL LANGUAGE.

### INTERMEDIATE PERFORMANCE LEVEL

UNDERSTANDS SOME FACTUAL INFORMATION; SOMETIMES CAN DRAW CONCLUSIONS AND MAKE INFERENCES ABOUT THE MOTIVES AND FEELINGS OF CHARACTERS; AND IS BEGINNING TO BE ABLE TO IDENTIFY THE MAIN IDEA, EVALUATE THE STYLE AND STRUCTURE OF THE TEXT, AND INTERPRET NONLITERAL LANGUAGE.

### LOW PERFORMANCE LEVEL

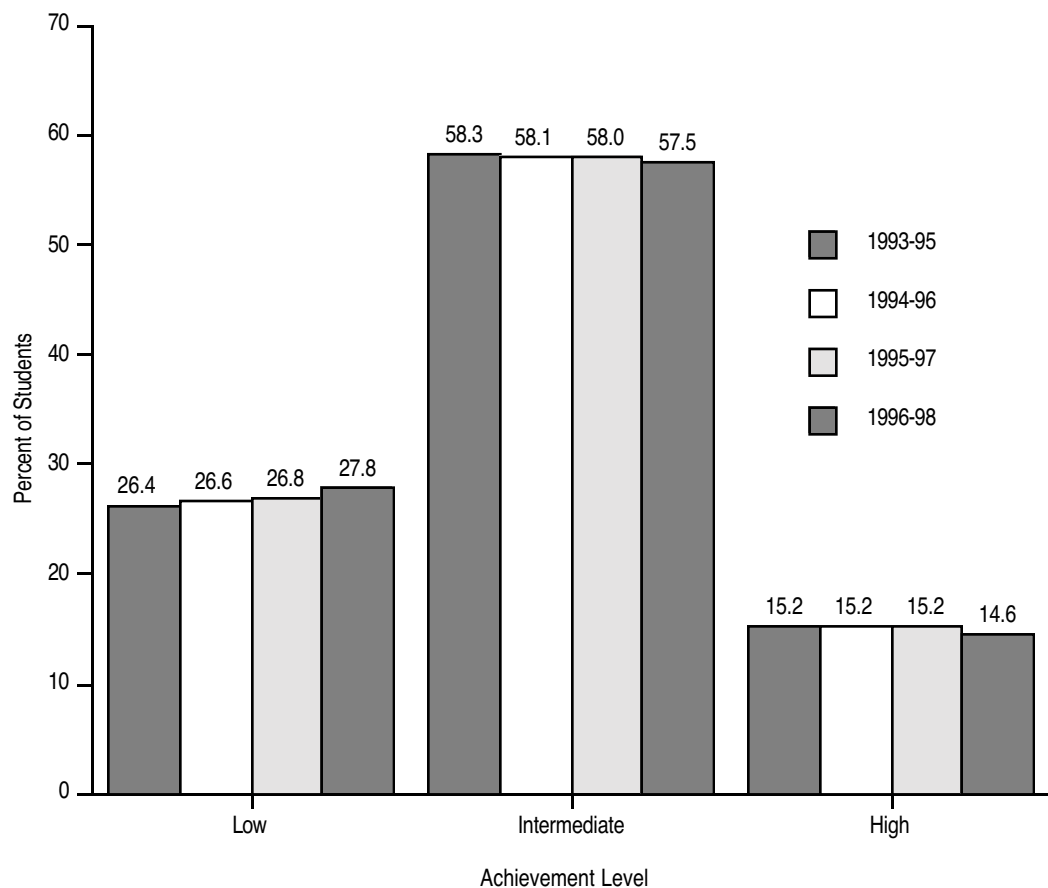
UNDERSTANDS LITTLE FACTUAL INFORMATION; SELDOM DRAWS CONCLUSIONS OR MAKES SIMPLE INFERENCES ABOUT CHARACTERS; RARELY GRASPS THE MAIN IDEA, EVALUATES THE STYLE AND STRUCTURE OF THE TEXT, OR INTERPRETS NONLITERAL LANGUAGE.



Eighth grade reading achievement is depicted by levels in Figure 20. As with fourth grade achievement levels, the percentage of eighth grade students classified as low performers increased over the four biennium periods. The percentage of students classified as high performers decreased for the last biennium period.

**Figure 20**

**ITBS READING COMPREHENSION IOWA ACHIEVEMENT LEVELS  
GRADE 8**



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 8 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITBS READING COMPREHENSION TEST:

**HIGH PERFORMANCE LEVEL**

UNDERSTANDS FACTUAL INFORMATION; DRAWS CONCLUSIONS AND MAKES INFERENCES ABOUT THE MOTIVES AND FEELINGS OF CHARACTERS; MAKES APPLICATIONS TO NEW SITUATIONS; IDENTIFIES THE MAIN IDEA; EVALUATES THE STYLE AND STRUCTURE OF THE TEXT; AND INTERPRETS NONLITERAL LANGUAGE.

**INTERMEDIATE PERFORMANCE LEVEL**

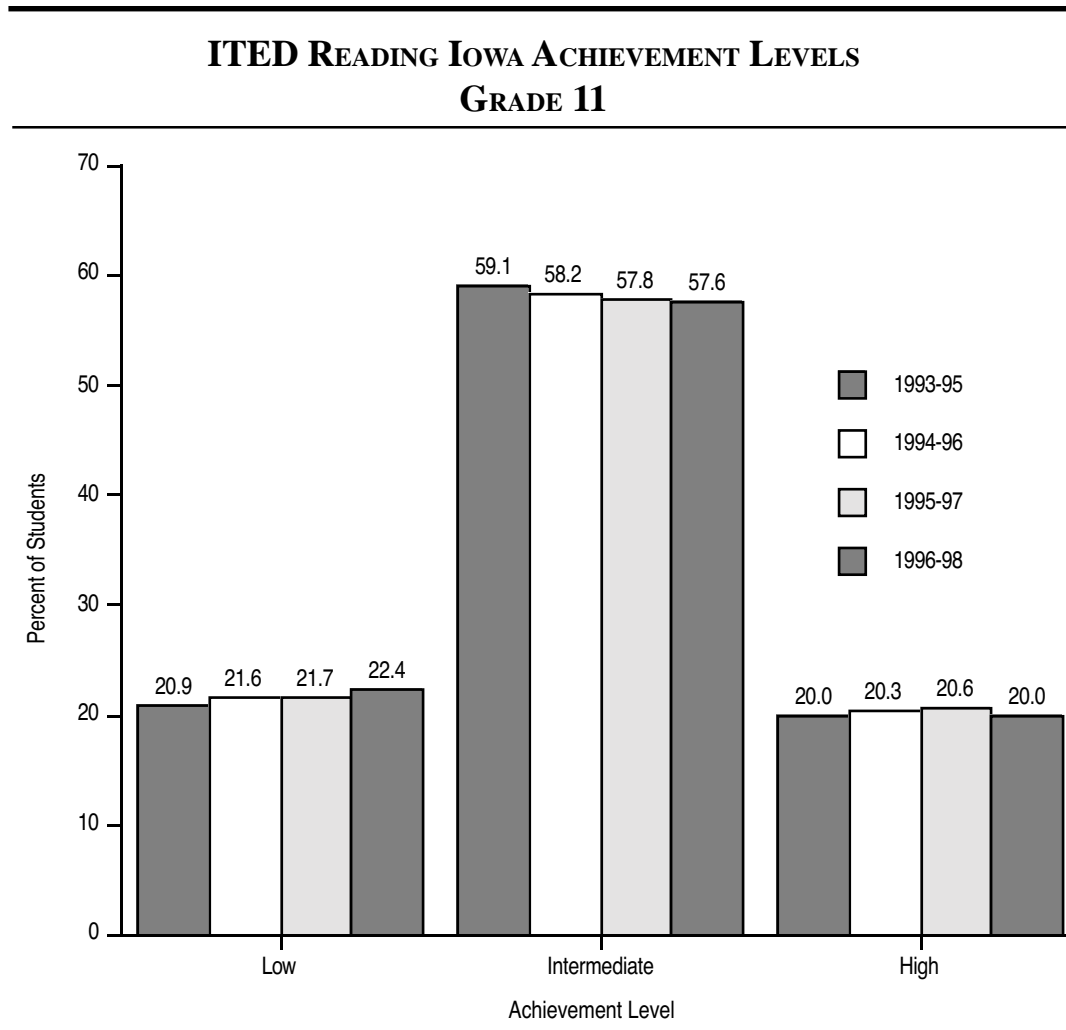
UNDERSTANDS SOME FACTUAL INFORMATION; SOMETIMES CAN DRAW CONCLUSIONS, MAKE INFERENCES ABOUT THE MOTIVES AND FEELINGS OF CHARACTERS, AND APPLY WHAT HAS BEEN READ TO NEW SITUATIONS; AND SOMETIMES CAN IDENTIFY THE MAIN IDEA, EVALUATE THE STYLE AND STRUCTURE OF THE TEXT, AND INTERPRET NONLITERAL LANGUAGE.

**LOW PERFORMANCE LEVEL**

UNDERSTANDS LITTLE FACTUAL INFORMATION; CAN SELDOM DRAW CONCLUSIONS OR MAKE SIMPLE INFERENCES ABOUT CHARACTERS; USUALLY CANNOT APPLY WHAT HAS BEEN READ TO NEW SITUATIONS; CAN RARELY GRASP THE MAIN IDEA, EVALUATE THE STYLE AND STRUCTURE OF THE TEXT, AND INTERPRET NONLITERAL LANGUAGE.

Figure 21 indicates the same general trend in the changes in the distribution with respect to students classified as low performers as was evident for students in grades 4 and 8, increases in the percentage of low performing students. There was general stability in the percentage of students designated as high performers across the four biennium periods.

**Figure 21**



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 11 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITED TEST TASKS THAT DETERMINE THE CONTENT AREA READING SCORE:

**HIGH PERFORMANCE LEVEL**

UNDERSTANDS FACTUAL INFORMATION; INFERS THE TRAITS AND FEELINGS OF CHARACTERS; IDENTIFIES THE MAIN IDEA; IDENTIFIES AUTHOR VIEWPOINT AND STYLE; INTERPRETS NONLITERAL LANGUAGE; AND JUDGES THE VALIDITY OF CONCLUSIONS.

**INTERMEDIATE PERFORMANCE LEVEL**

UNDERSTANDS SOME FACTUAL INFORMATION; SOMETIMES CAN MAKE INFERENCES ABOUT CHARACTERS, IDENTIFY THE MAIN IDEA, AND IDENTIFY AUTHOR VIEWPOINT AND STYLE; OCCASIONALLY CAN INTERPRET NONLITERAL LANGUAGE AND JUDGE THE VALIDITY OF CONCLUSIONS.

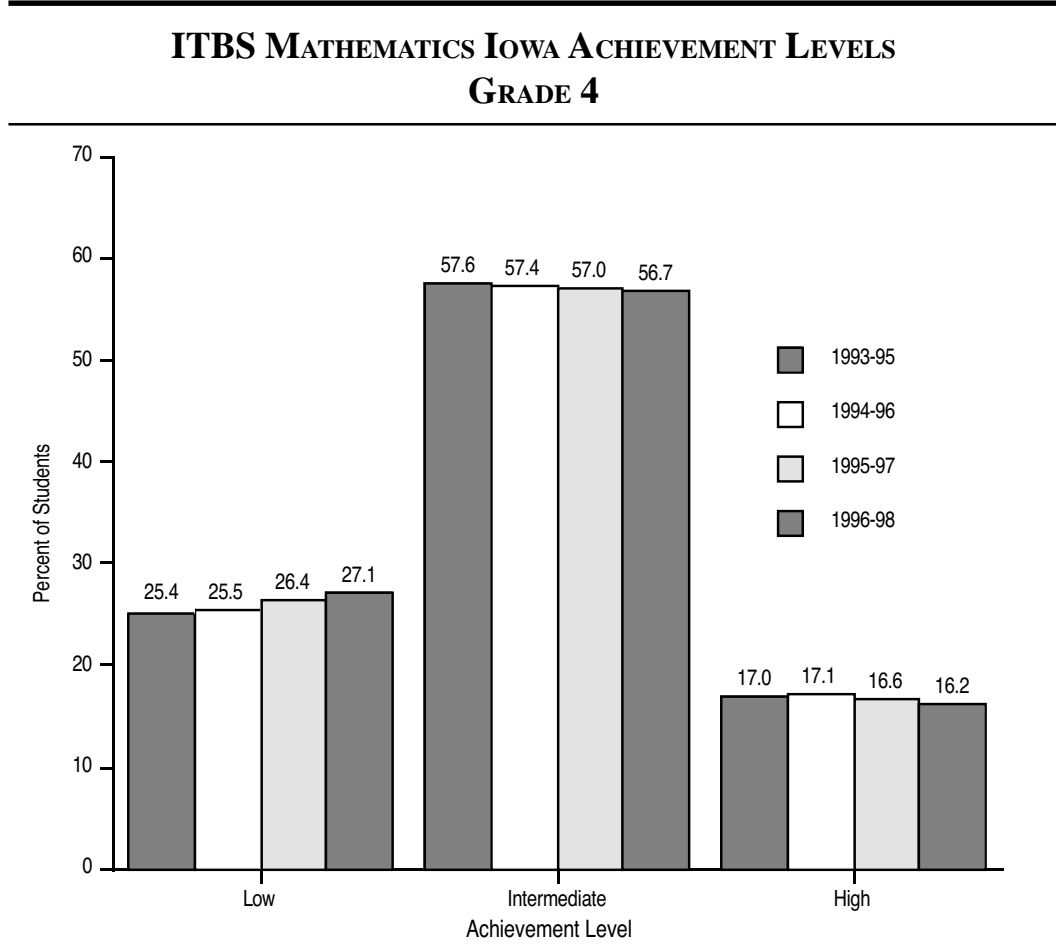
**LOW PERFORMANCE LEVEL**

UNDERSTANDS LITTLE FACTUAL INFORMATION; SELDOM MAKES SIMPLE INFERENCES; RARELY GRASPS THE MAIN IDEA; AND USUALLY CANNOT IDENTIFY AUTHOR VIEWPOINT AND STYLE, INTERPRET NONLITERAL LANGUAGE, OR JUDGE THE VALIDITY OF CONCLUSIONS.

## Achievement Levels for Mathematics

Mathematics achievement levels for Iowa students in grades 4, 8, and 11 are presented in Figures 22-24. Achievement distributions for grades 4 and 8 parallel reading performance distribution trends in that increases in the percentage of students designated as low performing generally occurred while the percentage of students termed high performers generally decreased. These trends were somewhat different for grade 11 students: the percentage of students classified as high performers increased over the four biennium periods and the percentage in the low level was steady.

Figure 22



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 4 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITBS TEST TASKS THAT DETERMINE THE MATH TOTAL SCORE:

### HIGH PERFORMANCE LEVEL

UNDERSTANDS MATH CONCEPTS, SOLVES COMPLEX WORD PROBLEMS, USES VARIOUS ESTIMATION METHODS, AND IS LEARNING TO INTERPRET DATA FROM GRAPHS AND TABLES.

### INTERMEDIATE PERFORMANCE LEVEL

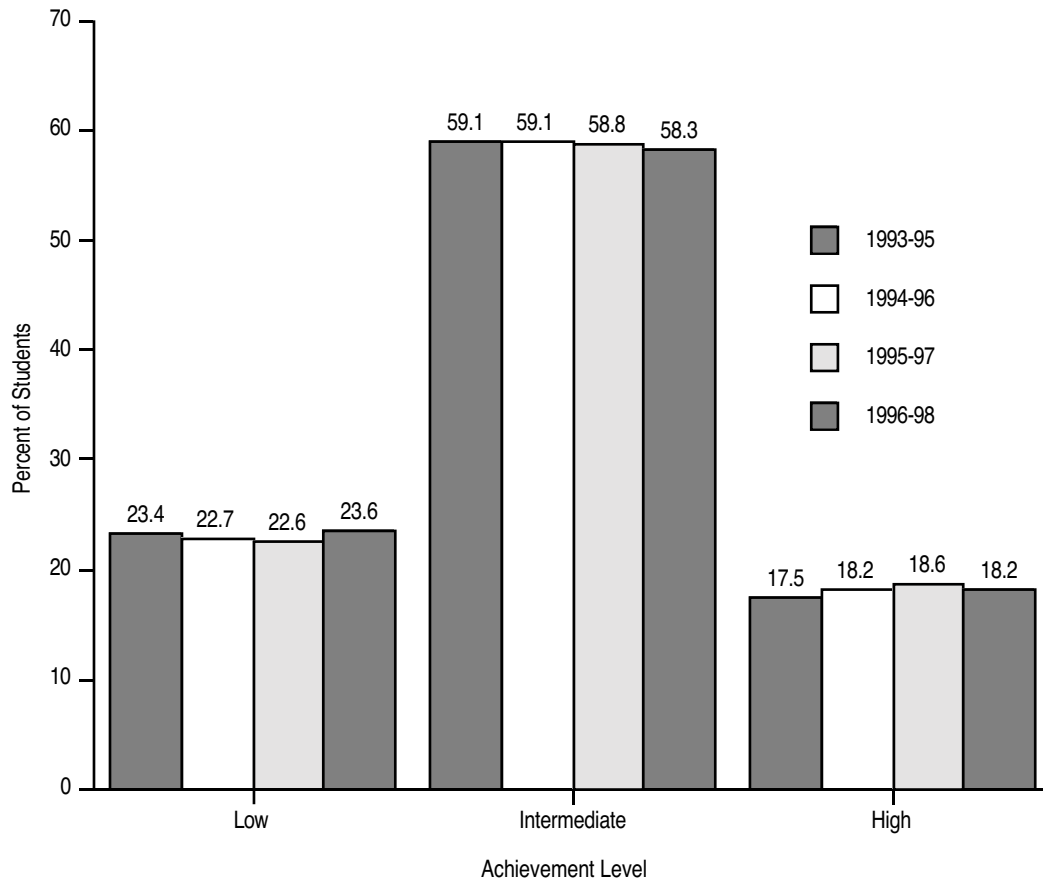
IS DEVELOPING AND UNDERSTANDING OF MOST MATH CONCEPTS, IS DEVELOPING THE ABILITY TO SOLVE SIMPLE AND COMPLEX WORD PROBLEMS AND TO USE ESTIMATION METHODS, AND IS BEGINNING TO DEVELOP THE ABILITY TO INTERPRET DATA FROM GRAPHICS AND TABLES.

### LOW PERFORMANCE LEVEL

IS BEGINNING TO DEVELOP AN UNDERSTANDING OF MANY MATH CONCEPTS AND AN ABILITY TO SOLVE SIMPLE WORD PROBLEMS, IS GENERALLY UNABLE TO USE ESTIMATION METHODS, AND IS SELDOM ABLE TO INTERPRET DATA FROM GRAPHS AND TABLES.

Figure 23

## ITBS MATHEMATICS IOWA ACHIEVEMENT LEVELS GRADE 8



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 8 STUDENT AT EACH ACHIEVEMENT LEVEL PERFORMS WITH RESPECT TO THE ITBS TEST TASKS THAT DETERMINE THE MATH TOTAL SCORE:

### HIGH PERFORMANCE LEVEL

UNDERSTANDS MATH CONCEPTS AND IS DEVELOPING THE ABILITY TO SOLVE COMPLEX WORD PROBLEMS, USE A VARIETY OF ESTIMATION METHODS AND INTERPRET DATA FROM GRAPHS AND TABLES.

### INTERMEDIATE PERFORMANCE LEVEL

IS BEGINNING TO DEVELOP AN UNDERSTANDING OF MOST MATH CONCEPTS AND TO DEVELOP THE ABILITY TO SOLVE WORD PROBLEMS, USE A VARIETY OF ESTIMATION METHODS, AND INTERPRET DATA FROM GRAPHS AND TABLES.

### LOW PERFORMANCE LEVEL

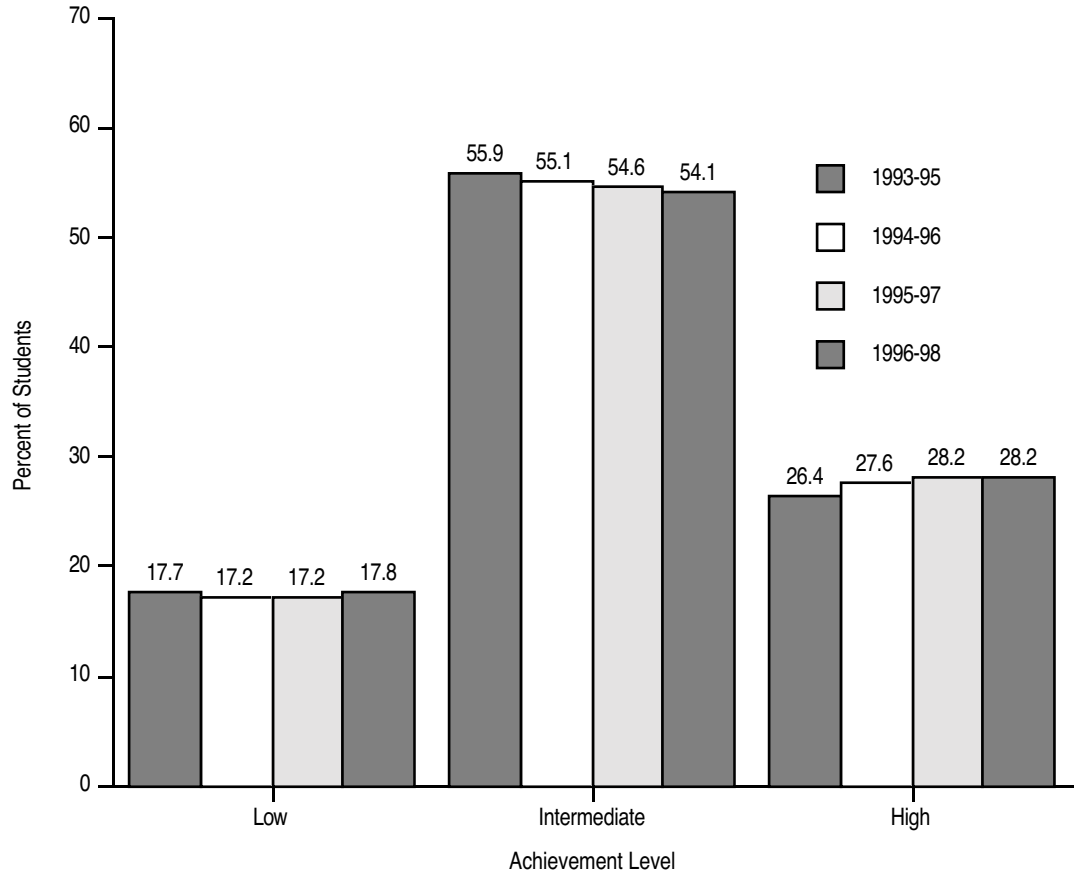
UNDERSTANDS LITTLE ABOUT MATH CONCEPTS, IS UNABLE TO SOLVE MOST SIMPLE WORD PROBLEMS OR USE ESTIMATION METHODS, AND IS SELDOM ABLE TO INTERPRET DATA FROM GRAPHS AND TABLES.

**Figure 24**

---

**ITED MATHEMATICS IOWA ACHIEVEMENT LEVELS  
GRADE 11**

---



---

SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA.

NOTES: THESE DESCRIPTIONS INDICATE HOW THE TYPICAL GRADE 11 STUDENT AT EACH LEVEL PERFORMS WITH RESPECT TO CONCEPTS AND PROBLEMS IN THE ITED QUANTITATIVE THINKING TEST:

**HIGH PERFORMANCE LEVEL**

UNDERSTANDS HOW TO APPLY MATH CONCEPTS AND PROCEDURES, MAKES INFERENCES WITH QUANTITATIVE INFORMATION, AND SOLVES A VARIETY OF NOVEL QUANTITATIVE REASONING PROBLEMS.

**INTERMEDIATE PERFORMANCE LEVEL**

IS BEGINNING TO DEVELOP THE ABILITY TO APPLY A VARIETY OF MATH CONCEPTS AND PROCEDURES, MAKE INFERENCES ABOUT QUANTITATIVE INFORMATION, AND SOLVE A VARIETY OF NOVEL QUANTITATIVE REASONING PROBLEMS.

