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ABSTRACT

This report, updated and expanded from a 1990 report, covers seven broad areas of Indiana education since 1980: (1) governance; (2) reform; (3) student enrollment and attainment; (4) student achievement; (5) curricular requirements and programs; (6) education work force; and (7) education finance. Additionally, the report provides data on economic, demographic, and social conditions in Indiana as a backdrop to an understanding of the state's education system. The focus is elementary and secondary public education, though the report also addresses postsecondary education whenever such information is helpful in providing a fuller understanding of specific topics. Whenever possible comparisons are made between data on Indiana with data from Indiana's four neighboring states--Illinois, Kentucky, Michigan, and Ohio--as well as with national data. Throughout the past decade Indiana has made intense improvement efforts, focusing on accountability, standards, and testing. This report is designed to answer questions about efforts being made to improve Indiana's educational system, results of the improvement efforts made so far, and what the future holds for Indiana's educational system. (KDP)

ED 369 137

Indiana Education Policy Center
at Indiana University
Bloomington & Indianapolis

Education in Indiana: An Overview

Special Report
School of Educati[illegible] Office

About the Center

The Indiana Education Policy Center provides nonpartisan research, information, and communication on education issues to Indiana policymakers and educators to improve education in the state.

The Center has offices on two Indiana University campuses. One office is located in the School of Education on the Indiana University Bloomington campus. The other is located in the School of Public and Environmental Affairs at Indiana University-Purdue University Indianapolis.

This report was produced by the School of Education Office.

The views expressed in this report are not necessarily those of the Indiana Education Policy Center's funding agencies, the Lilly Endowment Inc. and Indiana University.

Education in Indiana: An Overview

School of Education Office
Indiana Education Policy Center

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- *Carol Rogers,* Public Information Manager at the Indiana Business Research Center, for her advice on economic and demographic conditions in Indiana;
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Finally, the following members of Indiana's education policy community were kind enough to review drafts of various chapters and offer invaluable suggestions for improvement. Of course, neither these individuals and agencies nor the ones mentioned above are responsible for the final form of this report, nor do they necessarily endorse its findings or conclusions.

Edward Adams
Superintendent
New Albany-Floyd County Consolidated Schools

Robert Baker
Principal
Northwood Elementary (Franklin, IN)

Harmon Baldwin
Former Superintendent
Monroe County Community School Corporation

Nancy Cobb
Director, External Services
Department of Workforce Development

Steve Davis
Director, Student Services
Indiana Department of Education

Joe DiLaura
Director, External Affairs
Indiana Department of Education

Tracy Dust
Executive Director
Indiana Association of Public School Superintendents

Don Ernst
Director, Development, Communications, and Policy
Coalition of Essential Schools

Robert Fallon
Director, Office of Program Development
Indiana Department of Education

Roger Farr
Professor, School of Education
Indiana University Bloomington

Stephen Grimes
Senior Officer, Center for Assessment, Research, and Information Technology
Indiana Department of Education

Don Hossler
Chair, Educational Leadership and Policy Studies
School of Education
Indiana University Bloomington

Gail Huffman-Joley
Dean, School of Education
Indiana State University
Chair, Indiana Professional Standards Board

Carlyn Johnson
Associate Director
Indiana Education Policy Center
School of Public and Environmental Affairs Office
IUPUI

Stan Jones
Executive Assistant
Workforce Development and Higher Education
Governor's Office

David Kinman
Assistant Dean, Education Student Services
School of Education
Indiana University Bloomington

Michael Landwer
Director, Office of Bill Drafting
Indiana Legislative Services Agency

Joe Ogden
Principal
Bluffton-Harrison Middle School (Bluffton, IN)

Rick Peters
Director
School Assessment
Indiana Department of Education

Gail Pluta
Staff Representative
Indiana Federation of Teachers

Sue Richardson
Director, Parent Power
Member, State Board of Education

Carol Rogers
Public Information Manager
Indiana Business Research Center, School of Business
Indiana University

Evelyn Sayers
Policy and Planning Specialist
Indiana Department of Education

Sue Talbot
Director, Alumni Education Programs
Indiana University Alumni Association

Gary Tatlock
Data Base Administrator
Educational Information Systems
Indiana Department of Education

Jeff Weber
Manager
Information and Research
Commission for Higher Education

David Young
Vice President
Indiana State Teachers Association

Credits

This report was truly a collaborative effort, drawing on the skills of every employee at the School of Education Office of the Indiana Education Policy Center. Barry Bull, Co-director of the Center, directed the project, providing overall intellectual guidance and offering specific advice on each chapter. Gayle Hall, Associate Director, managed many of the day-to-day details of the information gathering and editing process. Policy Analyst Nick Vesper managed all the computer operations that supported the project, from statistical analyses of data to selection of software for production. Research Writer Mark Buechler revised and edited all eight chapters of the report.

Martha McCarthy, Faculty Researcher for the Center, offered advice on education reform over the past decade. Neil Theobald, also a Faculty Researcher, read several chapters and offered valuable suggestions, particularly in the area of school finance. Research Associates Jim Arnold, John Downey, Lee Krehbiel, Donna Neumann, and Jeannette Olson gathered data for many of the chapters, and Krehbiel and Neumann spent countless additional hours double-checking facts. Michele Hogan and Rebecca Hubbert, Administrative Secretaries, and Anthony Rolle, Research Associate, helped copyedit various chapters. Finally, Publications Coordinator Sarah Martin designed the publication.

The various chapters of the report were drafted by different authors, as follows:

- Introduction: Barry Bull
- Chapter 1—Organization and Governance of Education: Barry Bull
- Chapter 2—Recent State Education Reform: Barry Bull
- Chapter 3—Demographic, Economic, and Social Conditions: Mark Buechler, Lee Krehbiel, and Jim Arnold
- Chapter 4—Student Enrollment and Attainment: Carol Langdon
- Chapter 5—Student Achievement: Nick Vesper
- Chapter 6—Educational Requirements and Opportunities: John Downey, Donna Neumann, and Jeannette Olson
- Chapter 7—Education Work Force: Mark Buechler
- Chapter 8—Financing Education in Indiana: Nick Vesper

Foreword

In 1990, the School of Education Office of the Indiana Education Policy Center released a report called *Status of Education in Indiana: An Overview.* The report provided policymakers and the general public with a concise summary of K-12 education in Indiana during the 1980s.

Education in Indiana: An Overview is an update and expansion of the 1990 report. It covers seven broad areas of Indiana education since 1980:

- Governance
- Reform
- Student enrollment and attainment
- Student achievement
- Curricular requirements and programs
- Education work force
- Education finance

Additionally, the report provides data on economic, demographic, and social conditions in Indiana as a backdrop to an understanding of the state's education system.

The main focus of this report is elementary and secondary public education. Private elementary and secondary schools receive attention in several chapters. The report also addresses postsecondary education whenever such information is helpful in providing a fuller understanding of specific topics. Unless noted otherwise, though, whenever the report talks about schools, teachers, students, programs, and so forth, it is referring to K-12 public education.

Where possible, the report compares data on Indiana with data from Indiana's four neighboring states—Illinois, Kentucky, Michigan, and Ohio—as well as with national data. Such comparisons need to be interpreted with caution, however, since states, federal agencies, and various research organizations collect and report data in different ways. Even within Indiana, different agencies and organizations provide different numbers for the very same topics. When different sources yielded different numbers, we selected what appeared to be the most consistent and reliable data.

We have adopted certain conventions to make this report as concise and readable as possible. For example, in tables that compare Indiana with neighboring states and the nation as a whole, we have put the most important numbers—those for Indiana and the U.S.—in bold type. That way readers can easily compare Indiana with the rest of the country. Also, although all tables and graphs include appropriate reference citations, we elected not to cite references in the main body of the text. Such a practice would have resulted in citations after virtually every sentence in many chapters. Instead, we have provided a list of sources at the end of each chapter Readers who wish to know the

specific source of any item not contained in a table or figure may contact the School of Education Office of the Center.

Inevitably, any report about a system that serves almost a million children and a third of a million college students in thousands of locations around the state will fail to note significant instances of local effort, progress, and problems. Even the information about the state as a whole may sometimes fall short of the ideals of precision and comprehensiveness. Readers who feel that relevant information is missing or misinterpreted are encouraged to contact the Center. Another update of the report is planned for 1996, and we welcome suggestions for improvement.

The inevitable shortcomings aside, we believe that the current report will serve as a useful resource in helping educators, policymakers, and the general public determine where education in Indiana stands and where it may need to go.

Introduction

Indiana's Educational Effort, Results, and Prospects

For over a decade, Americans have been engaged in a serious examination of education. Hoosiers, like other Americans, are asking how well their education system is performing. This report provides a starting place for answering some of the most basic questions that Indiana policymakers, educators, and citizens have about education in the state:

- Is Indiana making an effort to improve its education system?
- Are the state's educational results improving?
- What are the prospects for future improvement?

Drawing upon the material included in this report, this introduction briefly considers what can be said about each of these questions.

Effort to Improve

All signs mark the past decade as a period of intensified attention to and change in state education policy and support. Governors and Superintendents of Public Instruction have moved K-12 education high on the state's political agenda, offering wide-ranging programs of reform. The General Assembly has passed four omnibus education acts and numerous other education statutes during this decade.