**LOW PERFORMANCE LEVEL**

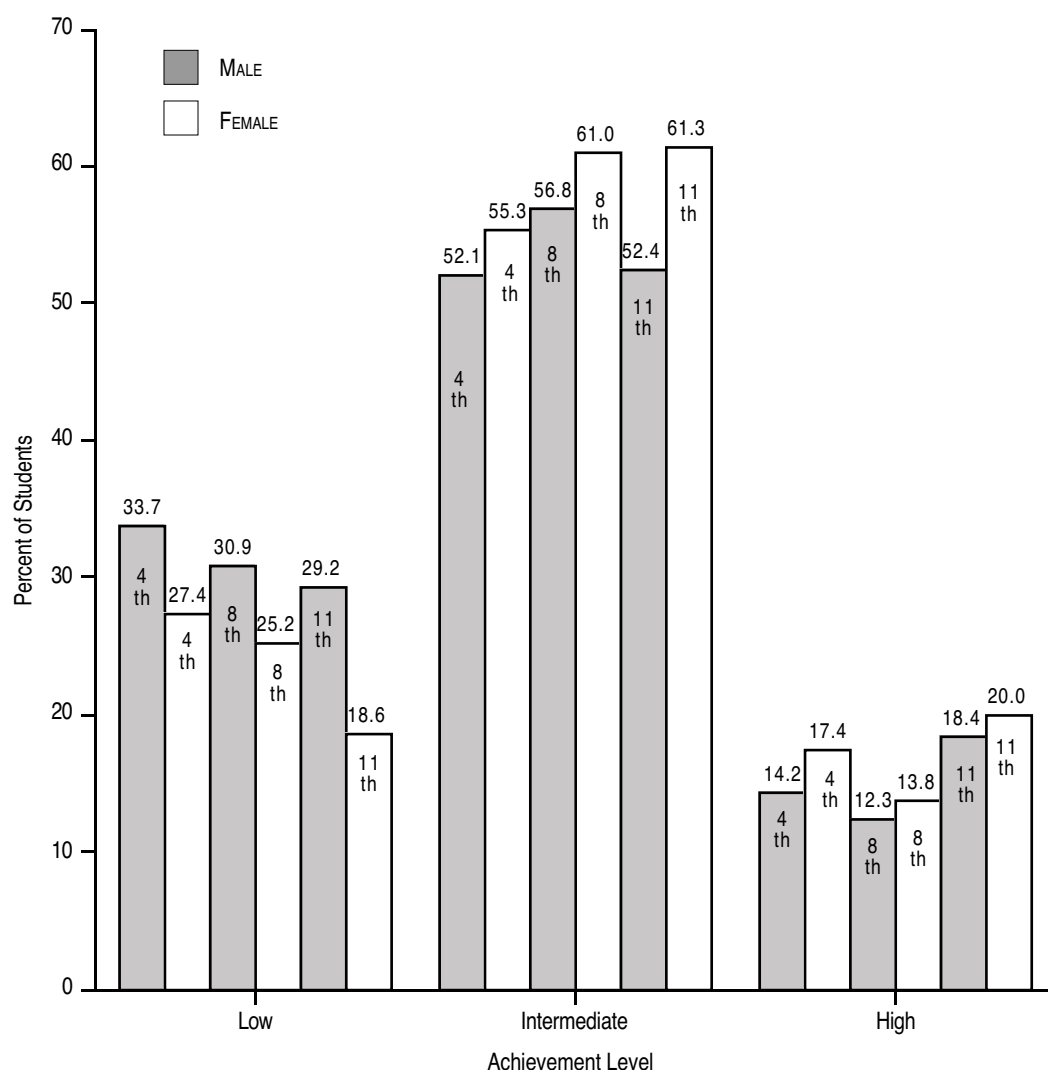
DEMONSTRATES LITTLE UNDERSTANDING ABOUT HOW TO APPLY MATH CONCEPTS AND PROCEDURES, GENERALLY CANNOT MAKE INFERENCES WITH QUANTITATIVE INFORMATION, AND CANNOT SOLVE MOST NOVEL QUANTITATIVE REASONING PROBLEMS.

## ITBS and ITED Achievement Levels by Gender

Information on achievement levels in the areas of reading and mathematics is presented in Figures 25 and 26 for Iowa students by gender. Unlike the previous data on achievement levels, the information is based on a single school year, 1997-98. The percentages of males and females scoring at each of the three achievement levels are presented.

**Figure 25**

### ITBS AND ITED IOWA READING ACHIEVEMENT LEVELS FOR GRADES 4, 8, AND 11 BY GENDER 1997-98



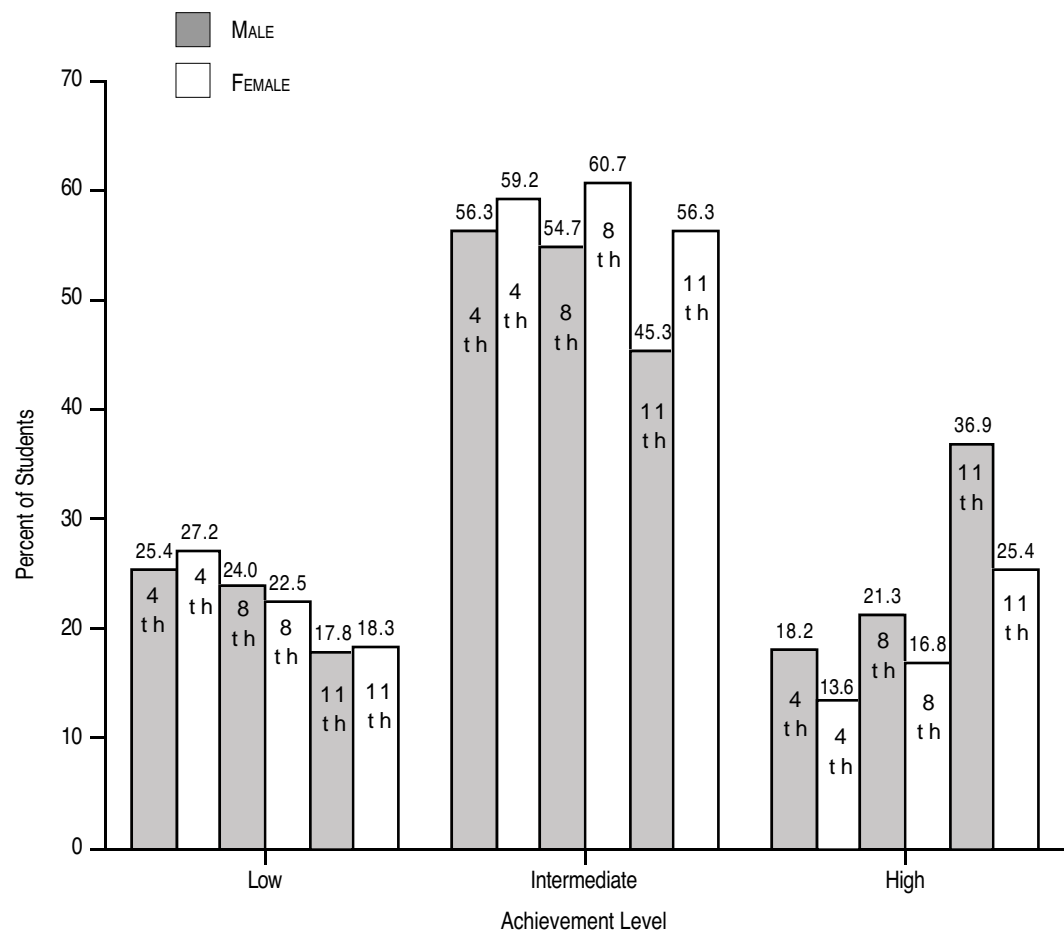
SOURCE: IOWA TESTING PROGRAM, UNIVERSITY OF IOWA.  
 NOTES: SEE FIGURE 19 FOR EXPLANATION OF 4TH GRADE PERFORMANCE LEVELS.  
 SEE FIGURE 20 FOR EXPLANATION OF 8TH GRADE PERFORMANCE LEVELS.  
 SEE FIGURE 21 FOR EXPLANATION OF 11TH GRADE PERFORMANCE LEVELS.

For reading, at all three grade levels, there was a higher percentage of males reported at the low achievement level, and a higher percentage of females reported at the high achievement level.

For mathematics, a higher percentage of males was reported at the high achievement level for all three grade levels. The spread between the percentages of high performing males and females was substantially higher for grade 11 than for grades 4 and 8. For grades 4 and 11, a higher percentage of females scored at the low achievement level than males.

**Figure 26**

**ITBS AND ITED IOWA MATHEMATICS ACHIEVEMENT LEVELS  
FOR GRADES 4, 8, AND 11 BY GENDER  
1997-98**



SOURCE: IOWA TESTING PROGRAMS, UNIVERSITY OF IOWA  
 NOTES: SEE FIGURE 22 FOR EXPLANATION OF 4TH GRADE PERFORMANCE LEVELS.  
 SEE FIGURE 23 FOR EXPLANATION OF 8TH GRADE PERFORMANCE LEVELS.  
 SEE FIGURE 24 FOR EXPLANATION OF 11TH GRADE PERFORMANCE LEVELS.

## American College Testing (ACT) Assessments

The majority of Iowa high school students taking college entrance examinations choose to take the ACT assessment. The ACT Assessment Program offers four components; English, mathematics, reading, and science reasoning. An ACT composite score is calculated from combining these four tests. ACT scores have a range of 0 to 36. ACT scores are provided for two types of academic programs completed by students, a core program and a non-core program. Core programs are comprised of four or more years of English and three years or more of mathematics, natural science, and social studies. High school programs pursued by students that require less than core criteria are reported by ACT as non-core programs of study.

In 1998, 65 percent of the graduating class in Iowa took the ACT, compared to 64 percent over the previous three years. A total of 24,233 Iowa students participated in the ACT Assessment Program in 1998. Close to one million students nationwide took the ACT. Data presented in this section are based on a national sample of 35 percent of the graduating class of 1998.

### ACT Composite Score Comparisons of Iowa and the Nation

Since 1992, ACT composite scores for both Iowa and the nation have, in general, reflected a steady to slightly upward trend (Table 51 and Figure 27). Average Iowa composite ACT scores exceeded scores for the nation across all years reported.

**Table 51**

#### IOWA AND NATIONAL ACT AVERAGE COMPOSITE SCORES 1989 - 1998

Year	Iowa Composite ACT Score	Percent Iowa Student Participation*	Nation Composite ACT Score	Percent Nation Student Participation
1989	21.8	60.5%	20.6	— %
1990	21.8	61.2	20.6	—
1991	21.7	61.0	20.6	—
1992	21.6	62.0	20.6	—
1993	21.8	61.5**	20.7	—
1994	21.9	62.0	20.8	—
1995	21.8	64.0	20.8	37.0
1996	21.9	64.0	20.9	35.0
1997	22.1	64.0	21.0	35.0
1998	22.1	65.0	21.0	35.0

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT ASSESSMENT (1989-98) RESULTS, SUMMARY REPORT IOWA.

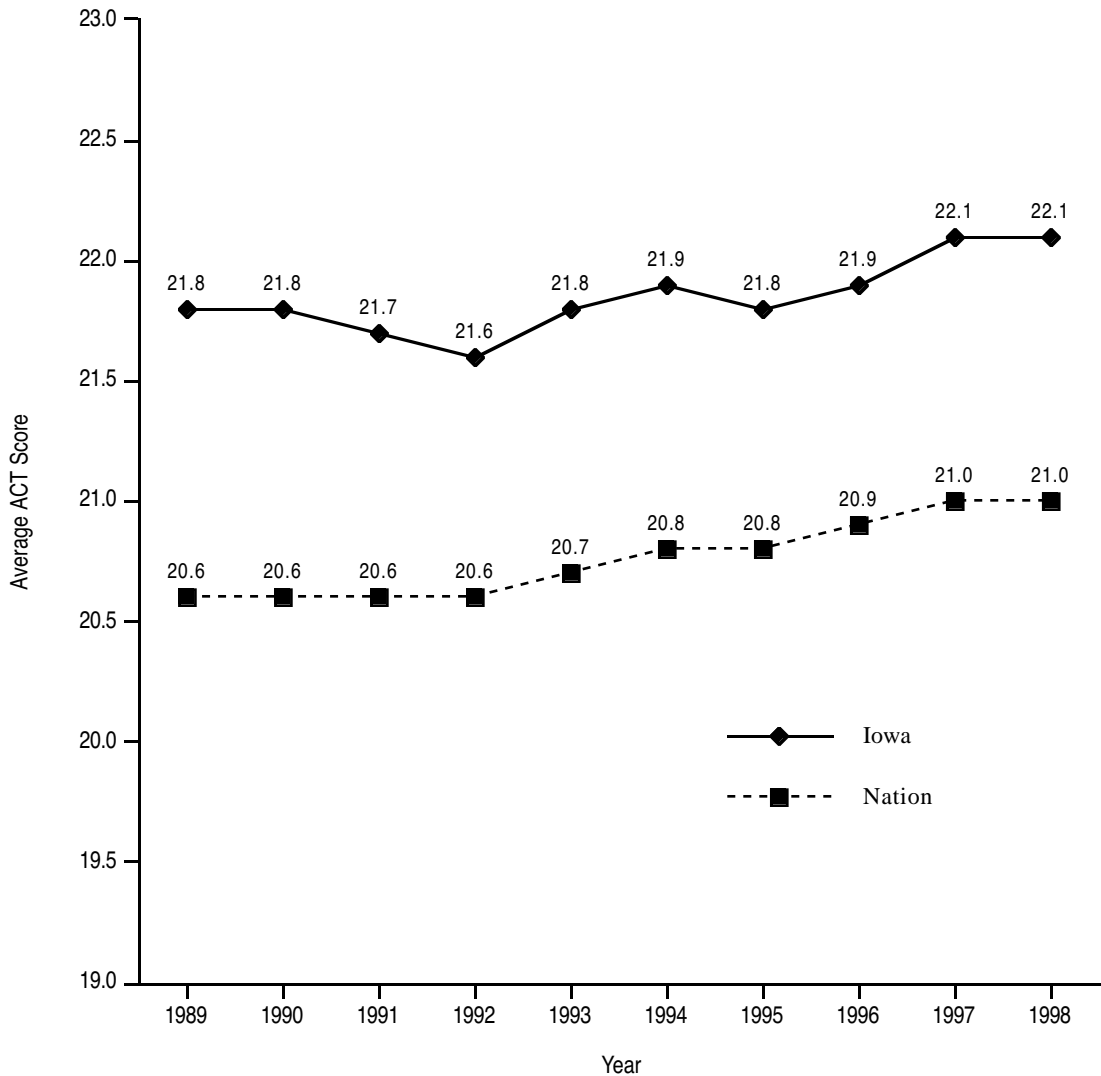
NOTES: \*FROM 1989-1992, AND 1994-1998 ACT NEWS RELEASES.

\*\*1993 ESTIMATED PERCENTAGE IS BASED ON IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, ENROLLMENT FILE.



**Figure 27**

**IOWA AND NATIONAL ACT AVERAGE COMPOSITE SCORES  
1989-1998**



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA.

**ACT Score Comparisons for English, Mathematics, Reading, and Science Reasoning**

A comparison of average ACT scores for Iowa and for the nation for each of the four ACT tests is presented in Table 52. Test results for the years 1991 through 1998 reflect that Iowa students scored significantly higher than their national counterparts on all four ACT tests across all years. The highest scores for Iowa students, in general, were in science reasoning, while the highest scores for the nation were reported in reading. The lowest scores across the period from 1991 to 1998, were in mathematics for both Iowa and the nation.

**Table 52**

**AVERAGE ACT SCORES FOR IOWA GRADUATES AND THE NATION  
1991 - 1998**

	Iowa				Nation			
	English	Mathematics	Reading	Science Reasoning	English	Mathematics	Reading	Science Reasoning
1991	21.3	21.0	22.2	21.9	20.3	20.0	21.2	20.7
1992	21.2	21.0	21.9	21.9	20.2	20.0	21.1	20.7
1993	21.3	21.1	22.2	22.0	20.3	20.1	21.2	20.8
1994	21.4	21.2	22.2	22.3	20.3	20.2	21.2	20.9
1995	21.3	21.2	22.1	22.1	20.2	20.2	21.3	21.0
1996	21.4	21.3	22.2	22.3	20.3	20.2	21.3	21.1
1997	21.4	21.5	22.4	22.4	20.3	20.6	21.3	21.1
1998	21.5	21.9	22.3	22.4	20.4	20.8	21.4	21.1

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA.

**ACT Composite Score Comparisons of Iowa and Midwest States**

Average ACT composite scores are reflected in Table 53 for Iowa and for other midwest states for 1997 and 1998. Figures reported indicate that Iowa students ranked third behind Wisconsin and Minnesota, in 1998. Iowa also ranked third, nationally, among states where the ACT was the primary college entrance examination taken by the 1998 graduating class. Four midwest states; Illinois, Minnesota, Nebraska, and South Dakota registered increases over 1997 scores while scores for the remaining states, as well as scores for the nation, remained unchanged.

**Table 53**

**ACT AVERAGE COMPOSITE SCORES FOR IOWA, THE  
NATION AND MIDWEST STATES — 1997 AND 1998**

Nation & State	1997			1998		
	ACT Composite	% of Graduates Tested	% Core Completers out of Total Tested	ACT Composite	% of Graduates Tested	% Core Completers out of Total Tested
Nation	21.0	36%	59%	21.0	37%	61%
Iowa	22.1	64	66	22.1	65	68
Illinois	21.2	69	49	21.4	69	52
Kansas	21.7	74	52	21.7	74	55
Minnesota	22.1	60	71	22.2	63	71
Missouri	21.5	64	58	21.5	66	61
Nebraska	21.7	73	63	21.8	71	67
North Dakota	21.4	78	64	21.4	78	64
South Dakota	21.3	68	65	21.4	70	65
Wisconsin	22.3	64	62	22.3	66	62

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT 1997 AND 1998 ASSESSMENT RESULTS.

## ACT Scores for Core and Non-core Students

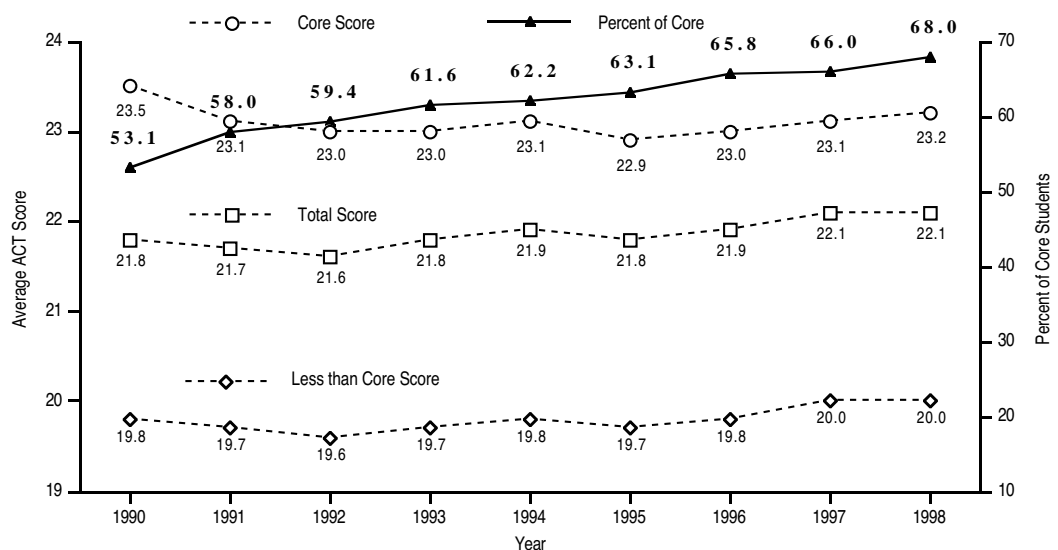
Average ACT composite score results for Iowa students taking core and non-core curriculums as well as the trend of participation in core high school programs are depicted in Figure 28. Students completing high school programs encompassing four or more years of English and three years or more of mathematics, natural science, and social studies are classified by ACT as “core” students. Students completing high school programs with less than core requirements are classified as “non-core” students.

Iowa student participation in core programs increased from 53.1 percent in 1990 to 68 percent in 1998, an increase of nearly 15 percentage points over the period. During the same time period scores for Iowa core students showed a slight downward trend with a gradual upward trend reported since 1996. Across the same time period, scores for non-core students were fairly stable with a gradual upward trend reflected since 1995. Across the period from 1990 through 1998, Iowa students completing core programs, on average, scored three or more points higher than students categorized as non-core completers.

ACT scores by type of high school program are also presented in Table 54 for both Iowa and the nation. Scores for Iowa students in both core and non-core high school programs exceeded scores for the nation on all ACT Tests.

**Figure 28**

### AVERAGE ACT COMPOSITE SCORES VS. PERCENT OF STUDENTS TAKING CORE PROGRAM FOR IOWA HIGH SCHOOL GRADUATING CLASSES 1990-1998



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA, 1990-1998.

**Table 54**

**1998 AVERAGE IOWA ACT SCORES BY TYPE OF  
HIGH SCHOOL PROGRAM TAKEN BY STUDENTS**

ACT Tests	High School Program Type			
	Core Program <sup>1</sup>		Non-Core Program	
	Iowa	Nation	Iowa	Nation
English	22.5	21.5	19.2	18.6
Math	23.1	22.0	19.5	18.9
Reading	23.3	22.4	20.1	19.7
Science	23.2	22.0	20.5	19.6
Composite	23.2	22.1	20.0	19.3

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, 1998 ACT ASSESSMENT RESULTS, SUMMARY REPORT IOWA.

NOTES: <sup>1</sup> A "CORE" PROGRAM IS DEFINED AS A TYPICAL COLLEGE PREPARATORY PROGRAM INCLUDING:

- ENGLISH (FOUR YEARS OR MORE)
- MATHEMATICS (THREE YEARS OR MORE)
- SOCIAL STUDIES (THREE YEARS OR MORE)
- NATURAL SCIENCES (THREE YEARS OR MORE)

THE PARTICIPATION RATE FOR THE IOWA GRADUATING CLASS OF 1998 WAS 65 PERCENT.

**Distribution of ACT Scores**

The distribution of composite ACT scores for Iowa and the nation are presented in Table 55 for selected cut points. Scores are presented for the years 1991 through 1998. The figures reflect that Iowa and the nation both have similar percentages of students with ACT composite scores of 30 or above.

Comparing ACT composite scores of 25 and above, Iowa had a higher percentage of students, generally three to four percentage points across the period from 1991 to 1998, than the nation. Both Iowa and the nation had an increasing percentage of students scoring at 25 or above on the ACT composite scores. The percentage of Iowa students in the 25 and above category has increased by four percentage points over the time period while the nation has increased by three percentage points.

Iowa had a substantially lower percentage of students with composite scores equal to or lower than 20 than the nation over the period from 1991 through 1998. The differences between the percentage of Iowa students with ACT composite scores of 20 or below and students in the nation at large have varied from nine to 11 percentage points over the period.

A comparison of the percentage of students scoring at 15 or lower on the ACT composite indicates that Iowa had about half the percentage of students scoring at 15 or below on the ACT composite as the nation. The percentage of students scoring at 15 or below on the ACT composite has remained fairly constant for both Iowa and the nation across the time period from 1991 through 1998.