Much of the focus of this reform has been on accountability, standards, and testing. Schools are now required to judge their performance against state standards and to develop plans to improve that performance. Students are required to take standardized tests throughout their school careers and to meet state and local standards for promotion to the next grade. Soon, high school students will have to pass a state test to receive a diploma.

Governors, Superintendents of Public Instruction, and the General Assembly have moved education high on Indiana's political agenda— and the pace of state education reform has increased dramatically.

The school curriculum has been another continuing subject of reform. Students are required to take more academic courses to graduate from high school. Up to 1994-95, schools are required to spend specified amounts of time on particular subjects, and, beginning in 1994-95, they will be required to follow specific state curriculum guidelines in the basic school subjects. Technology preparation and career, drug, and AIDS education are now required.

Education professionals have also had to meet additional requirements. Teachers now must pass a written test to become certified and must serve and pass an internship in their first year of teaching. All teachers must be evaluated according to a state-approved evaluation plan. And a Professional Standards Board has been established to regulate certification and teacher education.

Finally, the state has created a number of new programs, including incentives to reduce class size in grades K-3, assistance for at-risk students, remediation for students who do not meet testing standards, incentives for school restructuring, and latch-key programs to provide before- and after-school care to children who need it.

While the state requirements and expectations for schools have increased, state lawmakers have also made more funding available for education. Total school funding and funding per pupil have more than doubled since 1980. And the share of funding that comes from state sources has increased from about 55% to about 65% of total school funds. Similarly, state higher education funding more than doubled during the same period. Nevertheless, there continues to be debate over the adequacy and equity of funding for education and over whether the state has provided sufficient funds to meet the new requirements it has imposed upon schools.

Results

A variety of measures can be used to judge the results of Indiana's education system, but none is perfect.

The results of the state's education system can be measured in a number of different ways, none of which is perfect. In particular, a variety of factors beyond the control of Indiana's educational institutions may affect the measures of these results. For example, the state seeks a well-educated populace, but because of migration into and out of the state, Indiana's education system is only partially responsible for the educational levels of state residents. Similarly, the state seeks high rates of high school completion and of entry into postsecondary education, but such factors as the educational background of students' families and their ability to pay for college also affect these rates. Finally, the state seeks high scores on standardized achievement tests; however, these scores are also affected by outside factors and may or may not measure the educational performance that is of greatest significance to students, teachers, and Hoosiers in general. Keeping in mind the shortcomings of the available measures of these results, here is what seems to be known about various aspects of educational performance in Indiana.

By 1990, Indiana had exceeded the national average of adults who had graduated from high school, with 76.2% of Hoosier adults holding a high school diploma compared to 75.2% in the U.S. as a whole. A decade before, the state was three percentage points below the national average. By contrast, Indiana's adults with a college degree in 1990 numbered only 15.6% of all those over 25 years of age, considerably below the national average of 20.3%. However, this was an improvement over the 12.5% of Hoosier adults who held a college degree in 1980.

Indiana high school graduation and college attendance rates are improving, but a lower percentage of young adults in Indiana are attending college than in the nation as a whole.

High school completion and postsecondary attendance rates have also been improving recently. The graduation rate reported by the Indiana State Board of Education in 1992 was an all-time high of 82.5%, up from 76% in 1989. And the 1990 proportion of Hoosier 19- and 20-year-olds who had graduated from high school was 86%, slightly above the national average of 85%. Similarly, the percentage of Indiana high school graduates who plan to attend postsecondary education rose to 65.4% in 1992 from 45.3% in 1980. Despite this improvement, the proportion of Indiana's 18- to 24-year-olds actually enrolled in college in 1990 (40.8%) was below the national average (43.9%).

Standardized test scores for Indiana's elementary and middle-school students are above national norms. The scores on the Indiana Statewide Testing for Educational Progress (ISTEP) tests—administered to all students in grades 2, 3, 6, 8, and 9—consistently exceed national averages in all grades and subjects tested. Similarly, the National Assessment of Educational Progress (NAEP) tests for reading and mathematics—administered to a representative sample of students—showed Hoosier 4th- and 8th-grade students scoring somewhat above national

norms. Because of changes in these tests and because they are so new, it is not possible to determine whether the scores of Indiana's students are improving over time. However, the Scholastic Aptitude Test (SAT) that students take for admission into college shows a different picture. Indiana's college-bound students have consistently scored below national averages on the SAT, although scores have improved somewhat in the last two years. The SAT is not designed to evaluate the quality of schools since, in particular, it is taken voluntarily by students. The percentage of high school seniors in Indiana who take the SAT is much higher than average, which explains to some extent the lower average scores. But many other states with similar participation rates in the SAT have higher average scores. Whether justified or not, this causes some concern about whether Indiana high schools are preparing students adequately for college.