**Table 55**

**DISTRIBUTION OF AVERAGE ACT SCORES FOR  
IOWA GRADUATES AND THE NATION  
1991 - 1998**

Year	Iowa				Nation			
	Score Equal to or Lower than 15	Score Equal to or Lower than 20	Score Equal to or Higher than 25	Score Equal to or Higher than 30	Score Equal to or Lower than 15	Score Equal to or Lower than 20	Score Equal to or Higher than 25	Score Equal to or Higher than 30
1991	6%	42%	20%	3%	13%	52%	16%	2%
1992	7%	43%	19%	3%	13%	52%	16%	2%
1993	6%	41%	20%	3%	12%	51%	16%	2%
1994	6%	40%	21%	3%	13%	51%	17%	2%
1995	6%	41%	20%	3%	13%	51%	17%	2%
1996	6%	40%	22%	3%	13%	50%	17%	3%
1997	6%	39%	23%	3%	13%	49%	18%	3%
1998	6%	38%	23%	4%	12%	49%	19%	3%

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA.  
NOTE: THE PARTICIPATION RATE FOR THE IOWA GRADUATING CLASS OF 1998 WAS 65 PERCENT.

### ACT Scores by Grade

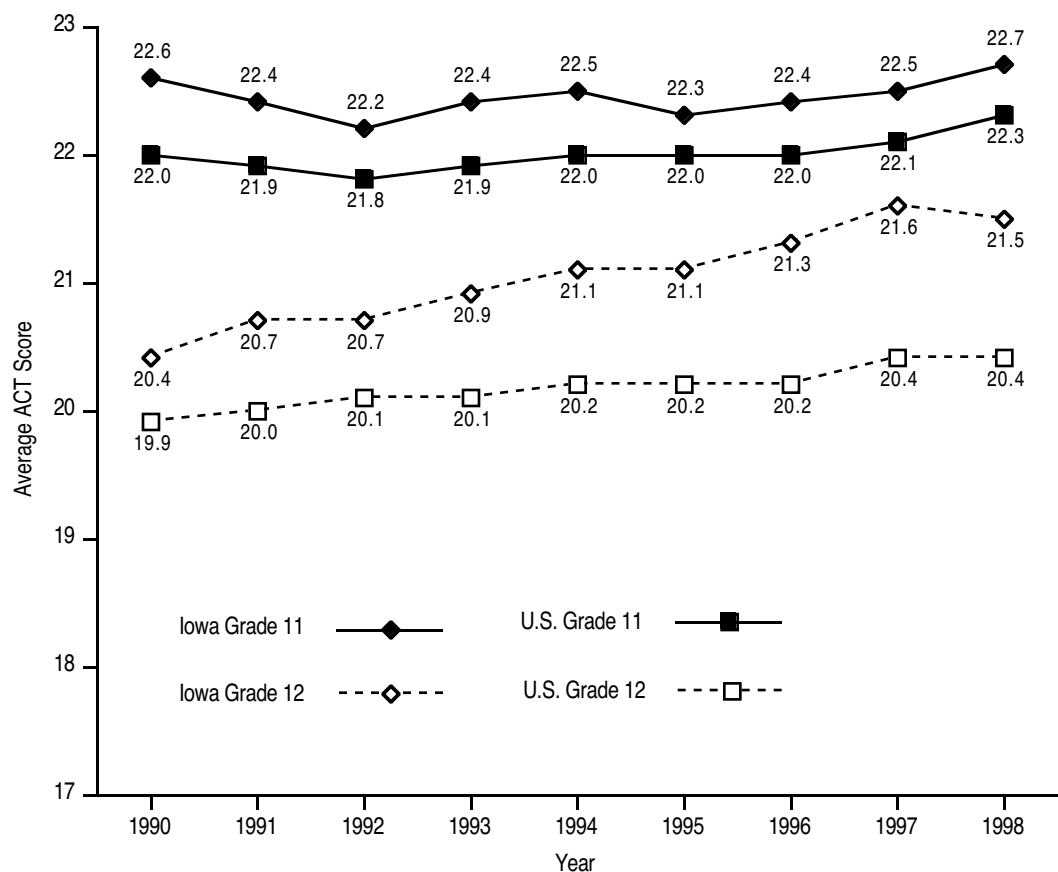
ACT composite scores by grade level for Iowa and for the nation are reported in Figure 29. Scores for 1990 through 1998 reflect that for both Iowa and the nation, eleventh graders scored higher than twelfth grade students.

Average scores for both Iowa eleventh and twelfth graders were higher than eleventh and twelfth grade scores for the nation. Across the period, Iowa eleventh grade scores decreased slightly through 1992 and have increased gradually since 1995. Scores for eleventh graders in 1998 reflected a one-tenth point increase over scores in 1990. Twelfth grade Iowa composite scores, on the other hand, have generally shown a gradual increase from 1990 through 1997, up significantly in 1998 over the 1990 level.

Average Iowa ACT scores for English, mathematics, reading, and science reasoning for eleventh graders were higher than comparable scores for twelfth graders in 1998 (Table 56). This was consistent with previous years results.

**Figure 29**

**ACT AVERAGE COMPOSITE SCORES BY GRADE**



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA, 1990-98.

**Table 56**

**1998 IOWA AVERAGE ACT SCORES BY GRADE**

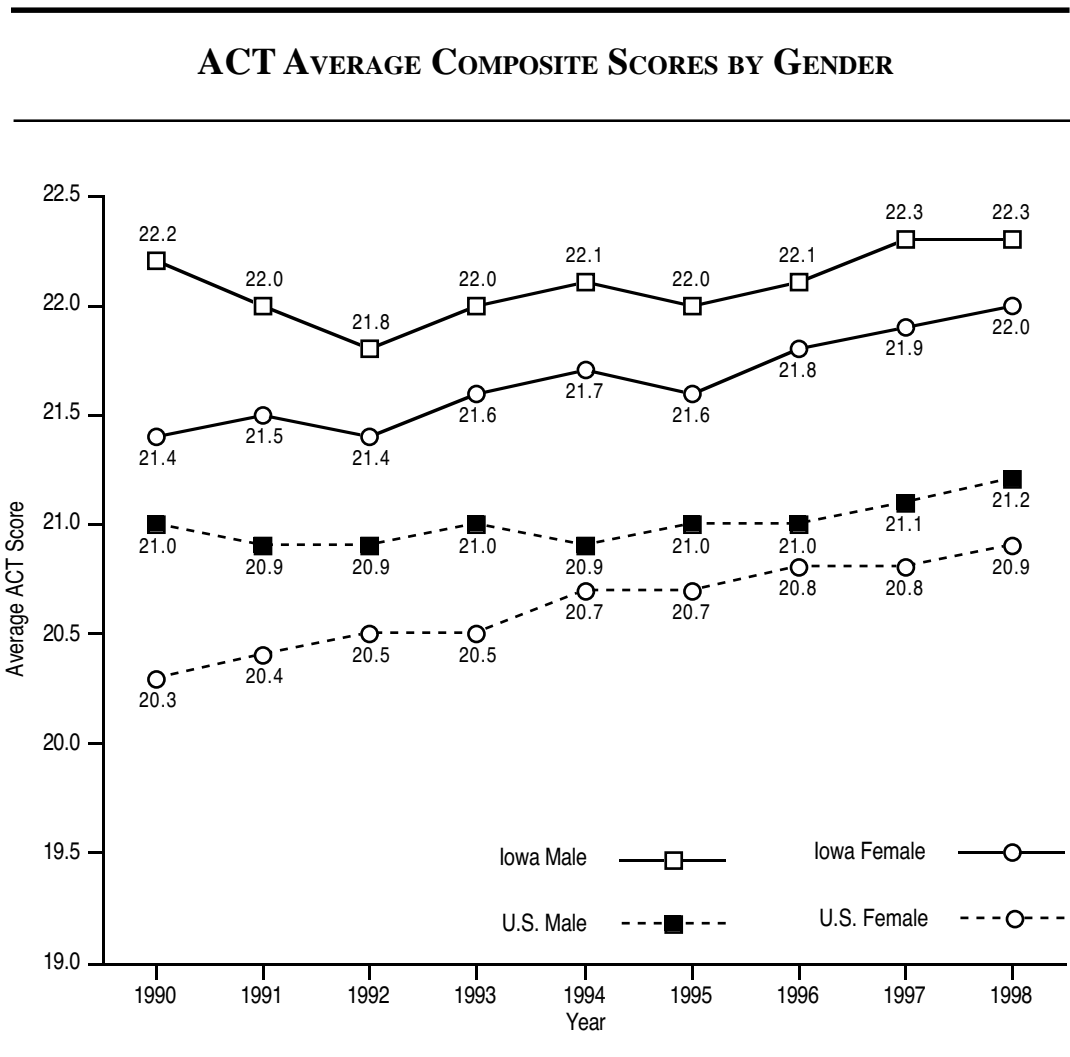
Grade	Number	Percent	ACT Scores				
			English	Math	Reading	Science Reasoning	Composite
11th	12,411	51.2%	22.0	22.6	22.9	23.0	22.7
12th	11,499	47.5	21.1	21.4	21.7	21.8	21.5
Other	323	1.3					

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT ASSESSMENT MAGNETIC TAPE, 1998.

## ACT Scores by Gender

A comparison of ACT composite scores by gender is reported in Figure 30 for the years 1990 through 1998. For both Iowa and the nation, males outperformed females. However, the score differences between males and females for both Iowa and for the nation have decreased since 1990. In 1990, score differences between males and females were .8 and .7 for Iowa and for the nation respectively. In 1998, score differences were .3 for both Iowa and the nation. Both Iowa males and females outperformed their national counterparts by a significant margin.

**Figure 30**



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA, 1990-98.

ACT scores for 1998 for each of the four ACT tests are shown in Table 57. More females than males took the ACT, 55.8 percent compared to 44.2 percent respectively. Iowa females scored higher on the English and reading tests, while males scored higher on mathematics and science reasoning.

**Table 57**

1998 IOWA AVERAGE ACT SCORES BY GENDER							
Gender	Number	Percent	Average ACT Scores				Composite
			English	Math	Reading	Science Reasoning	
Male	10,712	44.2%	20.9	22.7	22.1	23.1	22.3
Female	13,521	55.8	21.9	21.3	22.5	21.8	22.0

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA, 1998.

### ACT Scores by Enrollment Category

ACT scores for 1998 presented by enrollment category in Table 58 indicate that, in general, scores increase with successive increases in enrollment categories; although, ACT scores were higher in districts with enrollments of 2,500-7,499, than in the largest enrollment category. This finding was evident across each of the ACT tests including the composite score. Results for 1998 mirrored results for the previous school year. Comparison with 1997 composite scores reflected that composite scores increased for five of the seven enrollment categories and remained unchanged in two enrollment categories.

**Table 58**

1998 IOWA AVERAGE ACT SCORES BY ENROLLMENT CATEGORY						
Enrollment Category	Number of Students	ACT Scores				
		English	Math	Reading	Science Reasoning	Composite
<250	82	19.7	20.5	20.9	21.6	20.8
250-399	737	20.6	20.9	21.5	21.5	21.3
400-599	1,601	20.9	21.2	21.8	22.1	21.6
600-999	4,052	21.2	21.6	22.0	22.3	21.9
1,000-2,499	5,930	21.3	21.9	22.2	22.4	22.1
2,500-7,499	3,968	22.0	22.8	22.9	22.9	22.8
7,500+	4,183	21.7	22.3	22.7	22.5	22.4
Not Reported State	3,680					
	24,233	21.5	21.9	22.3	22.4	22.1

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT ASSESSMENT MAGNETIC TAPE, 1998; IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILE, 1997-98.

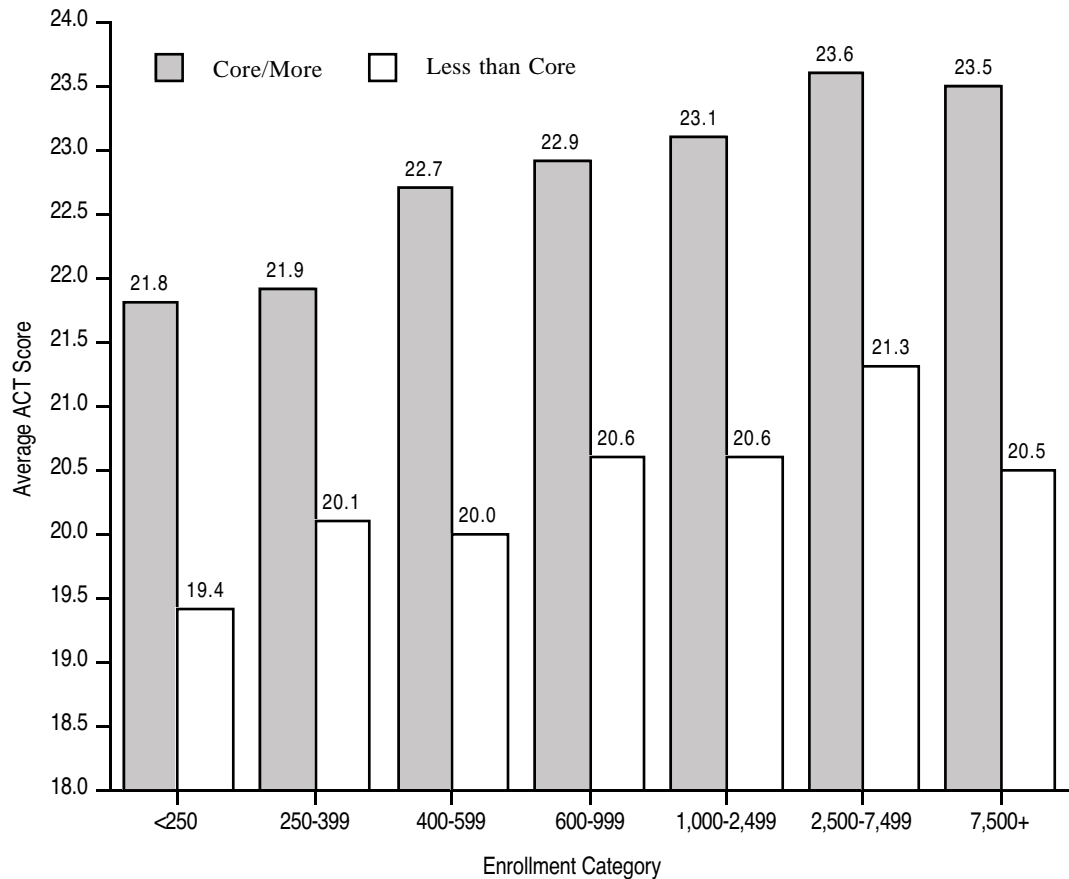


Iowa ACT average composite scores for 1998 are reported in Figure 31 by enrollment category for students completing core and non-core courses of study. As in previous years, scores for “core” students were substantially higher than for “non-core” students.

For students completing core programs, average ACT composite scores, in general, increased with each successive increase in enrollment category. Average composite scores for students completing non-core programs also tended to increase with increasing enrollments through the enrollment category 2,500-7,499.

**Figure 31**

**1998 IOWA AVERAGE ACT COMPOSITE SCORES  
BY ENROLLMENT CATEGORY AND COURSE OF STUDY**



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, ACT ASSESSMENT MAGNETIC TAPE, 1998; IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT FILE 1997-98.

NOTE: STATE AVERAGE ACT COMP. SCORES FOR THOSE WITH CORE OR MORE = 23.2; FOR THOSE WITH LESS THAN CORE = 20.0.

## Iowa Student ACT Scores Compared to High School Performance

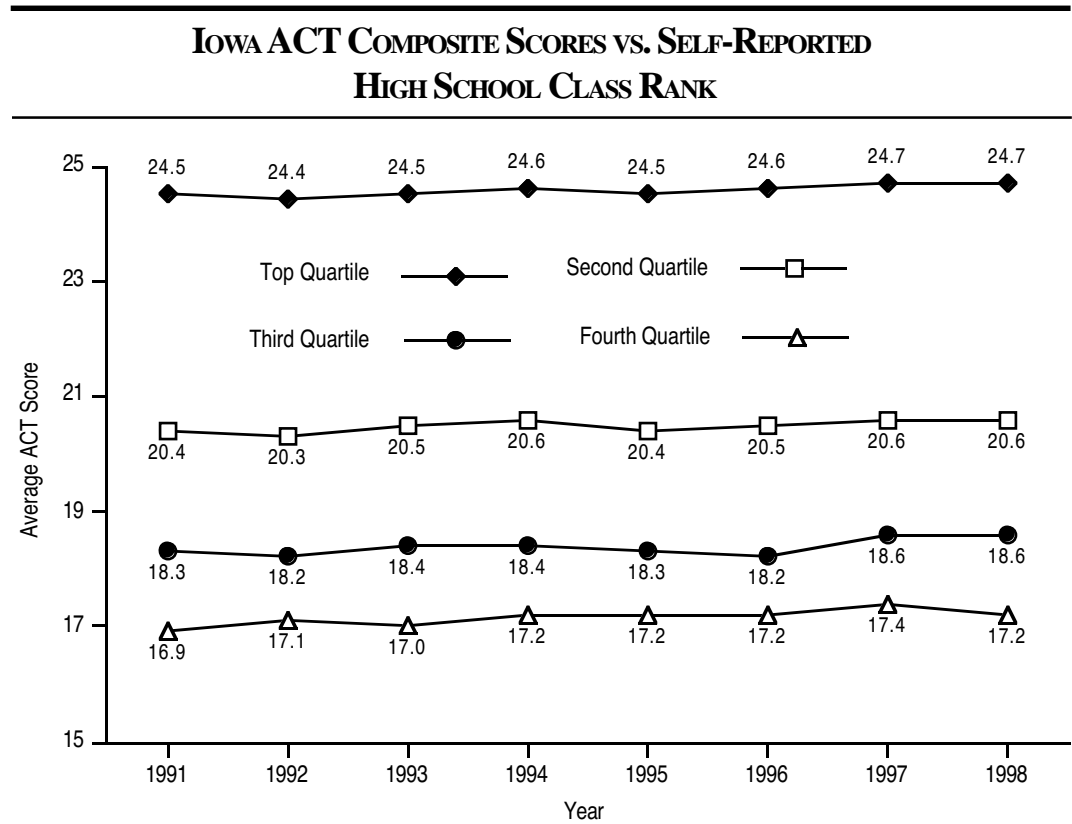
Average ACT scores of Iowa high school students are presented in Table 59 and Figure 32, along with student reported high school grade point averages (GPA) and self-reported class rank. As in previous years, students with the highest self-estimated GPAs also had the highest average composite scores. This also held true for each of the four ACT tests which comprise the composite scores; English, mathematics, reading, and science reasoning. For each successively higher GPA category all component scores of the ACT reflected increases. Similar relationships were found between average ACT composite scores and self-reported high school class ranks (Figure 32).

**Table 59**

GPA	Number	Percent	Average ACT Scores				
			English	Math	Reading	Science Reasoning	Composite
3.5+	9,523	41.3%	24.6	25.1	25.5	24.8	25.1
3.0 - 3.49	6,347	27.5	20.9	21.3	21.6	21.9	21.5
2.5 - 2.99	4,291	18.6	19.0	19.3	19.8	20.4	19.7
2.0 - 2.49	2,339	10.1	17.2	18.0	18.0	19.1	18.2
<2.0	585	2.5	16.0	16.8	16.7	18.0	17.0

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORT FOR IOWA, 1998.

**Figure 32**



SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORT FOR IOWA, 1991-1998.

## ACT Scores by Planned Educational Majors

ACT test takers are asked to specify their planned college major when they take the ACT. Figures are presented in Table 60, comparing composite ACT scores for Iowa students by planned college majors. For nine categories of planned majors, students intending to pursue majors in mathematics, engineering, and science ranked first, second, and third, respectively, across most years when composite ACT scores were compared.

For the nation, the top three categories were also mathematics, science, and engineering. Although, students with planned majors in science ranked second and students with planned majors in engineering ranked third. Students with planned majors in teacher education and education ranked sixth and seventh respectively for the nine planned major categories shown for all years compared, for both Iowa and the nation.

**Table 60**

<b>ACT COMPOSITE SCORES BY PLANNED EDUCATIONAL MAJORS</b>										
Planned Major		1990	1991	1992	1993	1994	1995	1996	1997	1998
Education <sup>1</sup>	<b>Iowa</b>	<b>21.0</b>	<b>21.0</b>	<b>20.7</b>	<b>20.9</b>	<b>21.1</b>	<b>20.8</b>	<b>20.8</b>	<b>21.0</b>	<b>21.2</b>
	Nation	20.0	20.0	20.0	20.1	20.1	20.1	20.1	20.2	20.3
Teacher Education <sup>2</sup>	<b>Iowa</b>	<b>20.7</b>	<b>21.3</b>	<b>21.0</b>	<b>21.1</b>	<b>21.1</b>	<b>21.0</b>	<b>21.3</b>	<b>21.3</b>	<b>21.6</b>
	Nation	19.7	20.0	20.0	20.1	20.1	20.1	20.2	20.3	20.4
Computer and Information Science	<b>Iowa</b>	<b>22.3</b>	<b>22.1</b>	<b>22.0</b>	<b>22.1</b>	<b>22.6</b>	<b>22.5</b>	<b>22.8</b>	<b>22.9</b>	<b>23.1</b>
	Nation	20.1	20.0	20.0	20.3	20.5	20.8	20.9	21.1	21.4
Engineering	<b>Iowa</b>	<b>24.9</b>	<b>24.4</b>	<b>24.4</b>	<b>24.8</b>	<b>24.7</b>	<b>24.7</b>	<b>24.6</b>	<b>24.8</b>	<b>24.7</b>
	Nation	23.0	22.9	22.9	23.0	22.9	22.8	22.7	22.9	22.8
Mathematics	<b>Iowa</b>	<b>26.0</b>	<b>25.1</b>	<b>25.2</b>	<b>24.8</b>	<b>25.7</b>	<b>25.1</b>	<b>25.2</b>	<b>25.8</b>	<b>25.7</b>
	Nation	24.1	24.0	23.9	24.0	24.1	24.1	24.2	24.3	24.4
Science	<b>Iowa</b>	<b>24.5</b>	<b>23.9</b>	<b>24.6</b>	<b>24.2</b>	<b>24.3</b>	<b>24.2</b>	<b>23.9</b>	<b>24.2</b>	<b>24.3</b>
	Nation	23.4	23.3	23.3	23.3	23.3	23.3	23.4	23.5	23.5
Social Science	<b>Iowa</b>	<b>22.9</b>	<b>22.6</b>	<b>22.7</b>	<b>22.7</b>	<b>22.6</b>	<b>22.7</b>	<b>22.8</b>	<b>22.9</b>	<b>23.1</b>
	Nation	21.6	21.5	21.5	21.5	21.6	21.6	21.7	21.8	22.0
Agriculture & Ag. Tech.	<b>Iowa</b>	<b>20.3</b>	<b>20.0</b>	<b>19.8</b>	<b>20.1</b>	<b>20.2</b>	<b>20.3</b>	<b>20.4</b>	<b>20.4</b>	<b>20.6</b>
	Nation	19.5	19.0	19.0	19.2	19.2	19.2	19.4	19.5	19.4
Marketing	<b>Iowa</b>	<b>19.1</b>	<b>18.7</b>	<b>19.1</b>	<b>19.2</b>	<b>19.7</b>	<b>19.3</b>	<b>19.4</b>	<b>19.8</b>	<b>20.2</b>
	Nation	19.0	18.7	18.6	18.6	18.7	18.8	19.0	19.2	19.4

SOURCE: AMERICAN COLLEGE TESTING PROGRAM, THE HIGH SCHOOL PROFILE REPORTS FOR IOWA.

NOTES: <sup>1</sup>THE CATEGORY OF EDUCATION ENCOMPASSES SPECIFIC LEVELS OF EDUCATIONAL PURSUITS SUCH AS ADULT, PRE-ELEMENTARY, AND SECONDARY EDUCATION, AS WELL AS ADMINISTRATION, COUNSELING, AND TEACHER AIDES.

<sup>2</sup>THE CATEGORY OF TEACHER EDUCATION ENCOMPASSES SPECIFIC AREAS OF TEACHING SUCH AS ART, MUSIC, SCIENCE, MATHEMATICS, AND ENGLISH AS A SECOND LANGUAGE.

## Scholastic Assessment Tests (SAT)

The Scholastic Assessment Test (SAT) is produced and published by the College Board. The SAT, like the ACT is a college entrance examination taken by a small percentage of Iowa graduates. Although the College Board publishes two tests, SAT I and SAT II, the information presented in the *Condition of Education Report* is taken from SAT I, the reasoning test. SAT I provides both verbal and mathematics scores. Scores range in value from 200 to 800.

Compared to the ACT examination, which was taken by 65 percent of Iowa graduates, the SAT was taken by only 1,868 students in the 1997-98 school year (Table 61). Although the number of Iowa students taking the SAT has increased slightly over the period from 1991-92 to 1997-98, the percentage of Iowa graduates taking the SAT remains at only about five percent. This is primarily due to the fact that the majority of Iowa high school graduates attend Iowa colleges, universities, and community colleges; or other colleges and universities in the midwest, which require ACT scores for admission.

**Table 61**

### NUMBER OF IOWA SAT TEST-TAKERS BY GENDER 1991-92 TO 1997-98

Year	Total	Male		Female	
		N	%	N	%
1991-92	1,625	839	51.6%	786	48.4%
1992-93	1,556	742	47.7	814	52.3
1993-94	1,700	815	47.9	885	52.1
1994-95	1,695	788	46.5	907	53.5
1995-96	1,776	851	47.9	925	52.1
1996-97	1,971	993	50.4	978	49.6
1997-98	1,868	875	46.8	993	53.2

SOURCE: THE COLLEGE BOARD, 1998 PROFILE OF SAT PROGRAM TEST-TAKERS.

Table 61 reports the number and gender distribution of Iowa SAT test-takers for the period from 1991-92 through 1997-98. In general, since 1992-93, a higher percentage of Iowa SAT test-takers were females.

A twelve year comparison of SAT verbal and mathematics scores for Iowa and the nation are presented in Table 62 and Figure 33. The national scores of SAT test-takers in 1997-98 were based on 43 percent of the 1998 graduates taking the SAT. Average SAT scores for Iowa students for both the verbal and mathematics tests were substantially higher than average scores for the nation. Iowa average scores on the verbal test increased in 1997-98, from the previous year, and equaled the 1992-93 high of 593, while average mathematics scores remained unchanged from the previous year at the high of 601.

**Table 62**

**TWELVE-YEAR TRENDS OF AVERAGE SAT  
SCORES FOR IOWA AND THE NATION, 1987-1998**

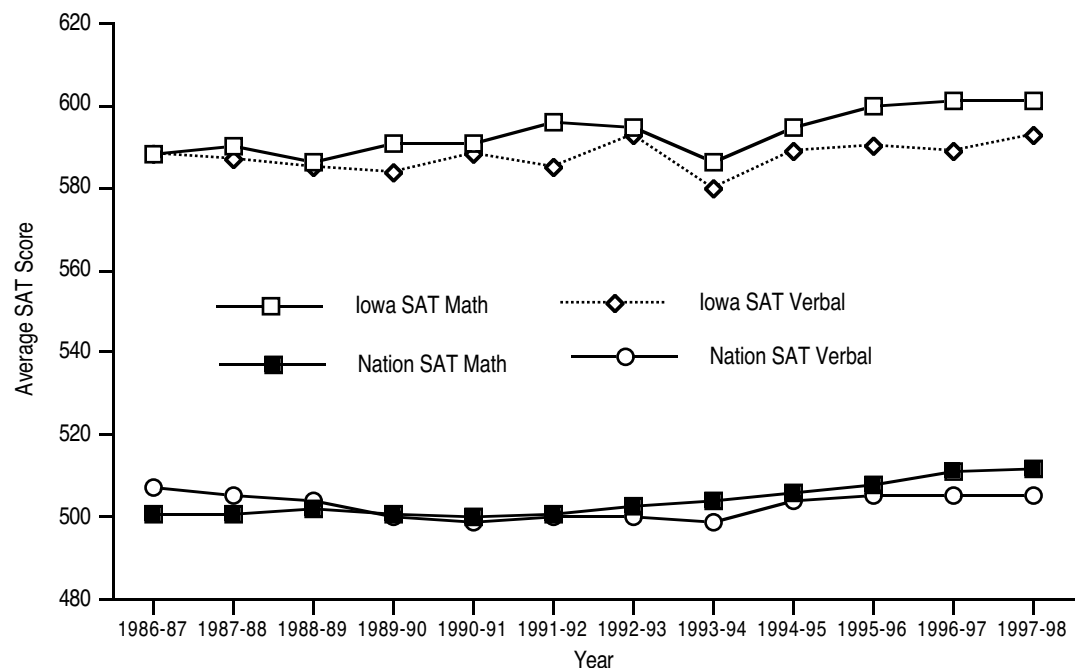
Year	SAT Verbal		SAT Math	
	Iowa	Nation	Iowa	Nation
1986-87	588	507	588	501
1987-88	587	505	590	501
1988-89	585	504	586	502
1989-90	584	500	591	501
1990-91	588	499	591	500
1991-92	585	500	596	501
1992-93	593	500	595	503
1993-94	580	499	586	504
1994-95	589	504	595	506
1995-96	590	505	600	508
1996-97	589	505	601	511
1997-98	593	505	601	512

SOURCE: THE COLLEGE BOARD, 1998 PROFILE OF SAT PROGRAM TEST TAKERS.

NOTE: THE IOWA PARTICIPATION RATE IN SAT FOR THE CLASS OF 1998 WAS 5.1 PERCENT.

**Figure 33**

**TWELVE-YEAR TRENDS OF SAT SCORES FOR IOWA AND THE NATION**



SOURCE: THE COLLEGE BOARD, 1998 PROFILE OF SAT PROGRAM TEST TAKERS.

NOTE: THE IOWA PARTICIPATION RATE IN SAT FOR THE CLASS OF 1998 WAS 5.1 PERCENT.

A comparison of average SAT scores for Iowa and other midwest states is presented in Table 63. Data are presented for the years 1988, and 1995 through 1998. For all years presented, Iowa students had the highest average verbal and mathematics scores in all but two years, ranking second to North Dakota in 1995 on the mathematics test and in 1996 on the verbal test.

**Table 63**

**AVERAGE SAT SCORES FOR  
IOWA, THE NATION AND MIDWEST STATES  
1988, 1995-98**

Nation and State	1988		1995		1996		1997		1998		% of Graduates Taking SAT
	V	M	V	M	V	M	V	M	V	M	
Iowa	587	588	589	595	590	600	589	601	593	601	5 %
Nation	505	501	504	506	505	508	505	511	505	512	43
Illinois	540	540	563	574	564	575	562	578	564	581	13
Kansas	568	557	576	571	579	571	578	575	582	585	9
Minnesota	546	549	580	591	582	593	582	592	585	598	9
Missouri	547	539	569	566	570	569	567	568	570	573	8
Nebraska	562	561	568	570	567	568	562	564	565	571	8
North Dakota	572	569	587	602	596	599	588	595	590	599	5
South Dakota	585	573	579	576	574	566	574	570	584	581	5
Wisconsin	549	551	574	585	577	586	579	590	581	594	7
<b>Iowa Rank in Nation</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	

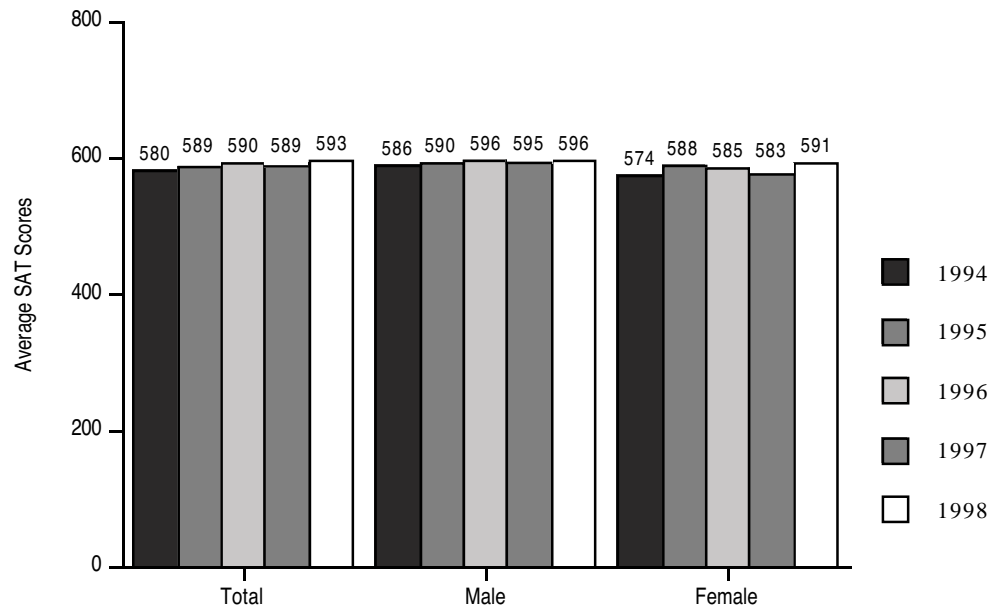
SOURCE: THE COLLEGE BOARD, 1998 PROFILE OF SAT PROGRAM TEST-TAKERS.

Figures 34 and 35 reflect average SAT verbal and mathematics scores of Iowa test-takers by gender over the past five years. The data reflect that males scored higher across the period on both verbal and mathematics tests. Score differences between males and females were substantially greater in mathematics than on the verbal test. Score differences between males and females on both the verbal and mathematics

tests were less in 1998 than in 1994. Both males and females realized gains in verbal and mathematics scores across the time period for which comparisons were made.

**Figure 34**

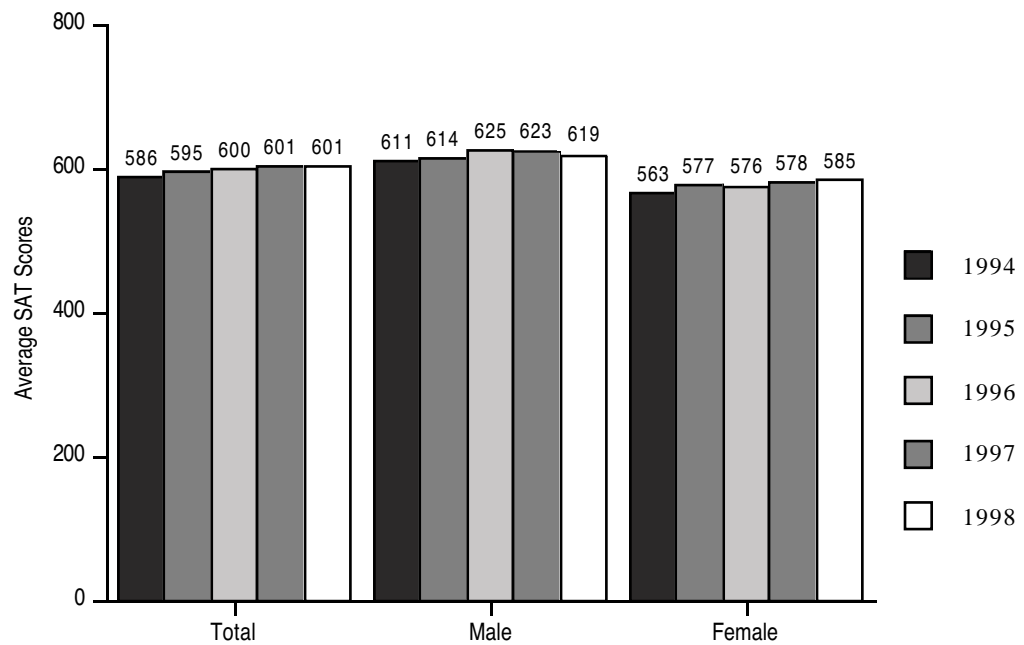
**IOWA SAT AVERAGE VERBAL SCORES BY GENDER**



SOURCE: THE COLLEGE BOARD, 1998 PROFILE OF SAT PROGRAM TEST TAKERS.  
 NOTE: THE IOWA PARTICIPATION RATE IN SAT FOR THE CLASS OF 1998 WAS 5.1 PERCENT.

**Figure 35**

**IOWA SAT AVERAGE MATHEMATICS SCORES BY GENDER**



SOURCE: THE COLLEGE BOARD, 1998 PROFILE OF SAT PROGRAM TEST TAKERS.  
 NOTE: THE IOWA PARTICIPATION RATE IN SAT FOR THE CLASS OF 1998 WAS 5.1 PERCENT.

## Advanced Placement

The Advanced Placement (AP) Program, administered by the College Board, provides students with the opportunity to acquire college credits for completing AP courses while in high school. AP scores awarded are based on a five-point scale: a score of five (5) indicates a student is extremely well qualified; four (4) indicates well qualified; three (3) indicates qualified; two (2) is interpreted as possibly qualified; and one (1) carries no recommendation.

Nationwide AP participation has increased from nearly 624,000 students in 1993 to almost 900,000 in 1997 (Table 64). Average AP scores for Iowa students continue to exceed average AP scores for the nation. The number of Iowa students involved in AP has increased more than fourfold since 1988 (Table 65). The average percentage increase in the number of Iowa students participating in AP was in excess of 15 percent over the past three years. Nearly 53 percent of the nation's high schools participated in the AP Program in 1997, up from 44 percent in 1991. Over the same time period AP participation in Iowa increased from a participation rate of 18 percent of schools in 1991 to 31.9 percent of schools in 1997 (Table 66).

**Table 64**

<b>AVERAGE ADVANCED PLACEMENT EXAMINATION SCORES FOR ALL CANDIDATES — 1993 TO 1997</b>										
	Year									
	1993		1994		1995		1996		1997	
	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score	Total Exams Taken	Average AP Score
Iowa	2,788	3.13	3,037	3.27	3,627	3.11	4,112	3.14	4,647	3.11
Nation	623,933	3.00	684,449	3.06	767,881	2.96	824,329	2.99	899,463	3.02

SOURCE: THE COLLEGE BOARD, ADVANCED PLACEMENT PROGRAM, IOWA AND NATIONAL SUMMARY REPORTS, 1993 TO 1997.

**Table 65**

<b>NUMBER OF AP EXAMINATIONS TAKEN BY IOWA STUDENTS, 1988-1997</b>		
Year	Number of Exams	Percent Increase from Prior Year
1988	1,059	—
1989	1,221	15.3
1990	1,797	47.2
1991	2,023	12.6
1992	2,289	13.1
1993	2,788	21.8
1994	3,037	8.9
1995	3,627	19.4
1996	4,112	13.4
1997	4,647	13.0

SOURCE: THE COLLEGE BOARD, ADVANCED PLACEMENT PROGRAM, IOWA SUMMARY REPORTS, 1997.



**Table 66**

**PERCENT OF TOTAL SCHOOLS PARTICIPATING IN ADVANCED PLACEMENT**

Rank Based on 1997 Data	State	Year						
		1997	1996	1995	1994	1993	1992	1991
1	New Jersey	85.0	85	83	80	78	77	75
2	District of Columbia	82.5	100	100	78	81	76	97
3	Connecticut	82.1	84	80	78	78	77	77
4	Massachusetts	80.4	80	78	78	75	74	73
5	Vermont	74.7	66	66	61	65	61	56
6	New York	73.7	72	71	69	68	66	65
7	Utah	73.0	70	70	74	68	69	63
8	Rhode Island	72.6	74	73	68	63	66	59
9	Maryland	72.5	71	69	72	69	68	68
10	New Hampshire	71.2	68	69	62	60	58	53
11	South Carolina	70.6	70	70	67	66	65	65
12	Hawaii	69.9	68	65	65	72	68	65
13	Virginia	69.4	70	68	69	69	67	66
14	California	68.9	69	66	65	64	63	60
15	North Carolina	63.9	64	64	67	67	60	57
16	Kentucky	62.5	62	58	60	59	58	53
17	Pennsylvania	60.9	60	56	53	52	51	48
18.5	Ohio	58.5	58	56	53	54	53	51
18.5	Maine	58.5	58	54	56	53	50	45
20	Georgia	57.8	59	59	61	60	53	49
21	West Virginia	57.5	63	64	60	59	59	55
22	Wisconsin	56.9	56	52	52	47	46	36
23	Florida	56.8	57	55	55	55	52	52
24	Indiana	56.4	55	55	57	53	49	45
25	Texas	56.3	51	45	38	35	32	29
26	Michigan	53.1	52	50	51	51	48	47
	<b>United States</b>	<b>52.9</b>	<b>52</b>	<b>50</b>	<b>49</b>	<b>48</b>	<b>46</b>	<b>44</b>
27	Washington	52.8	53	48	47	48	50	48
28.5	Nevada	52.2	56	53	52	52	48	44
28.5	Illinois	52.2	50	49	47	45	44	42
30	Tennessee	50.2	50	47	45	45	43	44
31	Colorado	47.9	50	50	47	47	44	43
32	Delaware	46.8	46	42	62	62	58	58
33	Arizona	46.6	57	51	55	55	54	52
34	Minnesota	43.1	44	42	35	34	30	30
35	Idaho	42.8	39	41	37	40	35	37
36	Oregon	42.5	44	45	44	45	44	40
37	Alabama	41.9	44	45	45	46	46	45
38	New Mexico	39.0	42	40	39	34	31	28
39	Mississippi	36.4	38	33	34	30	31	31
40	Montana	35.0	31	31	28	27	26	22
<b>41</b>	<b>Iowa</b>	<b>31.9</b>	<b>29</b>	<b>30</b>	<b>27</b>	<b>25</b>	<b>22</b>	<b>18</b>
42	Wyoming	30.4	30	30	34	34	33	31
43	Arkansas	30.2	27	22	23	21	20	19
44	Missouri	24.9	26	26	24	20	19	20
45	Louisiana	23.9	24	25	24	24	23	21
46	Kansas	22.8	24	25	22	20	20	18
47	Nebraska	21.7	19	22	20	21	20	18
48	Oklahoma	18.0	16	17	17	15	15	16
49	South Dakota	15.9	14	19	9	9	7	12
50	Alaska	11.7	12	12	13	12	10	10
51	North Dakota	7.4	7	5	5	5	5	4

SOURCE: THE COLLEGE BOARD, ADVANCED PLACEMENT PROGRAM, NATIONAL SUMMARY REPORTS, 1991-1997.

In terms of the number of Advanced Placement exams taken per 1,000 eleventh and twelfth graders, Iowa ranked 44th in 1997 with 53 exams taken per 1,000 eleventh and twelfth graders, up from 27 per 1,000 in 1991. Nationally, 139 exams per 1,000 eleventh and twelfth grade students were taken in 1997, up from 89 exams per 1,000 in 1991 (Table 67). The number of AP exams taken by Iowa students has increased nearly 67 percent since 1993, compared to an increase of about 44 percent for the nation (Table 64).

**Table 67**

**NUMBER OF ADVANCED PLACEMENT EXAMS PER 1,000 11TH & 12TH GRADERS**

Rank Based on 1997 Data	State	Year						
		1997	1996	1995	1994	1993	1992	1991
1	District of Columbia	331	277	249	251	222	220	283
2	Virginia	241	227	221	209	184	170	161
3	New York	237	218	195	192	180	170	157
4	Utah	232	221	229	239	215	211	193
5.5	California	206	195	178	167	157	146	139
5.5	New Jersey	206	195	163	155	143	136	121
7	Massachusetts	202	180	162	153	145	134	121
8	Maryland	201	188	177	164	157	145	135
9	Connecticut	188	171	152	144	138	134	123
10	South Carolina	184	178	171	165	152	141	130
11	Florida	183	197	190	189	171	181	156
12	North Carolina	178	167	170	145	119	95	81
13	Delaware	168	155	136	132	135	120	103
14	Hawaii	142	129	140	136	127	129	118
	<b>United States</b>	<b>139</b>	<b>130</b>	<b>122</b>	<b>116</b>	<b>106</b>	<b>98</b>	<b>89</b>
15.5	Illinois	136	130	122	115	106	101	90
15.5	Texas	136	115	103	82	69	57	52
17	Colorado	131	124	119	122	121	123	115
18	New Hampshire	127	122	111	95	91	83	74
19	Maine	125	104	96	84	80	71	63
20.1	Rhode Island	122	118	104	98	90	89	86
20.1	Georgia	122	110	144	154	125	85	77
22	Pennsylvania	110	102	91	90	86	79	72
23	Alaska	108	101	91	97	103	98	94
24.5	Michigan	107	105	91	84	82	76	70
24.5	Vermont	107	94	87	102	94	84	82
26	Wisconsin	106	96	85	74	64	48	39
27	Arizona	102	98	92	105	94	85	66
28	Nevada	100	103	101	97	87	80	80
29	Tennessee	97	94	88	89	80	74	70
30	Ohio	96	88	83	72	68	63	55
31.5	Alabama	94	88	88	81	73	70	62
31.5	Kentucky	94	86	79	78	74	69	59
33	Indiana	89	97	92	84	68	59	50
34.5	New Mexico	80	76	74	78	74	80	72
34.5	Minnesota	80	75	77	51	46	40	35
36	Washington	74	63	57	60	58	57	54
37	West Virginia	72	68	68	62	58	55	48
38	Oregon	70	58	60	65	65	65	61
39	Montana	64	63	52	51	44	44	41
40	Idaho	60	46	50	56	52	47	44
41	Mississippi	58	54	48	45	39	38	36
42	Oklahoma	56	49	45	51	48	42	37
43	Arkansas	54	42	41	37	32	29	29
<b>44</b>	<b>Iowa</b>	<b>53</b>	<b>48</b>	<b>44</b>	<b>39</b>	<b>37</b>	<b>31</b>	<b>27</b>
45	Missouri	51	48	47	47	44	38	34
46	Nebraska	49	44	48	46	47	41	39
47.5	Kansas	48	47	41	40	38	35	36
47.5	South Dakota	48	37	35	23	24	18	18
49	Louisiana	39	38	36	39	37	34	34
50	Wyoming	30	34	45	48	42	42	33
51	North Dakota	28	32	24	21	19	19	19

SOURCE: THE COLLEGE BOARD, ADVANCED PLACEMENT PROGRAM, NATIONAL SUMMARY REPORTS, 1991-1997.

## Linking the 1995 Third International Mathematics and Science Study (TIMSS) and the 1996 National Assessment of Educational Progress (NAEP)

The third International Mathematics and Science Study (TIMSS), conducted in 1995, was the largest, most comprehensive, and most ambitious international study of schools and student achievement ever undertaken. The international project involved the testing of more than a half-million students in mathematics and science at several different grade levels in 41 countries.

In 1996, National Assessment of Educational Progress (NAEP) assessed mathematics and science in the United States as a whole. State-level NAEP mathematics and science results are available for grade 8 public school students in 44 states and jurisdictions. When eighth grade mathematics from the 1996 NAEP and the 1995 TIMSS were linked, only Singapore, Korea, Japan, Hong Kong, Belgium-Flemish, and the Czech Republic ranked higher than Iowa. Along with students in Maine, Minnesota, North Dakota, Montana, Nebraska, and Wisconsin, Iowa students performed better than the other thirty-five countries that also participated in the TIMSS and the other thirty-seven states and jurisdictions that participated in the NAEP (Table 68).

When eighth grade science from the 1996 NAEP and the 1995 TIMSS were linked, Singapore ranked number one. Iowa was ranked second and above the other forty countries that took the TIMSS. Maine, North Dakota, Montana, Wisconsin, Minnesota, and eight other American states and a jurisdiction were also in the same group with Iowa.

**Table 68**

### RANKS OF MATHEMATICS AND SCIENCE FOR 8TH GRADE STUDENTS BY COUNTRY, STATE AND JURISDICTION

Mathematics, eighth grade		Science, eighth grade	
Rank	Countries and States	Rank	Countries, States and Jurisdiction
1	Singapore	1	Singapore
2	Korea	2	Maine
3	Japan		North Dakota
4	Hong Kong		Montana
5	Belgium-Flemish		Wisconsin
6	Czech Republic		Minnesota
7	<b>IOWA</b>		<b>IOWA</b>
	Maine		Wyoming
	Minnesota		Nebraska
	North Dakota		Vermont
	Montana		Massachusetts
	Nebraska		Utah
	Wisconsin		Connecticut
			DoDDS*
			Oregon
			Colorado
		3	Czech Republic
		4	Japan

SOURCE: LINKING THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP) AND THE THIRD INTERNATIONAL MATHEMATICS AND SCIENCE STUDY (TIMSS): NATIONAL CENTER FOR EDUCATION STATISTICS, A TECHNICAL REPORT, 1998.

NOTES: \*ORGANIZATION FOR THE OVERSEAS HIGH SCHOOLS FOR DEPENDENTS OF MILITARY AND STATE DEPARTMENT PERSONNEL. DATA FOR COUNTRIES IS BASED ON 1995 TIMSS SCORES AND DATA FOR STATES AND JURISDICTIONS IS BASED ON 1996 NAEP SCORES.

## Postsecondary Enrollment Options

With the implementation of the Postsecondary Enrollment Options Act, Iowa students had the ability to earn college credit for courses taken while in high school. Comparisons of enrollments and courses taken, by institution, are reflected in Tables 69 and 70. The enrollment of Iowa juniors and seniors in postsecondary options courses has increased from 2,187 in 1992-93 to 4,501 in 1996-97, an increase of about 106 percent. The number of courses taken by Iowa students under the Postsecondary Enrollment Options Act was up more than 120 percent over the same period.

**Table 69**

<b>1992-1993 IOWA POSTSECONDARY ENROLLMENT OPTIONS ACT ENROLLMENT BY TYPE OF INSTITUTION AND TYPE OF COURSE</b>									
INSTITUTION	ENROLLMENTS			NUMBER OF COURSES TAKEN DURING THE YEAR					
	JUNIORS	SENIORS	JUNIOR-SENIOR TOTAL	MATH	SCIENCE	SOCIAL SCIENCE	HUMANITIES	CAREER OPTIONS	VOCATIONAL TECHNICAL
REGENTS INSTITUTION	28	120	148	63	38	56	88	4	5
COMMUNITY COLLEGE	311	1,416	1,727	243	217	738	901	210	247
PRIVATE 4 YR. COLLEGE	39	267	306	54	30	135	163	19	7
PRIVATE 2 YR. COLLEGE		6	6	8			2		1
TOTALS <sup>1</sup>	378	1,809	2,187	368	285	929	1,154	233	260

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POSTSECONDARY ENROLLMENT OPTIONS FILE, 1992-93.

NOTE: <sup>1</sup>EXCLUDED FROM TOTAL ENROLLMENTS ARE 32 FRESHMEN AND SOPHOMORES.

**Table 70**

<b>1996-97 IOWA POSTSECONDARY ENROLLMENT OPTIONS ACT ENROLLMENT BY TYPE OF INSTITUTION AND TYPE OF COURSE</b>									
INSTITUTION	ENROLLMENTS			NUMBER OF COURSES TAKEN DURING THE YEAR					
	JUNIORS	SENIORS	JUNIOR-SENIOR TOTAL	MATH	SCIENCE	SOCIAL SCIENCE	HUMANITIES	CAREER OPTIONS	VOCATIONAL TECHNICAL
REGENTS INSTITUTION	151	298	449	116	123	181	283	82	38
COMMUNITY COLLEGE	694	2,706	3,400	468	441	1,586	1,691	558	656
PRIVATE 4 YR. COLLEGE	73	505	578	135	94	263	224	29	11
PRIVATE 2 YR. COLLEGE	18	56	74	37	5	26	55	2	21
TOTALS <sup>1</sup>	936	3,565	4,501	756	663	2,056	2,253	671	726

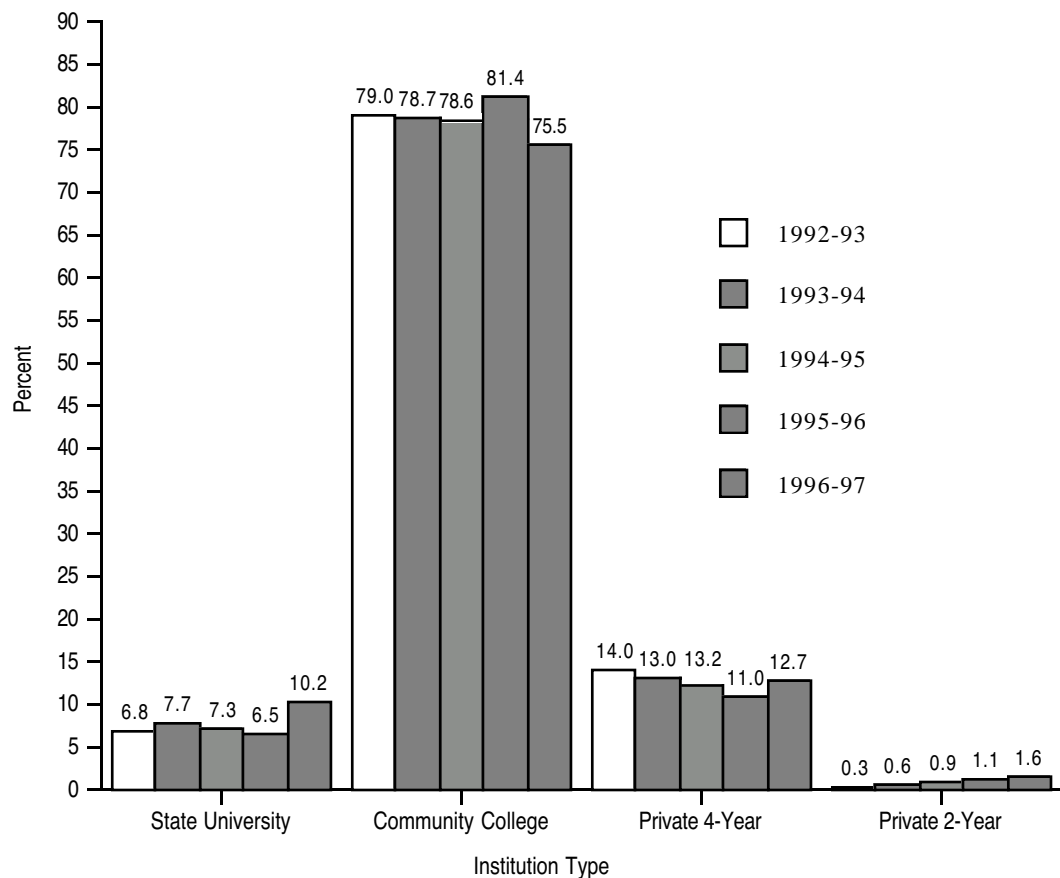
SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POSTSECONDARY ENROLLMENT OPTIONS FILE, 1996-97.

NOTE: <sup>1</sup>EXCLUDED FROM TOTAL ENROLLMENTS ARE 76 FRESHMEN AND SOPHOMORES.

Figure 36 reflects the percentage growth in postsecondary enrollment options, enrollments by type of institution. As indicated in Figure 36, more than three-fourths of all enrollments were recorded by community colleges in 1996-97. The remaining 25 percent of enrollments were, for the most part, divided between four-year private institutions 12.7 percent; and Regents institutions, 10.2 percent.

**Figure 36**

**PERCENTAGE DISTRIBUTION OF POSTSECONDARY ENROLLMENT OPTIONS  
ENROLLMENTS 1992-93 TO 1996-97**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, POSTSECONDARY ENROLLMENT OPTIONS FILES, 1992-93 TO 1996-97.

For the 1996-97 school year, the percentage of postsecondary enrollment options enrollments was down by nearly six percentage points for community colleges over the previous school year. This represented the lowest percentage for the five-year period shown. In contrast, postsecondary enrollment options enrollments at Regents institutions were up nearly four percentage points over the 1995-96 school year, and were at their highest level for the five-year period.

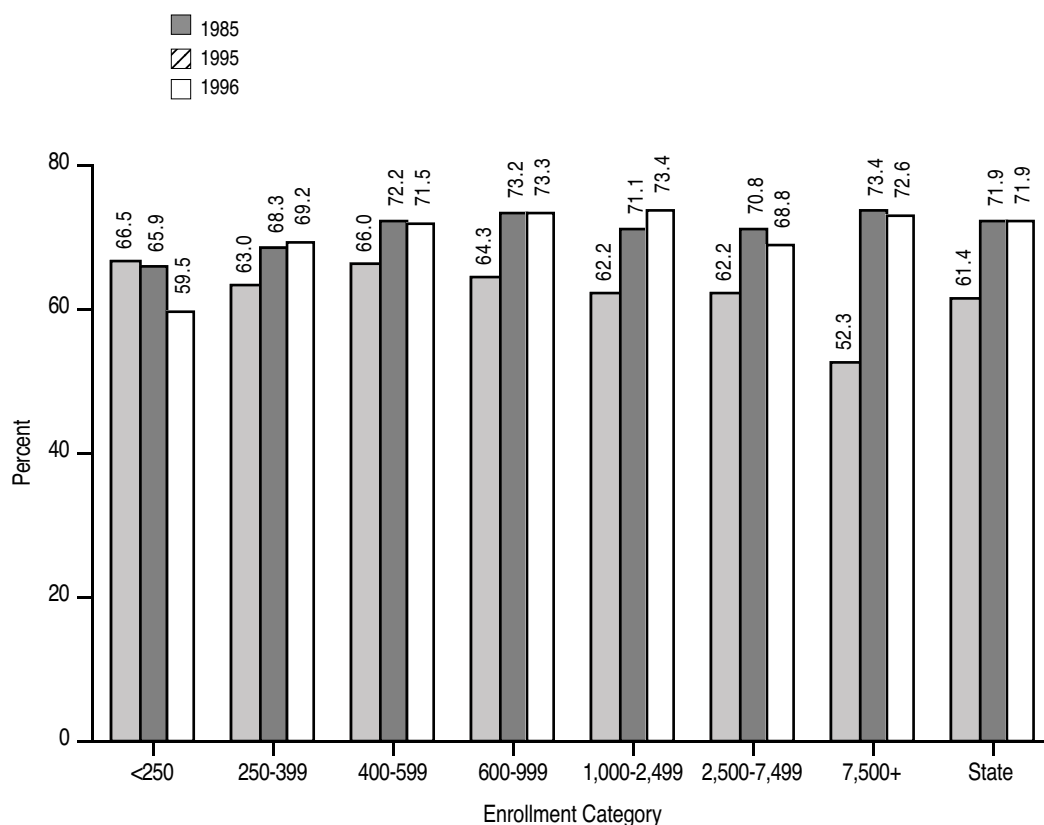
## Pursuit of Postsecondary Education/Training

The percentage of high school graduates pursuing postsecondary education/training by enrollment category is reported in Figure 37. Percentages are presented for three years, graduating classes 1985, 1995, and 1996. Statewide, the percentage of Iowa high school graduates pursuing postsecondary education/training has increased from 61.4 percent in the 1985 graduating class, to 71.9 percent for the graduating class of 1995. No change was reflected for the class of 1996 from the 1995 figure, on a statewide basis.

Only the smallest enrollment category experienced a decrease in the percent of students seeking postsecondary education/training in 1985 compared to 1996. The 1996 range in the percentages of graduates pursuing some type of postsecondary education/training was from 59.5 percent in districts with enrollments under 250 to 73.4 percent in districts with enrollments of 1,000-2,499.

**Figure 37**

**PERCENT OF IOWA PUBLIC SCHOOL GRADUATES PURSUING POSTSECONDARY EDUCATION/TRAINING, GRADUATING CLASSES OF 1985, 1995 AND 1996 BY ENROLLMENT CATEGORY**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, GRADUATE FOLLOW-UP FILES.

Table 71 reflects the distribution of graduates pursuing postsecondary education/training for 1985 and comparative figures for 1996. In 1985, 23.3 percent of graduates were reported as attending public four-year colleges, compared to 18.2 percent attending community colleges. In 1996, attendance at four-year public colleges increased to 25.3 percent, while attendance at community colleges increased to 28.3 percent.

**Table 71**

**IOWA PUBLIC SCHOOL GRADUATES STATUS ONE YEAR  
AFTER GRADUATION BY POSTSECONDARY INSTITUTION  
1985 GRADUATES VS 1996 GRADUATES**

Postsecondary Institution	Number of Students		Percent of Total Graduates	
	1985	1996	1985	1996
Private 4-Year College	4,236	4,203	12.3	13.3
Public 4-Year College	8,061	7,971	23.3	25.3
Community College	6,295	8,905	18.2	28.3
Private 2-Year College	488	381	1.4	1.2
Technical/Trade School	2,113	1,088	6.1	3.5
Apprentice Training	39	104	.1	0.3
Total	21,232	22,648	61.4	71.9

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, GRADUATE FOLLOW-UP FILES.

Table 72 compares the number and percent of graduates attending four-year and two-year colleges for the years 1985 through 1996. The percentage of students attending four-year colleges has increased by just over three percentage points over the period while the percentage of graduates attending two-year colleges increased by nearly ten percentage points (Figure 38).

**Table 72**

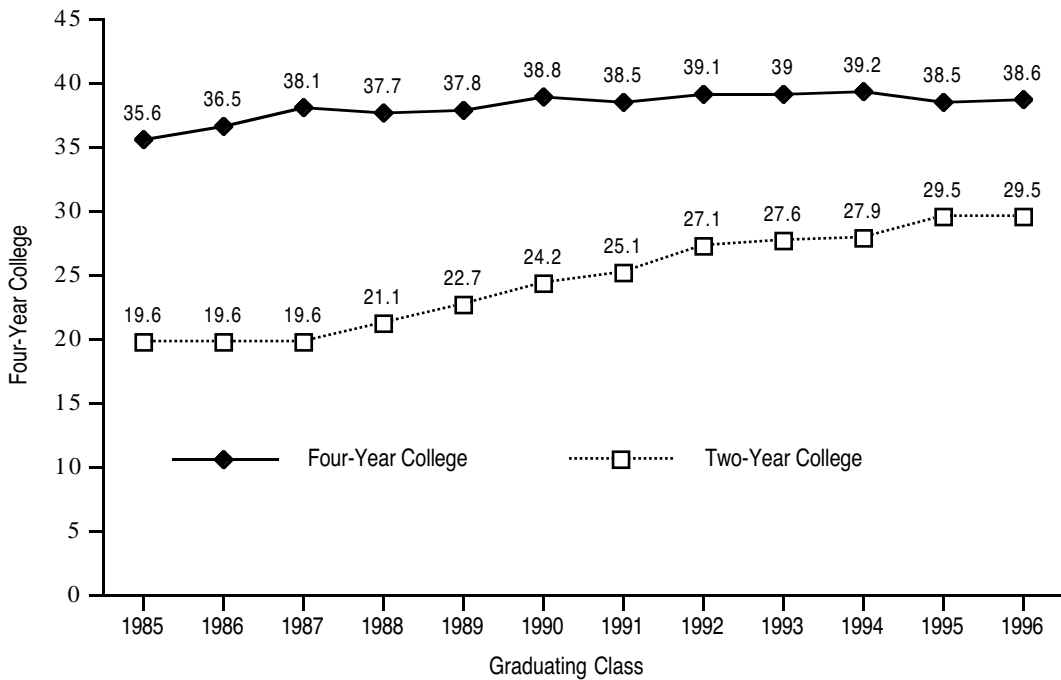
**PERCENT OF IOWA PUBLIC SCHOOL GRADUATES  
ENROLLED IN FOUR-YEAR AND TWO-YEAR COLLEGES**

Postsecondary Institution	Graduating Class											
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
4-Year Total	12,297	12,264	13,065	13,004	12,587	11,958	11,129	11,445	11,509	11,610	11,957	12,174
College Percent	35.6%	36.5%	38.1%	37.7%	37.8%	38.8%	38.5%	39.1%	39.0%	39.2%	38.5%	38.6%
2-Year Total	6,783	6,583	6,737	7,274	7,564	7,463	7,258	7,946	8,162	8,269	9,156	9,286
College Percent	19.6%	19.6%	19.6%	21.1%	22.7%	24.2%	25.1%	27.1%	27.6%	27.9%	29.5%	29.5%

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, GRADUATE FOLLOW-UP FILES.

Figure 38

**PERCENT OF IOWA PUBLIC HIGH SCHOOL GRADUATES ATTENDING  
FOUR-YEAR AND TWO-YEAR COLLEGES  
GRADUATING CLASSES 1985 TO 1996**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, GRADUATE FOLLOW-UP FILES.

## Dropouts

A dropout is defined on the Department of Education's Basic Educational Data Survey as any student in grades seven through twelve who has not graduated from high school or has failed to complete a school district or state approved education program, and is not enrolled in an education program provided by a public school district.

In general, the dropout rate for Iowa public school students in grades 7-12 has gradually declined since the 1990-91 school year, reaching a low of 2.02 percent in 1996-97 (Figure 39).

Table 73 compares the percent of 7-12 dropouts by racial/ethnic group with the proportion of 7-12 enrollment represented by that group for the years 1993-94 through 1996-97. Three of the four minority groups were over represented in terms of the percentage of total dropouts compared to their representation of enrollment in grades 7-12 for all years reported.

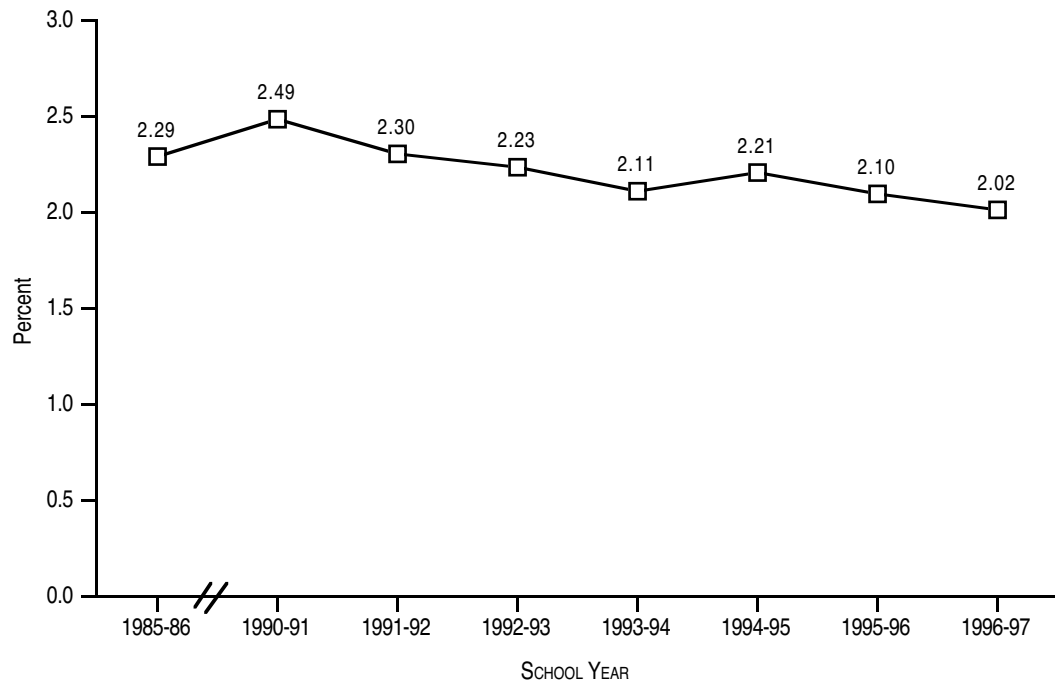
African American students, Hispanic students, and American Indian students represented a disproportionate percentage of 7-12 dropouts compared to their 7-12 en-



rollment representation. The disparity between the percent of Hispanic dropouts and the percent of 7-12 enrollment represented by Hispanics increased from 1993-94 to 1996-97, from 2.3 percentage points to 3.5 percentage points. For African Americans the disparity decreased from 5.4 percentage points to 4.8 percentage points over the same time period.

**Figure 39**

**IOWA GRADE 7-12 DROPOUTS AS A PERCENT OF  
PUBLIC SCHOOL STUDENTS IN GRADES 7-12**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, DROPOUT FILES.

**Table 73**

**PERCENT OF IOWA PUBLIC SCHOOL DROPOUTS BY RACIAL/ETHNIC GROUP  
1993-94 TO 1996-97**

Racial/Ethnic Group	% of Total Dropouts				% of 7-12 Enrollment			
	1993-94	1994-95	1995-96	1996-97	1993-94	1994-95	1995-96	1996-97
White	85.5%	87.8%	83.6%	84.8%	94.2%	94.0%	93.7%	93.4%
African American	8.0	5.6	9.0	7.6	2.6	2.7	2.7	2.8
Hispanic	3.8	4.3	4.6	5.4	1.5	1.5	1.7	1.9
Asian	1.7	1.3	1.6	1.3	1.4	1.4	1.5	1.6
American Indian	1.0	1.0	1.2	0.9	0.3	0.3	0.4	0.3

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, DROPOUT FILES.

The total number of dropouts in grades 7-12 for the 1996-97 school year was reported as 4,668 (Table 74). This was down 167 students from the 1995-96 school year. More than 84 percent of the total dropouts came for districts with enrollments of 1,000 or more students. These same districts accounted for just over 70 percent of the state's 7-12 enrollment. Dropout percentages paralleled the percentages of 7-12 enrollments. Table 74 also reflects the 7-12 dropout distribution by grade level. Historically, the highest percentage of dropouts has been from the eleventh grade. However, in 1996-97, the highest percentage of dropouts, 30.4 percent was from grade 12, followed by 29.5 percent from grade 11, and 23.4 percent from grade 10.

**Table 74**

**TOTAL IOWA PUBLIC SCHOOL DROPOUTS BY ENROLLMENT CATEGORY  
1996-97**

Enrollment Category	Grade Level						Total Dropouts	% of Total Dropouts	% of Enroll 7-12	Drop-Out Percent
	7	8	9	10	11	12				
State	18	29	730	1,094	1,377	1,420	4,668	100%	100%	2.02%
<250	0	0	3	2	3	3	11	0.2	0.6	0.75
250-399	1	1	7	17	26	22	74	1.6	3.3	0.96
400-599	0	4	30	45	66	92	237	5.1	8.9	1.16
600-999	6	8	36	108	136	126	420	9.0	16.9	1.07
1,000-2,499	4	9	128	274	384	354	1,153	24.7	26.5	1.88
2,500-7,499	1	2	202	279	314	317	115	23.9	19.3	2.49
7,500+	6	5	324	369	448	506	1,658	35.5	24.5	2.92

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, DROPOUT FILES.

Table 75 depicts dropouts by gender. In 1996-97, about 57 percent of the 7-12 Iowa dropouts reported were males and about 43 percent were females.

**Table 75**

<b>TOTAL IOWA PUBLIC SCHOOL DROPOUTS BY GENDER 1993-94 AND 1996-97</b>		
	1993-94	1996-97
Female Dropout Percent	1.83%	1.75%
Male Dropout Percent	2.39%	2.27%
Male & Female Overall Dropout Percent	2.11%	2.02%
Female Dropouts as a Percent of Total Dropouts	42.6%	42.6%
Female Enrollment as a Percent of Total Enrollment	49.3%	49.1%

SOURCE: IOWA DEPARTMENT OF EDUCATION, BASIC EDUCATIONAL DATA SURVEY, DROPOUT FILES.

A comparison of high school dropouts in grades 9-12 for each of the states is presented in Table 76. The dropout information was provided from figures prepared by the National Center for Education Statistics for the 1994-95 school year. Out of the 30 states, for which information was provided, Iowa had the fourth lowest percentage of dropouts in grades 9-12. Of the three states reporting a lower percentage of 9-12 dropouts, only one, North Dakota, was in the same geographic region as Iowa.

**Table 76**

<b>HIGH SCHOOL DROPOUTS IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS — 1994-95</b>	
State	Percent of 9-12 Dropouts
Alabama	6.2%
Arkansas <sup>1</sup>	4.9
California	4.4
Connecticut	4.9
Delaware	4.6
District of Columbia	10.6
Georgia	9.0
Hawaii	4.9
Indiana	4.6
<b>Iowa</b>	<b>3.4</b>
Kansas	5.0
Louisiana	3.5
Maine	3.3
Massachusetts	3.5
Minnesota	5.2
Mississippi	6.4
Missouri	7.1
Nebraska	4.5
Nevada	10.3
New Mexico	8.5
New York	4.1
North Dakota	2.5
Ohio	5.3
Oregon	7.1
Pennsylvania	4.1
Rhode Island	4.6
Texas	2.7
Utah	3.5
West Virginia	4.2
Wyoming	6.7

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, COMMON CORE OF DATA SURVEY; AND UNPUBLISHED DATA.

NOTE: <sup>1</sup>ESTIMATES PROVIDED BY STATE EDUCATION AGENCY.

# High School Completion Rates of 18-24-Year-Olds Not Currently Enrolled in High School

According to a National Center for Education Statistics (NCES) publication, Dropout Rates in the United States, the high school completion rates provided in Table 77, reflect experiences of all 18-24 year-olds residing in each state during the month of October for the year in which data were collected. The rates were based on the inclusion of dependent students residing in their parent's household as opposed to school residence. NCES also noted that some survey respondents may have attended school in a different state from that in which they resided at the time interviews were conducted.

NCES also cautions that there may be some ambiguity with respect to 18-24 year-olds reporting themselves as high school completers if they obtained a certificate of attendance. Such students, according to the NCES publication, should have been counted as non-completers.

Data reported in Table 77 was obtained from the U.S. Department of Commerce and represents three-year averages for 1991-93 and 1994-96. According to Department of Commerce figures, Iowa ranked third in high school completion rates for the three-year period from 1991-93, and fell to tenth for the three year period from 1994-96. For both three-year periods reported, the Iowa high school completion rate was well above the rate for the nation, at 91.6 percent for 1994-96 and 94 percent for the three-year period 1991-93.

**Table 77**

---

**THREE YEAR AVERAGE HIGH SCHOOL COMPLETION RATES OF 18- THROUGH  
24-YEAR-OLDS NOT CURRENTLY ENROLLED IN HIGH SCHOOL OR BELOW  
BY STATE: OCTOBER 1991-93 AND 1994-96  
(RANK ORDER BY 1994-96 THREE YEAR AVERAGE)**

---

State	1994-96	1991-93
Connecticut	96.1	90.9
Minnesota	95.3	91.7
Maryland	93.4	91.0
Nebraska	93.3	92.5
North Dakota	93.0	95.7
Hawaii	92.6	92.8
Wisconsin	92.5	92.4
Massachusetts	92.0	90.5
Maine	91.8	93.4
<b>Iowa</b>	<b>91.6</b>	<b>94.0</b>
Kansas	91.6	91.4
Utah	91.3	94.6
New York	90.9	87.6
Montana	89.8	91.6
South Dakota	89.6	91.2
Pennsylvania	89.6	90.5
Wyoming	89.4	92.1
Illinois	89.3	86.0
West Virginia	89.3	84.6
Michigan	89.1	88.3
Delaware	88.8	90.3
South Carolina	88.4	85.5
Indiana	88.3	87.4
Missouri	88.0	88.3
Colorado	87.9	87.2
Alaska	87.8	89.0
District of Columbia	87.8	87.2
Ohio	87.7	89.7
New Hampshire	87.7	89.0
Rhode Island	87.5	90.4
North Carolina	87.2	84.2
New Jersey	87.0	89.8
Vermont	87.0	89.6
Oklahoma	87.0	81.8
Washington	86.8	89.2
Alabama	86.8	81.0
Arkansas	86.7	87.7
Virginia	86.6	89.8
<b>United States</b>	<b>85.8</b>	<b>85.7</b>
Arizona	85.8	81.1
Idaho	85.2	89.0
Mississippi	83.9	88.6
Tennessee	83.3	77.5
New Mexico	82.7	84.3
Kentucky	82.2	82.6
Louisiana	82.2	82.5
Nevada	81.4	83.3
Georgia	81.3	81.9
Oregon	81.1	85.5
Florida	80.1	84.5
Texas	79.3	81.2
California	78.6	78.2

---

SOURCE: U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS, CURRENT POPULATION SURVEY, OCTOBER (VARIOUS YEARS)  
UNPUBLISHED DATA.

---

# Finance

The school finance chapter of the *Condition of Education Report* presents information on general fund expenditures by function and object category, revenues by source, average per pupil expenditures, total government appropriations, property tax revenues, state aid, income surtaxes, and elementary and secondary education budgets. Comparisons are made across time, and also by enrollment category.

## Function Category Expenditures

Expenditures for each of the function categories for the years 1985-86, 1995-96, and 1996-97 are presented in Table 78 as a percent of total general fund expenditures. Expenditures for instruction accounted for the greatest percentage of general fund expenditures for all years shown. In 1996-97, the percentage of general fund expenditures allotted for instruction, increased by three percentage points over 1985-86 figures, and was down slightly from the previous school year. Over the period, from 1985-86 through 1996-97, the categories of central support services, food services subsidy, and community service and education, remained relatively unchanged at a fraction of one percent of total general fund expenditures. Categories showing decreases over the same time period included administrative services, operations and maintenance, and student transportation. The percentages of general fund expenditures spent for student and staff support services showed slight increases over the period.

**Table 78**

---

**FUNCTION CATEGORY EXPENDITURES AS A PERCENT OF  
TOTAL GENERAL FUND EXPENDITURES IN IOWA PUBLIC SCHOOLS  
1985-86, 1995-96, AND 1996-97**

---

Function Category	Year		
	1985-86	1995-96	1996-97
Instruction	65.3%	68.6%	68.3%
Student Support Services	2.9	3.7	3.8
Staff Support Services	3.2	3.7	4.0
Administrative Services	10.2	9.7	9.5
Operations and Maintenance	12.2	9.4	9.3
Student Transportation	5.2	4.1	4.0
Central Support Services	0.6	0.5	0.8
Food Services Subsidy	0.2	0.1	0.1
Community Service and Education	0.2	0.2	0.2

---

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORTS.

---

The specific function category expenditures are reported as a percentage of total general fund expenditures by enrollment category in Table 79. The percentage of general fund expenditures allocated to instruction varied only slightly across enrollment categories. Expenditures for operations and maintenance, as a percentage of general fund expenditures, tended to increase with increases in enrollment categories, while administrative services expenditures, as a percent of general fund expenditures, decreased with each successively larger enrollment category.

**Table 79**

**FUNCTION CATEGORY EXPENDITURES AS A PERCENT OF TOTAL  
GENERAL FUND EXPENDITURES IN IOWA PUBLIC SCHOOLS  
BY ENROLLMENT CATEGORY 1996-97**

Function Category	Enrollment Category							State
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+	
Instruction	70.7%	68.7%	68.4%	67.8%	68.5%	69.2%	67.7%	68.3%
Student Support Services	1.7	2.5	2.6	3.0	3.7	4.0	5.0	3.8
Staff Support Services	2.3	3.0	3.1	3.4	4.1	4.8	4.0	4.0
Administrative Services	12.0	11.8	11.3	10.8	9.8	8.9	8.0	9.5
Operations and Maintenance	7.6	8.7	8.8	9.2	9.0	9.2	10.0	9.3
Student Transportation	5.3	5.0	5.3	5.4	4.4	3.3	2.7	4.0
Central Support Services	0.2	0.1	0.2	0.2	0.3	0.4	2.2	0.8
Food Services Subsidy	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1
Community Service and Ed.	0.0	0.0	0.2	0.1	0.1	0.2	0.4	0.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORT, 1996-97.

## Object Category Expenditures

Object category expenditures, which include expenditures for salaries, benefits, purchased services, supplies, property, and other objects are reported in Table 80. The table reflects comparisons of object category expenditures, as a percentage of total general fund expenditures, for 1985-86, 1995-96, and for 1996-97.

Salaries, as a percentage of general fund expenditures, decreased over the period from 1985-86 to 1996-97, falling 3.5 percentage points. The percentage of the general fund paid for benefits increased over the period to 15.4 percent in 1996-97, compared to 12.9 percent in 1985-86. The percentage of general fund dollars spent for purchased services remained relatively stable over the period, while percentages for supplies, property, and other objects reflected only slight changes.

**Table 80**

**OBJECT CATEGORY EXPENDITURES AS A PERCENT OF TOTAL  
GENERAL FUND EXPENDITURES IN IOWA PUBLIC SCHOOLS  
1985-86, 1995-96, AND 1996-97**

Object Category	Year		
	1985-86	1995-96	1996-97
Salaries	68.1%	65.3%	64.6%
Benefits	12.9	15.4	15.4
Purchased Services	9.9	9.7	9.9
Supplies	5.7	6.5	6.5
Property	2.6	2.8	3.3
Other Objects	0.8	0.3	0.3

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORTS.

Object category expenditures, by enrollment category, are reported in Table 81. Substantial differences in general fund allocations for salaries were reflected across enrollment categories. In the smallest districts, an average of only 48.4 percent of general fund dollars was spent for salaries, compared to 66.6 percent in districts with enrollments of 2,500-7,499. Benefits, as a percentage of general fund expenditures, also reflected differences across enrollment categories and like salary expenditures, showed increases with increasing enrollments. The substantial differences in the percentage of expenditures, allocated for purchased services, reflect sharing arrangements, particularly in districts with enrollments under 400.

**Table 81**

**OBJECT CATEGORY EXPENDITURES AS A PERCENT OF  
TOTAL GENERAL FUND EXPENDITURES IN IOWA PUBLIC SCHOOLS  
BY ENROLLMENT CATEGORY 1996-97**

Object Category	Enrollment Category						
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Salaries	48.4%	57.4%	61.9%	62.4%	65.5%	66.6%	66.2%
Benefits	11.5	13.1	13.9	14.1	14.8	15.5	17.2
Purchased Services	29.8	17.9	12.0	10.8	8.5	8.4	9.2
Supplies	7.0	7.8	7.6	7.9	7.2	6.0	5.1
Property	2.8	3.5	4.2	4.5	3.6	3.1	2.1
Other Objects	0.5	0.3	0.4	0.3	0.4	0.4	0.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORT, 1996-97



# Revenues

Revenues by source of funds for public school districts are reflected in Table 82. Revenues are reported as a percent of total general fund revenues for the years 1985-86, 1995-96, and 1996-97. The figures reflect that since 1985-86, the major revenue source has shifted from local taxes to state foundation aid. In 1985-86, a similar percentage of revenues was derived from local taxes and state foundation aid, compared to more than 53 percent of revenues to local school districts coming from state foundation aid, and just over 32 percent of revenues deriving from local taxes in 1996-97 (See Table 82 and Figure 40).

**Table 82**

Source of Revenue	Year		
	1985-86	1995-96	1996-97
Local Taxes	47.3%	35.8%	32.4%
Interagency	1.4	3.3	3.5
Other Local Sources	1.8	2.3	2.2
Intermediate Sources	0.1	0.3	0.3
State Foundation Aid	46.0	50.9	53.3
Other State Sources	0.7	4.5	5.3
Federal Sources	2.4	2.7	2.6
Other Financing Sources	0.3	0.2	0.4

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORTS.

**Figure 40**

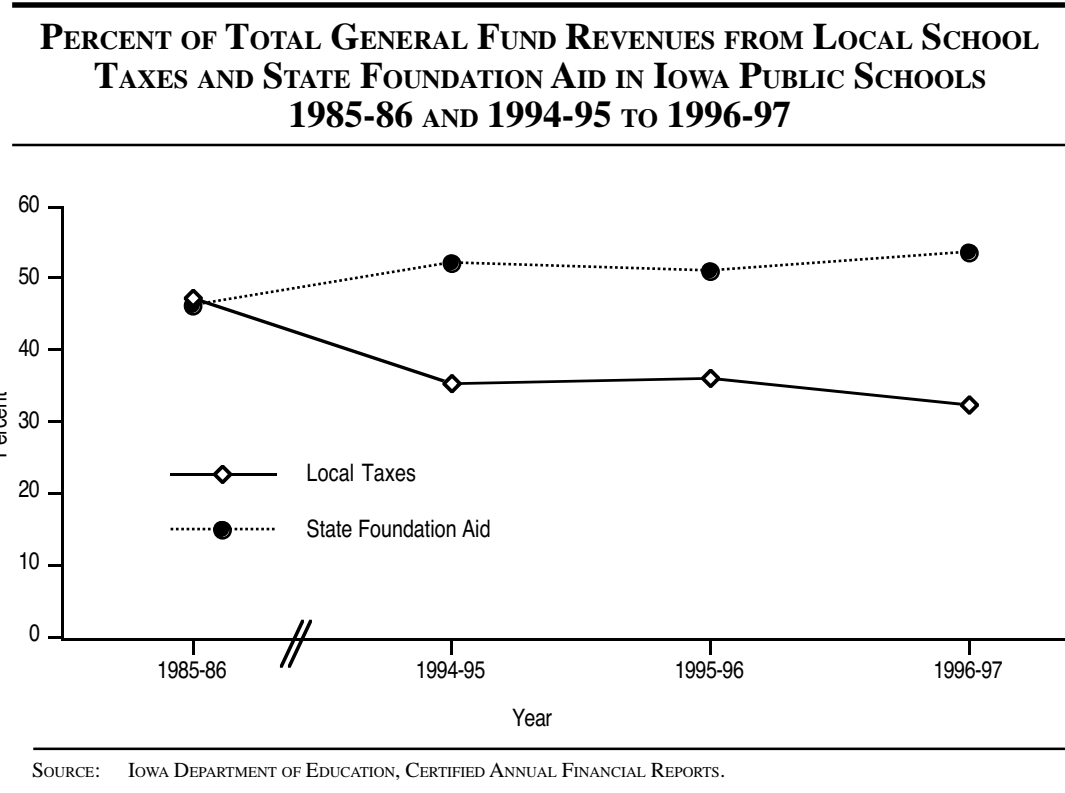


Table 83 reflects revenues by source as a percent of total general fund revenues for each of seven enrollment categories. The percent of general fund revenue derived from local taxes decreased in 1996-97, with each successive increase in enrollment category through the enrollment category 1,000-2,499. Conversely, the percentage of general fund revenues derived from state foundation aid generally increased with successive increases in enrollment (see Figure 41).

**Table 83**

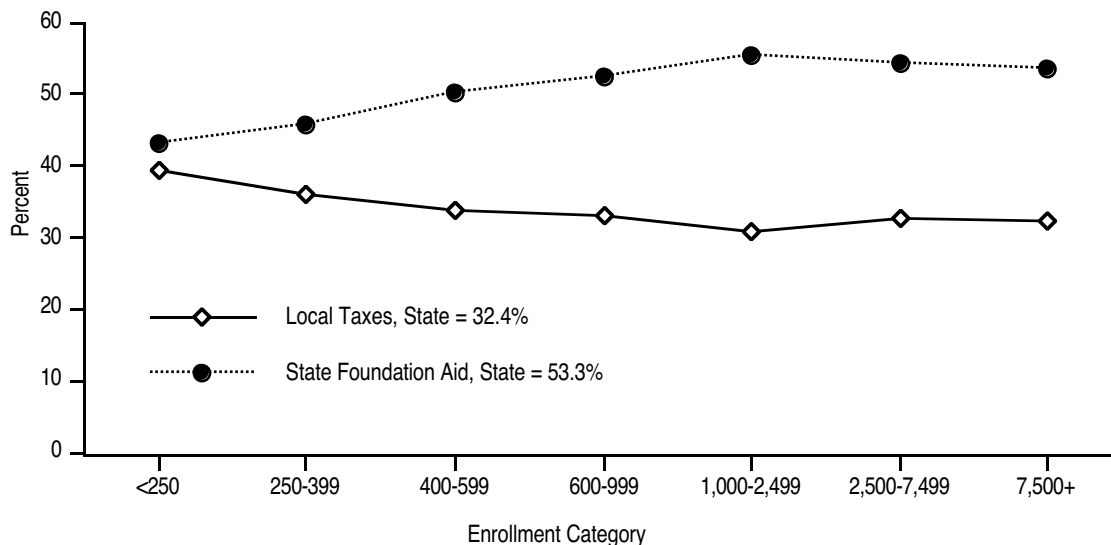
**REVENUES BY SOURCE AS A PERCENT OF TOTAL GENERAL FUND REVENUES IN IOWA PUBLIC SCHOOLS BY ENROLLMENT CATEGORY 1996-97**

Source of Revenue	Enrollment Category						
	<250	250-399	400-599	600-999	1,000-2,499	2,500-7,499	7,500+
Local Taxes	39.5%	35.9%	33.9%	32.9%	30.9%	32.5%	32.3%
Interagency	4.5	7.1	5.3	4.4	3.8	3.4	1.6
Other Local Sources	2.0	2.4	2.4	2.1	2.0	2.3	2.5
Intermediate Sources	0.1	0.3	0.0	0.1	0.1	0.0	0.9
State Foundation Aid	43.0	45.8	50.1	52.3	55.3	54.4	53.4
Other State Sources	7.5	5.6	5.6	5.3	5.2	4.9	5.6
Federal Sources	2.8	2.5	2.3	2.2	2.3	2.2	3.5
Other Financing Sources	0.6	0.4	0.4	0.7	0.4	0.3	0.2

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORT, 1996-97.

**Figure 41**

**PERCENT OF TOTAL GENERAL FUND REVENUES FROM LOCAL TAXES AND STATE FOUNDATION AID BY ENROLLMENT CATEGORY 1996-97**



SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ANNUAL FINANCIAL REPORT, 1996-97.

## Expenditures Per Pupil

Per pupil expenditures for Iowa school districts are presented in Table 84 for the years 1985-86, 1995-96, and for 1996-97. Expenditures are reported for each of the seven standard enrollment categories. Instruction, student support services, staff support services, administration, operations and maintenance, student transportation, and central support are included in expenditures reported. The following are excluded from expenditures: community services, adult education, nonpublic education, co-curricular activities, financial support for food services programs, AEA flow-through, inter-fund transfers, facility acquisition, and debt services. Interagency revenues received from other school districts and AEAs, for services sold to them, have also been removed from the expenditure amounts.

Statewide, average expenditures per pupil have increased nearly 80 percent since 1985-86 to 1996-97. The range in average per pupil expenditures was \$549 in 1985-86, compared to a range of \$874 in 1996-97. Per pupil expenditures for 1996-97 were up 12 percent on a statewide basis from the previous year.

**Table 84**

---

**AVERAGE PER PUPIL EXPENDITURES IN GENERAL FUND  
FOR IOWA PUBLIC SCHOOLS  
BY ENROLLMENT CATEGORY  
1985-86, 1995-96, AND 1996-97**

---

Enrollment Category	Year		
	1985-86	1995-96	1996-97
<250	\$3,368	\$5,349	\$5,934
250-399	3,000	4,988	5,757
400-599	2,917	4,674	5,327
600-999	2,869	4,595	5,224
1,000-2,499	2,819	4,477	5,060
2,500-7,499	2,899	4,579	5,138
7,500+	2,987	4,941	5,399
State Average	2,916	4,680	5,243

---

SOURCE: IOWA DEPARTMENT OF EDUCATION, CERTIFIED ENROLLMENT AND CERTIFIED ANNUAL FINANCIAL REPORTS.

---

## State Aid

In 1998-99 the total state aid paid to school districts was \$1.7397 billion (Table 85). Total state aid includes State Foundation Aid, Instructional Support Aid, Educational Excellence (Phases I, II, and II), and Technology/School Improvement Aid. Approximately 38.4 percent of the State's total general fund appropriations was allocated to school districts in 1998-99. The increase in the percent of total appropriations spent on education in 1996-97 is primarily due to the increase in the foundation level of the state aid funding formula. In 1996-97, the foundation level was increased from 83 percent to 87.5 percent. Not included in the state aid amounts are state funds expended for Part III of the Iowa Communication Network at the K-12 level.

**Table 85**

<b>TOTAL IOWA GOVERNMENT APPROPRIATIONS (IN MILLIONS)</b>			
Year	State Aid to Districts	General Fund Appropriations	Percent Spent on Education
1998-99	\$1,739.7	\$4,531.9	38.4%
1997-98	1,686.0	4,364.1	38.6
1996-97	1,615.8	4,126.4	39.2
1995-96	1,425.5	3,842.0	37.1
1994-95	1,360.5	3,615.6	37.6
1993-94	1,324.8	3,471.7	38.2
1992-93	1,273.1	3,394.3	37.5
1991-92	1,185.4	3,178.8	37.3
1990-91	1,147.7	3,130.9	36.7
1989-90	1,047.8	2,853.4	36.7
1988-89	964.1	2,667.5	36.1
1987-88	905.7	2,422.3	37.4
1986-87	761.1	2,190.2	34.8
1985-86	712.3	2,207.0	32.3
1984-85	708.5	2,088.6	33.9
1983-84	660.3	1,976.6	33.4
1982-83	642.3	1,870.9	34.3
1981-82	621.0	1,762.6	35.2

SOURCE: LEGISLATIVE FISCAL BUREAU, SESSION FISCAL REPORT.

## Property Taxes

In 1998-99, the total property taxes needed to fund the combined district cost were \$866.9 million. The actual taxes paid, when adjusted for various tax credits such as; machinery and equipment, homestead, military, agriculture land, family farms, etc., were \$731.7 million. Property taxes required to support the school foundation formula decreased between 1995-96 and 1996-97, and increased slightly in 1997-98 (Table 86).

**Table 86**

---

**IOWA PROPERTY TAX REVENUES GENERATED FOR  
THE SCHOOL FOUNDATION FORMULA  
(IN MILLIONS)**

---

Year	Property Taxes	Property Taxes Less Credits
1998-99	\$866.9	\$731.7
1997-98	821.3	704.8
1996-97	798.2	701.8
1995-96	853.4	757.0
1994-95	822.0	725.6
1993-94	793.5	696.7
1992-93	781.1	684.3
1991-92	757.0	670.4
1990-91	741.0	651.2
1989-90	718.3	632.5
1988-89	705.4	619.6
1987-88	721.0	601.9
1986-87	751.7	636.4
1985-86	724.3	612.5
1984-85	700.4	597.5
1983-84	680.2	563.2
1982-83	664.0	543.6
1981-82	635.6	518.9

---

SOURCE: DEPARTMENT OF MANAGEMENT, PROGRAM AND BUDGET SUMMARY.

---

## Income Surtaxes

Income surtaxes accounted for \$33.9 million in revenues for local school districts in the 1998-99 school year, Table 87. Revenues from income surtaxes increased 8.3 percent between 1997-98 and 1998-99 compared to a 21.1 and 26.7 percent increase in 1996-97 and 1997-98 respectively. Income surtaxes may be used to support the voted portion of the physical plant and equipment, asbestos, instructional support, or educational improvement levies.

**Table 87**

IOWA INCOME SURTAXES		
Year	Income Surtax in Millions	Percent Increase
1998-99	\$33.9	8.3%
1997-98	31.3	26.7
1996-97	24.7	21.1
1995-96	20.4	8.5
1994-95	18.8	9.9
1993-94	17.1	5.6
1992-93	16.2	30.6
1991-92	12.4	125.5
1990-91	5.5	77.4
1989-90	3.1	6.9
1988-89	2.9	52.6
1987-88	1.9	NA

SOURCE: ANNUAL AID AND LEVY WORKSHEETS.

## Total Elementary and Secondary Education Budgets

The total amount budgeted by local school districts for the 1998-99 school year was \$3.170 billion, Table 88. The majority, 64.4 percent, of the funding is derived through the basic funding of school districts, Regular Program cost. The Regular Program cost amount increased 61.4 percent between 1985-86 and 1998-99. This compares to a 163.4 percent increase in the amount generated for special education instructional programs.

Miscellaneous State Categorical is primarily from Excellence Program and Technology/School Improvement. The major source of revenue in the fiscal area is Title I. The miscellaneous income amount is based upon school district estimates and should be used with caution.

**Table 88**


---

**IOWA ELEMENTARY AND SECONDARY BUDGET DETAIL  
1985-86, 1997-98, AND 1998-99**

---

Source of Funds	1985-86		1997-98		1998-99	
	Amount	Percent	Amount	Percent	Amount	Percent
Regular Program	\$1,263,768,116	75.2%	\$1,972,959,620	64.8%	\$2,040,050,957	64.4%
Guarantee Amount	3,161,077	0.2	2,447,199	0.1	3,179,155	0.1
Supplementary Weights	426,616	0.0	22,894,522	0.8	22,775,083	0.7
Special Education	90,438,951	5.4	216,374,135	7.1	238,209,885	7.5
AEA Media	10,865,134	0.7	17,588,405	0.6	18,164,970	0.6
AEA Ed Services	11,986,320	0.7	19,405,663	0.6	20,042,454	0.6
AEA Special Education	60,292,283	3.6	96,381,311	3.2	100,332,319	3.2
Tag SBRC	5,008,416	0.3	14,313,372	0.5	15,491,204	0.5
Dropout SBRC	1,702,264	0.1	27,373,453	0.9	32,740,722	1.0
Other SBRC	14,203,445	0.8	1,627,000	0.1	1,890,444	0.1
Instructional Support & Enrichment	4,092,470	0.2	91,801,074	3.0	97,951,116	3.1
Educational Improvement			333,674	0.0	348,439	0.0
Enrollment Audit Adjustment			(35,482)	(0.0)	(251,866)	(0.0)
Management	23,199,501	1.4	35,317,708	1.2	35,654,798	1.1
Physical Plant & Equipment			53,122,002	1.7	63,951,743	2.0
67.5 Cent Schoolhouse			11,106,193	0.4	6,677,811	0.2
Playground and Library			1,423,285	0.0	1,472,385	0.0
Debt Service	85,639,275	5.1	90,893,276	3.0	98,120,257	3.1
Miscellaneous*						
Estimated Misc. State Categorical	0	0.0	131,503,350	4.3	133,413,350	4.2
Estimated Misc. Federal	38,100,000	2.3	101,500,000	2.3	72,687,432	2.3
Other Misc.	66,800,000	4.0	167,290,777	5.4	167,290,777	5.3
<b>Total</b>	<b>\$1,679,683,868</b>	<b>100.0</b>	<b>\$3,046,807,969</b>	<b>100.0</b>	<b>\$3,170,193,435</b>	<b>100.0</b>

SOURCE: IOWA DEPARTMENT OF MANAGEMENT, SCHOOL BUDGET MASTER FILE.

NOTES: FOR FY 86, THE ALLOCATION OF DOLLARS TO AEA MEDIA AND AEA ED SERVICES HAS BEEN ESTIMATED.  
FOR FY 86, PPEL, 67.5 CENT, PLAYGROUND, LIBRARY AND DEBT SERVICE LEVIES HAVE BEEN REPORTED AS ONE TOTAL FIGURE.

\*MISCELLANEOUS INCOME IS AN ESTIMATED AMOUNT.

---

# Community College Education

in Iowa

Iowa Department of Education

**Division of Community Colleges & Workforce Preparation**  
Janice Friedel, Administrator

**Bureau of Community Colleges**  
Evelyn Anderson, Chief  
Stephen G. Mahr, Consultant

*The Annual Condition of Education Report*





# Community Colleges

The community colleges are an integral component in the educational and economic infrastructure of Iowa. More than one-half of Iowans have their initial enrollment in postsecondary education at the community college. High school graduates seeking entry into the workforce rely upon the community colleges to assist them in acquiring the knowledge and skills to qualify them for entry and for retention in the workforce. Increasing numbers of Iowans who are in the workforce rely upon the offerings of the community colleges as an avenue to new careers, professional advancement, personal fulfillment, continuing education, and lifelong learning.

Community colleges have lived up to their name as the “community’s college,” and have become partners with other components in the private and public sectors in fostering both economic and community development. The importance of community colleges in the development of our nation’s workforce and ultimately to our national economic security has been emphasized numerous times by President Bill Clinton.

Iowa’s community colleges are accessible to virtually every resident of the state. The community colleges have developed numerous partnerships and are noted for their collaborative efforts. These colleges provide expertise to employers about new knowledge and technologies, and provide customized training for specific businesses and industries; they have become a major economic force that assists in recruiting and keeping jobs and workers in Iowa.

During the past 30 years, Iowa’s community colleges have responded to the challenges and opportunities of the state’s changing demographics and population, the global economy, and the adoption of new technologies and knowledge that require greater skills and adaptability of the work force. These comprehensive community colleges have held true to the founding principles of the community college system: accessibility, affordability, adaptability, responsiveness, quality, and community.

It is the mission of Iowa’s community colleges to offer quality programs, courses, and services to meet the different community interests, student abilities, and personal objectives of citizens of all ages and levels of education for the purpose of improving the quality of life, the economic conditions, and the public welfare of our state.

Iowa’s community colleges strive to achieve their mission through a system of 15 colleges and 30 campuses, all committed to access, quality, and responsiveness.

## Access

Every Iowa resident is within an hour’s drive of a community college campus. The opportunity to utilize the educational offerings of Iowa’s community colleges is assured to nearly everyone who applies. This access has been enhanced through the community colleges’ involvement in the Iowa Communications Network (ICN).

Community colleges in Iowa, authorized under Chapter 260C, Iowa Code, constitute a statewide system of public two-year postsecondary educational institutions. Each of the 15 comprehensive community colleges serves a multi-county merged area, and all counties in the state are included in one of these merged areas.

## **Quality**

Each of the 15 community colleges offers a comprehensive program of arts and sciences or college transfer courses, vocational-technical programs, training and retraining programs for the workforce of Iowa's businesses and industries, and an expanding variety of adult education and non-credit courses for residents of each community college district. The community colleges are committed to the continuous pursuit of quality and excellence in education.

## **Responsiveness**

Community colleges across the state are involved in articulation agreements and numerous other collaborative efforts with high schools and four-year institutions. Iowa students benefit from these partnerships through early college credit during high school and "two plus two" programs beginning at a community college and concluding with a four-year degree. The community colleges are the most responsive component of Iowa's postsecondary educational system. They are increasingly involved in community and statewide initiatives in economic and community development, development of linkages between the private and public sectors for the provision of lifelong learning opportunities, workforce development programs, and welfare-to-work initiatives.

The statement of policy describing the educational opportunities and service to be provided by community colleges is included in Section 260C.1 of the Iowa Code. This statement of policy identifies the following as services that should be included in a community college's mission.

- The first two years of college work, including pre-professional education.
- Vocational and technical training.
- Programs for in-service training and retraining of workers.
- Programs for high school completion for students of post-high school age.
- Programs for all students of high school age who may best serve themselves by enrolling in vocational and technical training while also enrolled in a local high school.
- Student personnel services.
- Community services.
- Vocational education for persons who have academic, socioeconomic, or other handicaps that prevent succeeding in regular vocational education programs.
- Training, retraining, and all necessary preparation for productive employment of all citizens.
- Vocational and technical training for persons who are not enrolled in a high school and who have not completed high school.
- Developmental education for persons who are academically or personally underprepared to succeed in their program of study.

## **History of Iowa's Community Colleges**

The 61st General Assembly in 1965 enacted legislation that permitted the development of a statewide system of two-year postsecondary educational institutions, identified as "merged area schools." The Department of Education was to direct the

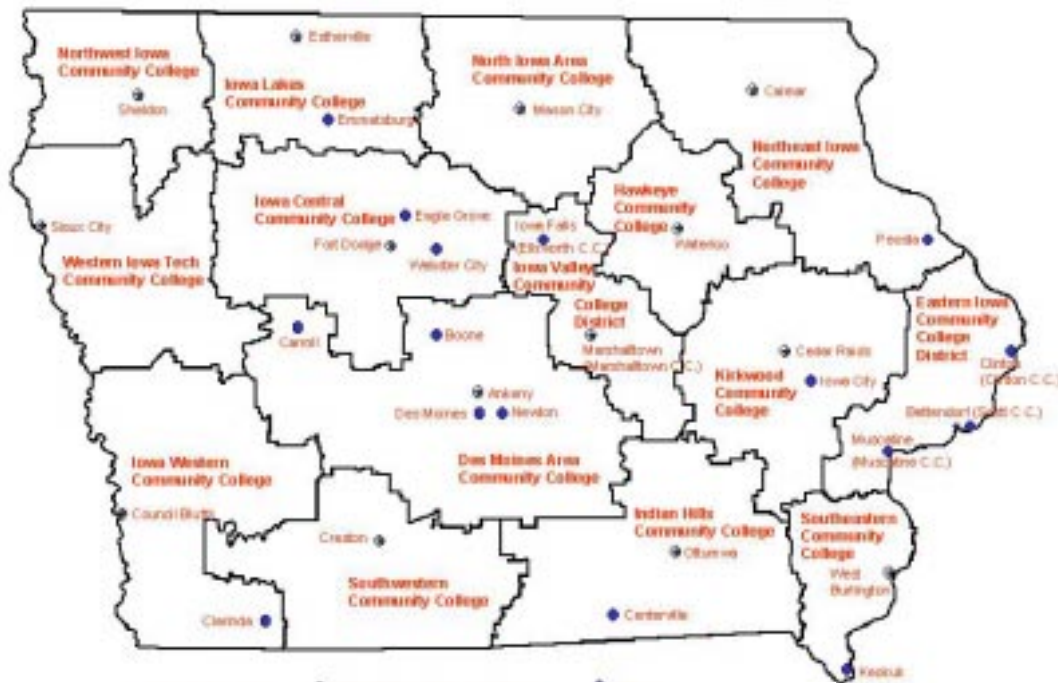
operation of the development of merged area schools as either community colleges or area vocational schools (Chapter 280 A of the Code of Iowa).

The legislation approved in 1965 was enthusiastically received. The Department of Education received the first plan for a community college on July 5, 1965, one day after the legislation was effective. Plans for the other community colleges followed in quick succession. Fourteen (14) community colleges were approved and organized in 1966, and a 15th in January 1967. Fourteen (14) of these community colleges began operation during the 1966-67 school year.

At the present time, 10 of Iowa's community colleges are operated as multi-campus institutions. The 30 major campuses are shown on the following map.

**Figure 42**

**COMMUNITY COLLEGE DISTRICTS WITH  
MAJOR CAMPUSES**



SOURCE: IOWA DEPARTMENT OF EDUCATION, BUREAU OF COMMUNITY COLLEGES.

**Table 89**


---

**IOWA COMMUNITY COLLEGE DISTRICTS WITH MAJOR CAMPUSES  
AND 1997 FALL TERM CREDIT ENROLLMENT**

---

Community College	Major Sites	Fall Term 1997 Enrollment*
Des Moines Area Community College	Ankeny, Boone, Carroll, Des Moines, Newton	10,720
Eastern Iowa Community College District	Bettendorf, Clinton, Muscatine	6,088
Hawkeye Community College	Waterloo	3,944
Indian Hills Community College	Centerville, Ottumwa	3,495
Iowa Central Community College	Eagle Grove, Fort Dodge, Webster City	3,002
Iowa Lakes Community College	Emmetsburg, Estherville	2,315
Iowa Valley Community College District	Iowa Falls, Marshalltown	2,045
Iowa Western Community College	Clarinda, Council Bluffs	3,905
Kirkwood Community College	Cedar Rapids	11,066
North Iowa Area Community College	Mason City	2,807
Northeast Iowa Community College	Calmar, Peosta	2,987
Northwest Iowa Community College	Sheldon	826
Southeastern Community College	Keokuk, West Burlington	2,590
Southwestern Community College	Creston	1,147
Western Iowa Tech Community College	Sioux City	3,539
<b>State Total</b>		<b>60,473</b>

SOURCE: IOWA DEPARTMENT OF EDUCATION, FALL TERM ENROLLMENTS, 1997.

NOTE: \*ENROLLMENTS DO NOT INCLUDE HIGH SCHOOL COOPERATIVE STUDENTS.

---

Community colleges operate courses and programs at many other sites throughout their merged areas. Credit programs are offered at a total of 73 different sites throughout the state. All community colleges have expanded access to lifelong learning through the Iowa Communications Network (ICN).

All colleges have a variety of educational service contracts with other public and private educational institutions, including many agreements to provide instructional programs to clients from human service agencies. Each of the community colleges cooperates with local school districts within its merged area to identify and to offer needed academic and vocational programs for students from the local districts.

### **Major Initiatives for Fiscal Year 1998**

The Division of Community Colleges and Workforce Preparation has worked with the community colleges on the following two major initiatives during the past fiscal year.

#### **Community College Funding**

The community college presidents and Department of Education personnel worked throughout the year to develop a formula for distribution of state general aid funds appropriated by the legislature. This formula for distribution primarily involves an appropriations base, an inflation factor, and the college's proportional share of the total community college full-time equivalent enrollment (FTE) for the prior fiscal

year. A required component of the distribution process is the annual completion of a student enrollment audit, the requirements for which were distributed to the community college presidents in August 1998. Audits will commence with fiscal year 1998.

### Management Information System

Development of a Management Information System (MIS) has been an ongoing project for several years. The purpose of the MIS is to make current, accurate data available on a timely basis. By the end of the fiscal year, data elements for all components of the MIS had been defined for the five major components of the MIS as follows:

- 1. Credit Student Characteristics
- 2. Non-Credit, Student Characteristics
- 3. Finance
- 4. Human Resources
- 5. Programs

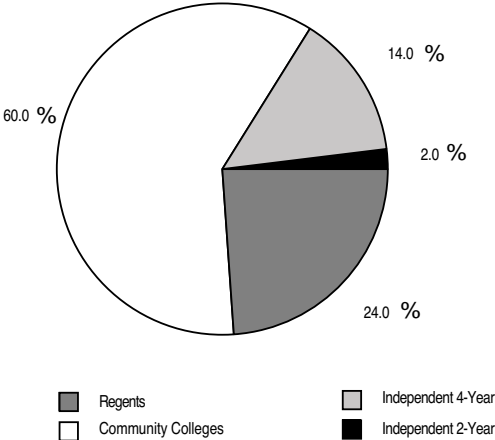
A data dictionary was developed and distributed to community college presidents and other community college personnel. Fiscal and program information components are in place. Credit Student Characteristics was pilot tested in fiscal year 1998. Non-Credit Student Characteristics and Human Resources components will be pilot tested during fiscal year 1999. A process for the identification and inclusion of new data elements to the MIS system has been developed. This process was presented to the community college presidents in August 1998.

### The Community College Student

51.9 percent of the new freshmen in all Iowa colleges and universities in the fall of 1997 were enrolled at public community colleges. Figure 43 shows that 60 percent of new freshmen who are Iowa residents attend a community college.

Figure 43

**TYPES OF IOWA INSTITUTIONS ATTENDED BY NEW FRESHMEN WHO ARE IOWA RESIDENTS**



SOURCE: FALL 1997 IOWA COLLEGE AND UNIVERSITY ENROLLMENTS, UNIVERSITY OF IOWA.

Ninety-four percent (94%) of community college students enrolled in the fall of 1997 were Iowa residents, compared to 75 percent at the regents' universities (Fall 1997, Iowa College and University Enrollments). In addition, 84 percent of all known community college alumni have continued their residency in the state (Iowa College Student Aid Commission). These facts illustrate the critical role that community colleges play in the development of Iowa's workforce and the enhancement of Iowa's population, issues vital to Iowa's continued economic viability and growth.

Enrollments in community college credit programs have grown steadily throughout their history; and today, total unduplicated head count is more than 60,000, making community colleges the largest provider of undergraduate-level education in the state. As Table 90 indicates, total enrollments in Iowa's community colleges surpassed the total undergraduates enrolled in Iowa's regents' universities in 1991, and have continued to exceed the annual undergraduate enrollment of Iowa's independent two- and four-year colleges.

**Table 90**

**UNDERGRADUATES ENROLLED AT IOWA'S COLLEGES AND UNIVERSITIES  
1986-1995 — FALL TERM**

Institute	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Regents	53,917	52,413	52,270	51,989	51,627	51,450	50,917	50,019	49,375	49,958
Independent 4-Yr.	33,785	34,806	35,829	38,332	39,096	39,224	39,768	40,277	40,574	42,029
Comm. Colleges	41,023	42,959	44,938	47,374	49,726	52,259	55,589	56,088	56,226	56,464
Independent 2-Yr.	3,785	3,836	4,196	4,166	4,472	4,488	4,507	4,326	4,276	3,712

SOURCE: INFORMATION DIGEST OF POSTSECONDARY EDUCATION IN IOWA, 1995 EDITION, IOWA COLLEGE STUDENT AID COMMISSION.

Students enroll in four types of credit programs in the community college system:

- Arts and science programs that are designed as college parallel programs and transfer to four-year colleges and universities.
- Vocational-technical programs that prepare graduates for direct entry into selected careers.
- Career option programs that are designed to meet the objectives of both arts and science and vocational-technical programs in that they prepare the graduate for direct entry into work and articulated to specific four-year colleges and universities.
- High school cooperative programs that are jointly administered programs between the community college and local school district and enroll high school students.

In the fall of 1997, approximately 56 percent of the community college students were enrolled in arts and science programs, 32 percent in vocational-technical, eight percent in career-option, and four percent in secondary programs.

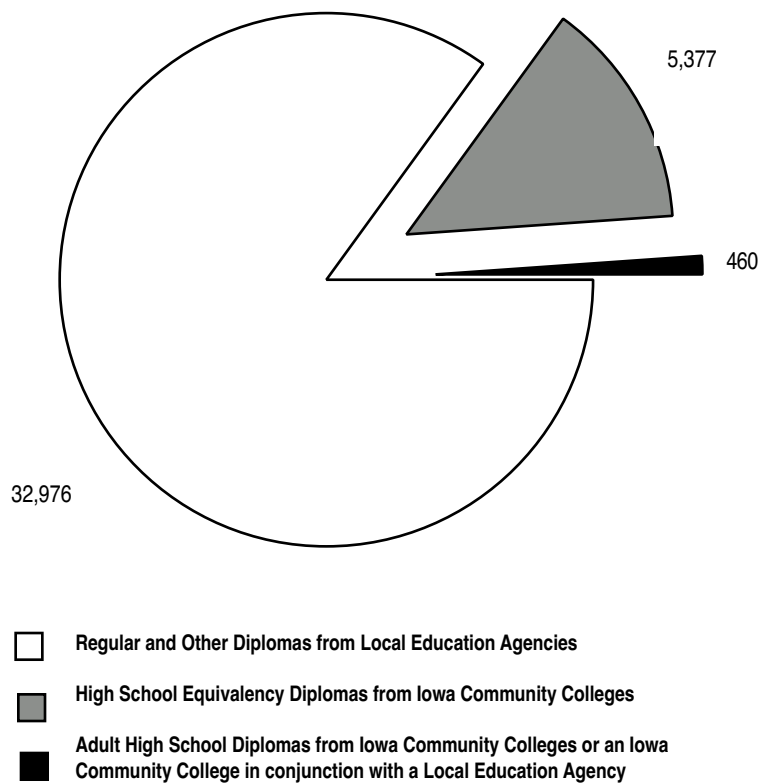
The average student enrolled in credit programs (excluding adult and continuing education) in the fall of 1997 was 26 years old.

In the fall of 1997, 7.02 percent of the community college enrollments were minority students compared to the 1990 census indicating 4.03 percent of the total Iowa population as minority.

Iowa's community colleges serve thousands of Iowans in adult basic education and high school completion programs; 46,210 Iowans were served in these programs in fiscal year 1997 alone. In that year, community colleges issued, either themselves or in conjunction with a local school district, approximately one of seven high school diplomas granted in Iowa.

**Figure 44**

**HIGH SCHOOL DIPLOMAS ISSUED BY PUBLIC SCHOOLS  
1996-97 SCHOOL YEAR (FISCAL 1997)**



SOURCE: GED STATISTICAL REPORTS FOR CALENDAR YEAR 1997, IOWA DEPARTMENT OF EDUCATION.

In 1997, 8,566 candidates were tested in Iowa for the General Equivalency Diploma (GED) through the community colleges. 91.4 percent (7,829) passed by Iowa state standards on the initial test or on the retest. This pass rate was third in the nation, surpassed only by Nebraska and Maine. Iowa's goal is to reach 96 percent. This high pass rate is an excellent testimony to the effectiveness of Iowa's Adult Basic Education/GED instructional and GED testing delivery system through the community colleges. Due to the success of the program, the number of GED awards granted has been slowly decreasing over the past few years. The long-range objective is to continually decrease this number through making Adult Basic Education/GED instruction so available that all interested adults will have obtained their certificates.



Community colleges, as educational institutions with open-door policies, have been impacted by increasing numbers of adults pursuing educational opportunities who are not prepared to enter and successfully complete college level work. Thousands of students annually receive special services and support at the community colleges. These students may be academically disadvantaged, economically disadvantaged, or in need of developmental education. In addition to credit enrollment, community colleges enroll thousands of Iowans in adult and continuing education courses, which also include avocational and recreational courses. In fiscal year 1997, total enrollments in adult and continuing education classes at community colleges exceeded 539,000. (Note: These are enrollments, not individuals served; individuals may enroll in more than one class; classes range in length from one to 120 hours each.)

**Table 91**

**IOWA COMMUNITY COLLEGE ENROLLMENTS IN NON-CREDIT COURSES  
FISCAL YEARS 1990-1997**

Courses	1990	1991	1992	1993	1994	1995	1996	1997
Vocational/Tech. Supp.	346,674	404,800	430,483	429,960	444,512	457,452	446,943	399,863
Adult Basic Ed*/High Sch. Comp.	44,874	46,725	47,091	45,431	47,765	51,190	47,775	46,210
Secondary Jointly Administered	2,022	1,261	2,133	2,321	4,019	2,492	3,752	3,884
Developmental Education*			23,281	43,018	34,829			
Continuing & General Education	50,182	50,520	51,288	51,520	55,134	55,042	44,309	50,557
Cont. Ed. -Avoc./Recreational	67,091	65,813	66,210	70,194	65,579	66,072	60,854	27,062 **
Other	7,475	13,114	9,115	8,701	12,157	15,438	23,103	11,735
<b>Total</b>	<b>518,318</b>	<b>582,233</b>	<b>629,601</b>	<b>651,145</b>	<b>663,995</b>	<b>647,706</b>	<b>626,736</b>	<b>539,311</b>

SOURCE: IOWA DEPARTMENT OF EDUCATION

NOTES: \*IN FISCAL YEARS 1992, 1993, AND 1994, DEVELOPMENTAL EDUCATION ENROLLMENTS WERE REPORTED AS A SEPARATE LINE ITEM.

\*\*FOR FISCAL YEAR 1997, DES MOINES AREA COMMUNITY COLLEGE DID NOT REPORT CONTINUING EDUCATION-AVOCATIONAL/RECREATIONAL

**Iowa Community College Instructional Programs**

**The major instructional programs offered by the Iowa community colleges include:**

1. Adult basic education and high school completion courses that are intended to provide basic literacy skills for under-educated adults.
2. Continuing and general education courses.
3. Recertification and relicensure courses.
4. Supplementary vocational courses that are designed to upgrade skills of employed individuals, including related education courses for apprenticeship programs.

5. Arts and sciences (college parallel) courses intended to transfer as the first two years of a baccalaureate degree program, and “career option” programs that provide immediate entry level employment skills as well as the option of transferring into baccalaureate degree programs.
6. Preparatory vocational programs, many of which incorporate options such as short-term certificate programs, one-year diploma programs, and two-year AAA or AAS degree programs. The purpose of these programs is to prepare students for entry-level employment. Many options are available to part-time students, as well as full-time students.
7. Special needs programs and services designed to assist disadvantaged students and students with disabilities.
8. Customized training programs designed to prepare employees for new and expanding industries.
9. Courses and programs offered for students in local secondary school districts, including exploratory and preparatory vocational programs as well as courses in academic disciplines.
10. Avocational and recreational courses.
11. Courses and programs for individuals who are institutionalized in correctional, health care, or custodial facilities.
12. Community service programs and services such as workshops, meetings, festivals, cultural events, speaker bureaus, and seminars.

**Iowa community colleges are authorized to offer five degrees. These degrees are:**

- Associate in Arts (AA)
- Associate in Science (AS), for students completing arts and sciences programs
- Associate of Applied Arts (AAA)
- Associate of Applied Science degrees (AAS) for graduates of the preparatory vocational programs
- Associate in General Studies (AGS) degree, which can be used to recognize completion requirements for a specialized program

Community colleges are also authorized to offer diplomas for completion of programs not less than 12 weeks in length that do not lead toward an associate degree and certificates for other short-term programs. The AA degree awarded by all community colleges is articulated with the three state universities to ensure transfer of college credit. Community colleges have also established articulation agreements with independent colleges.

Community colleges granted 11,133 awards (Table 93) to students for completing vocational-technical and arts and science college parallel programs during fiscal year 1997.

**Table 92**

**NUMBER OF AWARDS GRANTED BY IOWA'S COMMUNITY COLLEGES IN FISCAL YEAR 1997**

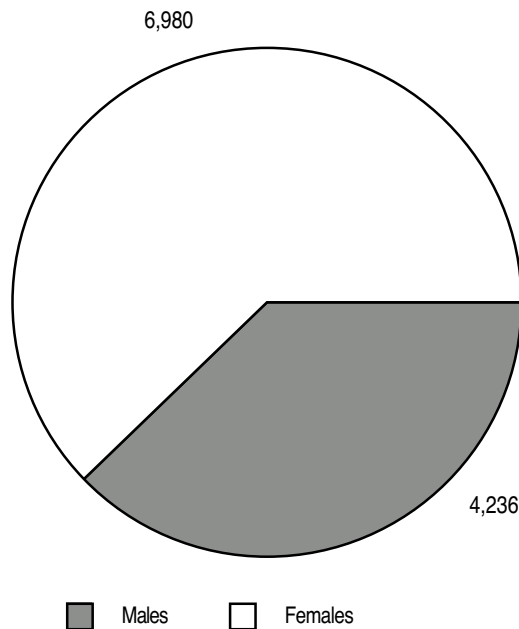
Associate in Arts (AA)	3,126
Associate of Applied Arts (AAA)	69
Associate of Applied Science (AAS)	3,348
Associate in Science (AS)	54
Associate in General Studies (AGS)	734
Certificate	1,172
Diploma	2,630
<b>Total</b>	<b>11,133</b>

SOURCE: DEGREES GRANTED, IOWA DEPARTMENT OF EDUCATION, BUREAU OF COMMUNITY COLLEGES.

Awards granted, as well as enrollments, show a greater number of women than men (Figure 47). The percentage of total awards which were granted to women has varied from 54 percent to 63 percent since 1990.

**Figure 45**

**IOWA COMMUNITY COLLEGE AWARDS GRANTED BY GENDER FISCAL YEAR 1997**



SOURCE: DEGREES GRANTED, IOWA DEPARTMENT OF EDUCATION, BUREAU OF COMMUNITY COLLEGES.

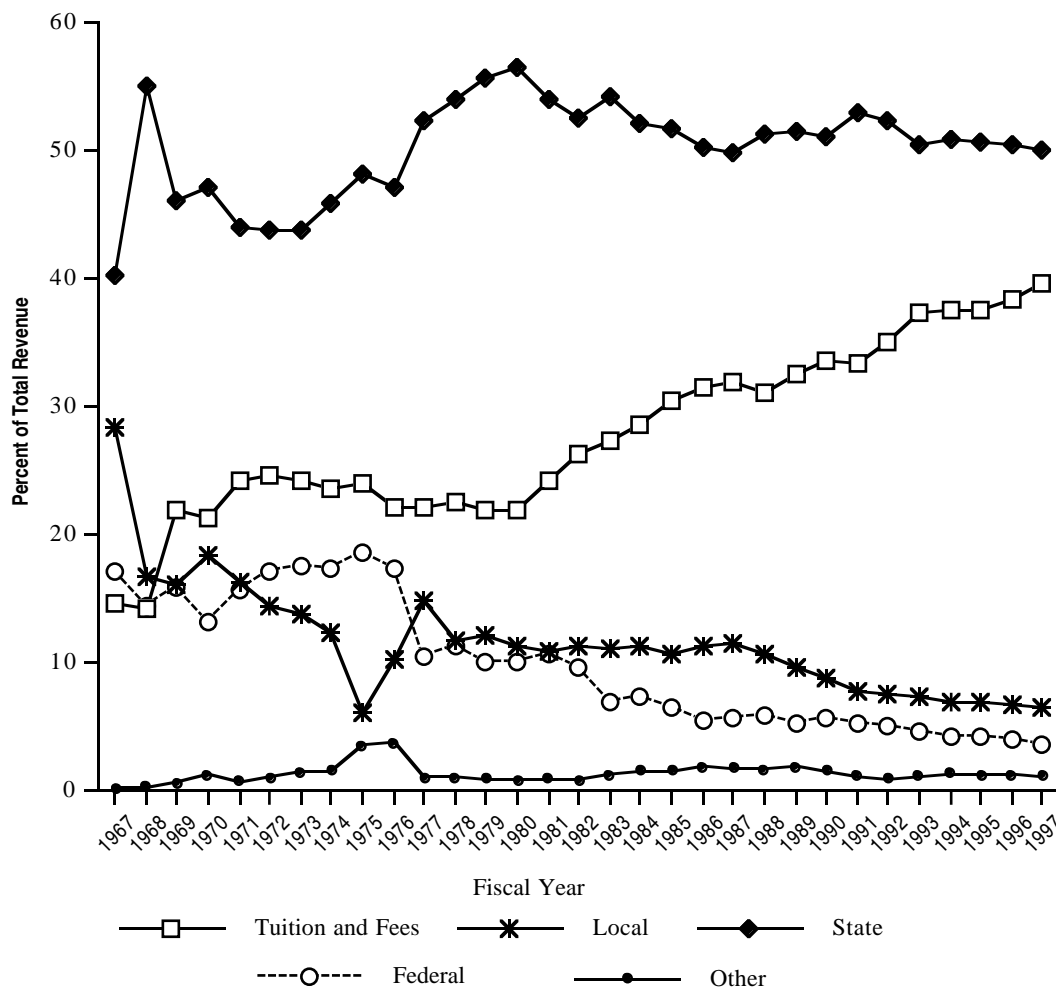
# Funding of Iowa's Community Colleges

## Revenues

Community colleges have the following three primary sources of revenue in their general operating budgets: state general aid, property tax, and student tuition and fees. Over the past few years, the percent of total revenue derived from federal reimbursement programs (such as Carl Perkins) has constantly decreased. Local taxes for community colleges are at the maximums allowed by law, and state general aid has not kept up with rising costs of operation. Increasingly, the colleges are forced to look to student tuition and fees as a means of providing revenue for college operations. Tuition and fees for each community college are determined locally by their board of directors. The following tables show the increasing reliance of the general operating fund on tuition and fees.

Figure 46

**REVENUE BY SOURCE AS A PERCENT OF TOTAL GENERAL OPERATING FUND REVENUES\* IN IOWA COMMUNITY COLLEGES**



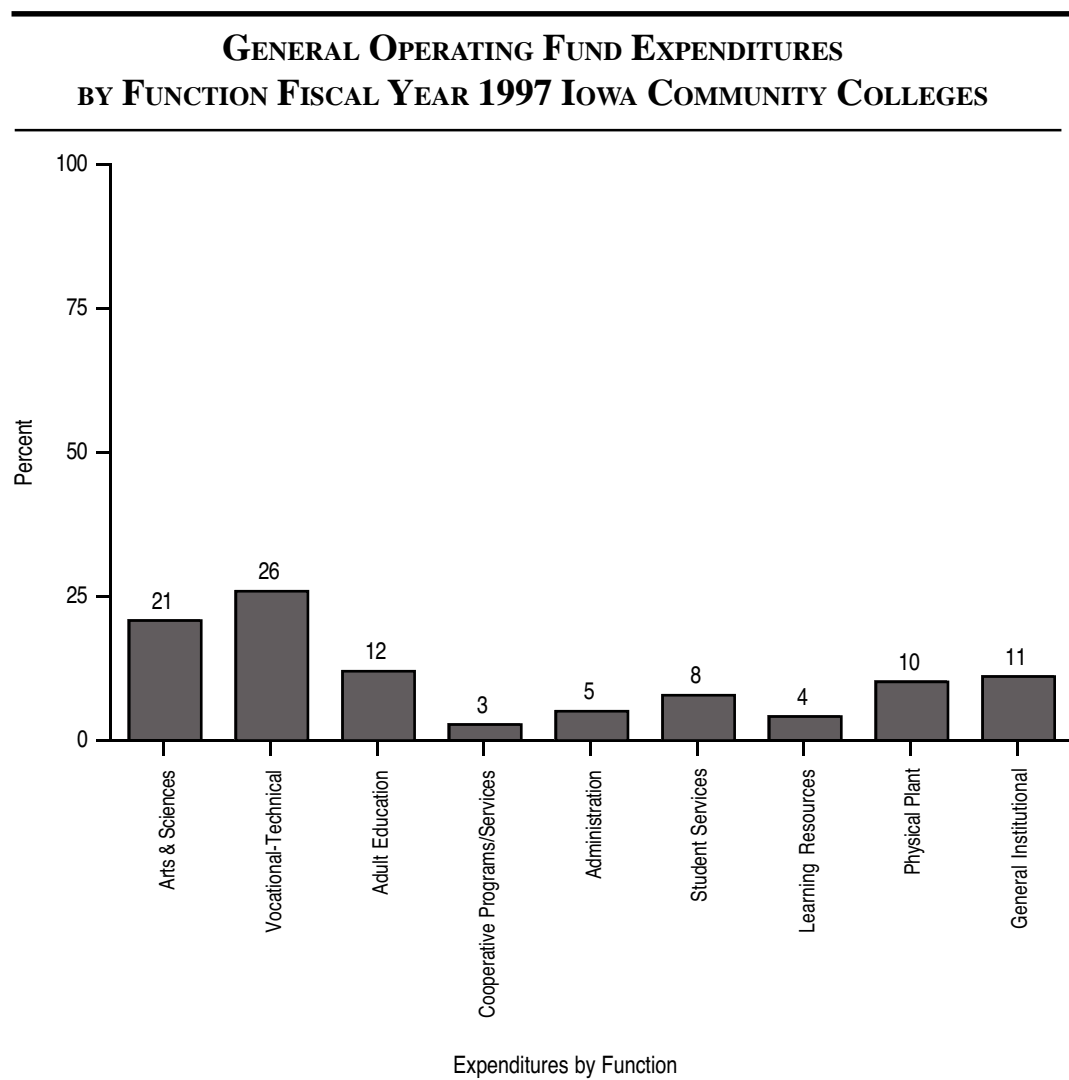
SOURCE: IOWA DEPARTMENT OF EDUCATION, BUREAU OF COMMUNITY COLLEGES.  
 NOTE: \*UNRESTRICTED PORTION.

The rise in dependence on tuition and fees can also be demonstrated by the changes in tuition over the past few years. Since 1990, the average annual tuition for 12 credit hours has risen \$334, from \$1,024 to \$1,358; a 32.6 percent increase.

### Expenditures

The following chart illustrates the expenditures by function of community colleges for the unrestricted portion of the general operating fund for fiscal year 1997. Expenditures for vocational-technical programs constituted approximately 26 percent, while expenditures for arts and science programs were approximately 21 percent of the community colleges' total operating budgets for fiscal year 1997. Approximately five percent is spent on administration.

**Figure 47**



SOURCE: AS15E, IOWA DEPARTMENT OF EDUCATION, BUREAU OF COMMUNITY COLLEGES.

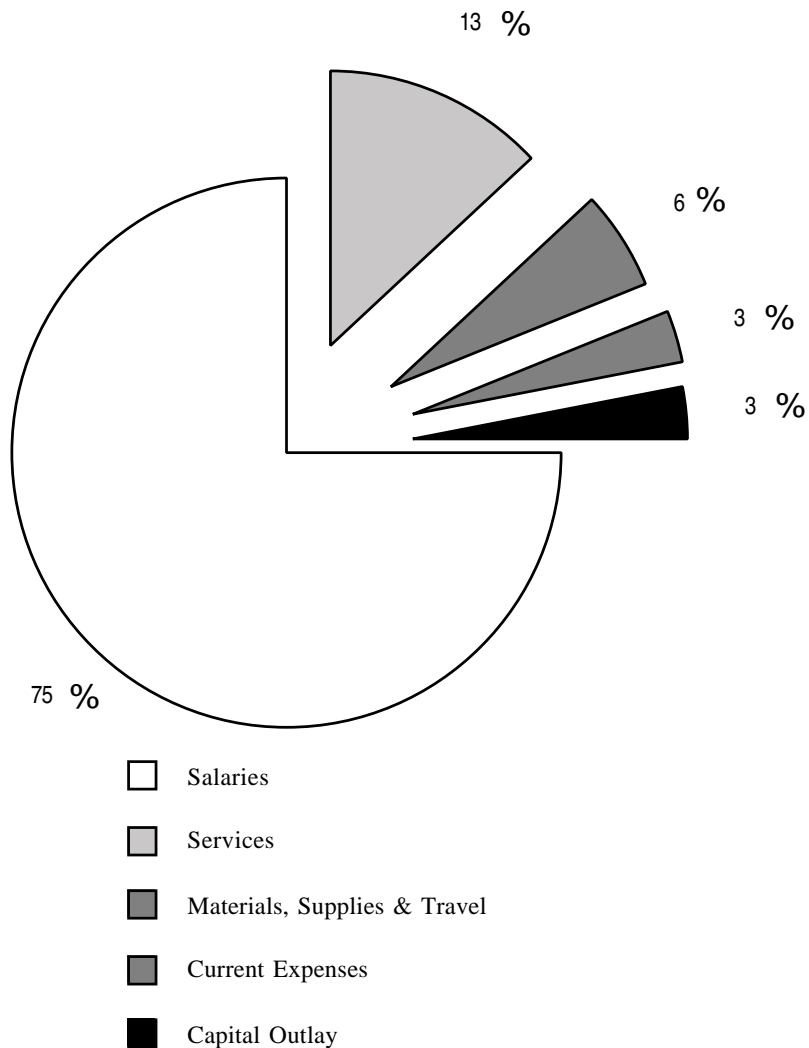
The major categories of expenditures for fiscal year 1997 for the unrestricted portion of the general operating fund are identified below. In fiscal year 1997, approximately 75 percent of the total expenditures was devoted to salaries and benefits.

Figure 48

---

**IOWA COMMUNITY COLLEGES  
GENERAL OPERATING FUND EXPENDITURES\* BY CATEGORY  
FISCAL YEAR 1997**

---



SOURCE: AS15E, IOWA DEPARTMENT OF EDUCATION, BUREAU OF COMMUNITY COLLEGES.

NOTE: \*UNRESTRICTED PORTION ONLY OF GENERAL FUND.

---

### **Iowa Community Colleges' Role in Economic Development**

Each community college has an economic development division which offers customized programs for business and industry. These programs are designed to provide training and retraining services on-site or at any location, at convenient times, seven days per week. The programming is flexible and responsive to the needs of the customer.

Community colleges also have the responsibility for operating the Iowa New Jobs Training Program and the Iowa Jobs Training Program, which provide customized

training for new or expanding industries. The Iowa New Jobs Training Program is for employees in newly created positions for which their employer pays Iowa withholding tax. It is funded through resources derived from certificates that are later repaid from a part of the withholding tax from wages of new employees and from incremental property taxes, and from resources deposited into the Iowa Workforce Development Fund. Since its inception in 1983, it has funded 1,266 projects statewide at an investment of \$321,087,808 to train a projected 97,819 workers.

The Iowa Jobs Training Program funds education and training services for new employees of small Iowa businesses and for current employees of businesses which are retooling. It is funded through an annual appropriation from the Iowa Workforce Development Fund. In fiscal year 1999, this fund will provide over 6.5 million dollars to fund the Iowa Jobs Training Program, apprentice programs, innovative skill development activities, and targeted industry training.

## Vocational Education

### Funding

In fiscal year 1997, the Carl Perkins Basic Grants were awarded to Iowa community colleges and K-12 agencies in the ratio of 34 percent to community colleges, 66 percent to K-12 agencies. Total Perkins funds in fiscal year 1997 were awarded in the ratio of 43 percent to community colleges and 57 percent to K-12 agencies. Table 94 shows Perkins funds awarded in four categories and the percentage division of those categories between community colleges and secondary schools.

**Table 93**

<b>IOWA COMMUNITY COLLEGES FISCAL YEAR 1997 PERKINS FUNDS AWARDED</b>				
	Community Colleges	Percent	Secondary and AEA	Percent
Basic Grant	\$2,877,363	34%	\$5,585,468	66%
Tech Prep	759,581	72	296,216	28
Single/Displaced Homemaker	720,600	87	109,700	13
Sex Equity	219,998	68	102,148	32
<b>Total</b>	<b>\$4,577,542</b>	<b>43</b>	<b>\$6,093,532</b>	<b>57</b>

SOURCE: IOWA VOCATIONAL EDUCATION PERFORMANCE REPORT, FISCAL YEAR 1997, IOWA DEPARTMENT OF EDUCATION, BUREAU OF TECHNICAL AND VOCATIONAL EDUCATION.

## Use of Funds

Federal vocational funds are used quite differently between secondary and postsecondary institutions. In fiscal year 1997, secondary schools used their funds predominantly to purchase equipment and materials, while the postsecondary institutions (community colleges) funds were used to provide services.

## Enrollment

Enrollments in Iowa's vocational programs continued to be strong in fiscal year 1997. Secondary enrollments continued their growth of the past few years. Postsecondary enrollments maintained previous levels.

## Vocational Education Goals

Iowa's Vocational Education Goals were determined by conducting a state assessment prior to receiving assistance under the Perkins Act. Six goals, based upon the identification of the areas of greatest perceived need for both secondary and postsecondary institutions, were established for improving the quality of vocational education. All recipients of federal assistance with Perkins' funds were required to address the following six goals.

- Goal 1:** To provide support services to ensure full and equitable participation for members of special populations so that they have equal opportunity to prepare for their chosen occupational area.
- Goal 2:** To integrate academic and vocational knowledge and skill development in sequenced courses so students possess academic and occupational competencies necessary for competent performance in a workplace.
- Goal 3:** To increase the responsiveness of local programs to the labor market and employers.
- Goal 4:** To provide quality experience and instruction in all aspects of an industry so that program completers possess an understanding of all aspects of the industry that they are prepared to enter.
- Goal 5:** To develop and improve linkages between secondary and postsecondary institutions.
- Goal 6:** To increase the capacity of vocational education programs to place students in jobs or continuing education so that program completers are successfully placed into jobs or continuing education

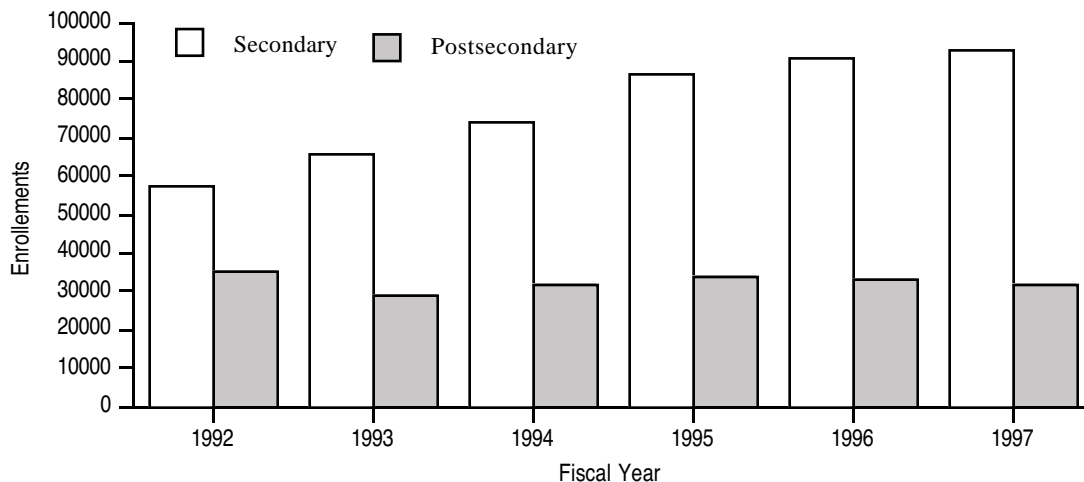


**Figure 49**

---

**ENROLLMENTS IN STATE BOARD APPROVED VOCATIONAL AND PERKINS ONLY FUNDED PROGRAMS**

---



---

SOURCE: IOWA VOCATIONAL EDUCATION PERFORMANCE REPORT, IOWA DEPARTMENT OF EDUCATION.

---

### **Achievement of Iowa Vocational Education Goals**

Achievement of Iowa's state goals for vocational education is reported according to each goal. Some indicators of success are based on performance standards and core measures developed for Iowa's response to Section 403.202 of the rules and regulations for the 1990 Carl D. Perkins Act. Detailed descriptions of achievement of each goal can be found in the *Iowa Vocational Education Performance Report, Fiscal Year 1997*, published by the Iowa Department of Education.

### **Vocational Student Organizations**

Vocational student organizations (VSOs) provide a unique program of career and leadership development, motivation, and recognition for secondary and postsecondary students and adults. Each VSO (Table 94) has at least one state of Iowa vocational education staff member involved in the management of the organization. The Health Occupations Education staff at the University of Iowa manages HOSA (Health Occupations Students of America). The State Multi-Occupations (MOC) Student Organization is not listed with the nationally affiliated VSOs, but a state of Iowa vocational education staff member annually manages fall and spring conferences. Training was provided for state officers of the Iowa VSOs.

**Table 94**

**NUMBER OF CHAPTERS AND NUMBER OF MEMBERS IN  
VOCATIONAL STUDENT ORGANIZATIONS IN  
FISCAL YEAR 1997**

Vocational Student Organizations	Number of Chapters	Number of Members
Business Professionals of America	52	967
Distributive Education Clubs of America (DECA)	40	1,265
Future Homemakers of America/Home Economics Related Occupations (FHA/HERO)	105	2,481
Health Occupations Students of America (HOSA)	37	965
Future Farmers of America (FFA)	229	11,271
Iowa Young Farmers Education Association (IYFEA)	13	164
Postsecondary Agricultural Students (PAS)	5	167
Technology Student Association (TSA)	16	369
Vocational Industrial Clubs of America (VICA)	50	538
<b>Totals</b>	<b>547</b>	<b>18,187</b>

SOURCE: IOWA VOCATIONAL EDUCATION PERFORMANCE REPORT, IOWA DEPARTMENT OF EDUCATION.

### **Single Parents, Displaced Homemakers, and Single Pregnant Women**

Programs funded with the seven percent single parents and displaced homemakers allocation of Perkins' funds were classified as Adult Single Parent/Displaced Homemaker programs and Adolescent Parenting programs. A total of 17 Adult Single Parent/Displaced Homemaker programs and eight Adolescent Parenting programs were funded.

#### **Adult Single Parent/Displaced Homemaker Programs**

A total of 2,992 clients (2,642 females and 350 males) were served through Adult Single Parent/Displaced Homemaker programs. Thirteen (13) percent of the clients self-identified by race were minorities. At least 75 percent of the clients served by the programs were economically disadvantaged.

#### **Adolescent Parenting Programs**

Adolescent parenting programs are designed to retain individuals in school and to provide vocational and career guidance to them. A total of 299 (278 females and 21 males) were served as clients in fiscal year 1997. Thirty-eight (38) percent of the female clients were minorities. Thirty-eight (38) percent of the male clients were

minorities. Sixty-two (62) percent of the females were classified as high school females. Fifty-seven (57) percent of the males were in the 18-20 age range. An additional 484 females and 16 males were referred to other agencies.

### **Sex Equity**

Sex equity grants were classified for management purposes as large comprehensive grants and mini-grants. Mini-grants were subdivided in sex equity mini-grants and cultural specific career education mini-grants. Twelve (12) large comprehensive grants and 11 mini-grants were funded.

### **Criminal Offenders in Correction Institutions**

Two (2) community colleges received funds from the one percent Perkins' allocation for corrections. Students and inmates in three correctional institutions participated in the Perkins' programs. Five hundred (500) students (101 females, 399 males) received guidance and counseling services pertaining to assistance in transition. One hundred sixty-six (166) inmates were served in a work readiness program at the North Central Correctional Facility.

### **Tech Prep**

Tech prep staffing at the state level includes a coordinator and a director. The director devotes 25 percent of his time for the administrative duties and grant management. The state coordinator facilitates the regional activities and provides technical assistance and project development activities. Production of a Career Pathways Manual by the coordinator was a major accomplishment. Each regional level consortium has a tech prep coordinator. In over one-half of the regions, the tech prep coordinator also serves as a school-to-work coordinator.