Coming changes in the state testing system may help to clarify the apparent disparity in achievement between students in early grades and college-bound students.

These various measures of educational results in Indiana seem to follow a common pattern—above average basic skills achievement levels and above average and improving high-school attainment rates coupled with seemingly below average college-bound achievement levels and below average but improving rates of college attendance and attainment. What is not at all clear, however, is whether this pattern is cause for concern. Is the SAT an accurate indication of high school students' preparation for college, or would a test of all Indiana students at the end of high school show different results? Do these tests and other standards actually measure the knowledge and skills that students need to become socially responsible and productive adults, or are standardized, multiple-choice tests and simple measures of students' staying in school irrelevant to the sophisticated skills and values needed by adults? Do these results, even if meaningful, demonstrate a failure on the part of Indiana's educational institutions, or are they the result of cultural, educational, economic, and motivational factors that those institutions cannot control? Recent changes in the state testing system may help to answer some of these questions. Beginning in 1995, state tests are to include an "application-oriented" and "interdisciplinary" element intended to measure complex student skills. Also in 1995, high school seniors will have to take a state test. But questions raised by available measures of educational results call for scrutiny at both the local and state levels over whether the schools are preparing students adequately for their lives as adults.

Prospects for Future Improvement

Despite the redoubled state effort to improve education, we are unable to say with certainty that Hoosier students and schools are really getting better in ways that matter most to the state and to individual students, parents, and citizens. In part, this uncertainty may stem from the relative recency of the reforms; in fact, some

of the reforms have yet to be fully implemented. Perhaps it is just too soon to tell whether the new requirements are working as intended. To be sure, the rapid and continuous pace of state policy change since 1987 has kept local school corporations and schools busy trying to keep up with what the state is asking of them.

Uncertainty over the effect of education reforms may be due to unclear expectations.

In part, the uncertainty over the effect of recent reforms may result from a lack of clarity over just what the state expects schools to do. Sometimes the message of state lawmakers seems to be that the state will specify the results that schools are supposed to achieve and that it will be up to local school boards, teachers, and administrators to figure out how to achieve those results. But this message is contradicted by new and specific requirements for the curriculum and by new programs that the schools must implement. Moreover, the state provides comparatively little assistance for schools to redesign their activities to achieve the desired results.

Against this background, the best way for Indiana to use the next 5 to 10 years may be to reflect upon, reconcile, and adjust state policy to enable the front-line workers in education, such as teachers and principals, to focus their attention on the concrete, problems and possibilities of local schools and students. The demographics of the state indicate that this may be an ideal time to try to focus and release the energies of local citizens and educators. For, in contrast to the past 40 years, enrollments in the next four decades promise to be fairly stable in almost all parts of the state. So instead of having to concentrate on the quantity of education that public schools and colleges provide, Hoosiers may have the luxury of being able to attend seriously to the quality of education.

Stabilizing enrollments may make the coming years an ideal time to improve the quality of education in Indiana.

Of course it is a real challenge for all interested parties—including teachers, school boards. community leaders, students, and parents—to work on the quality of education. Building new facilities and closing old ones present the public with tangible problems to solve, problems that are easy to understand and be concerned about. Helping 3rd graders learn to write cogently, to think clearly, to comprehend the complexities of a global society, to be committed to hard work, honesty, and mutual respect—these are the tasks of an education system dedicated to a high quality education for all students. And they are much harder tasks, ones that require far more inventiveness, intelligence, and energy.

The opportunity to make schools work better for Hoosier children and adults in the near future is very real. And the importance of doing so is equally real. For our young people are becoming an increasingly scarce resource, a resource that we can no longer afford to squander through the neglect of children from certain geographic regions, racial and economic groups, or family backgrounds. Indiana is fortunate not to have the extreme concentrations of social pathologies that threaten to overwhelm some

other states. In education, this can be seen as yet another opportunity to deliver on the promise of a good education for all.

An Invitation

This introduction has touched on just a few of the educational concerns of Indiana policymakers, educators, and citizens. This report speaks to dozens of specific issues relevant to education in the state—issues that range from how educational decisions are made and what social and economic circumstances confront the education system to what populations are served by that system. Readers are invited to explore these issues in greater depth and detail in the following chapters and to use this information in their efforts to make the most of existing opportunities to improve the quality of Indiana's education system.

The structures and functions of state and local education governance affect students' classroom experiences.

Chapter 1

Organization and Governance of Education

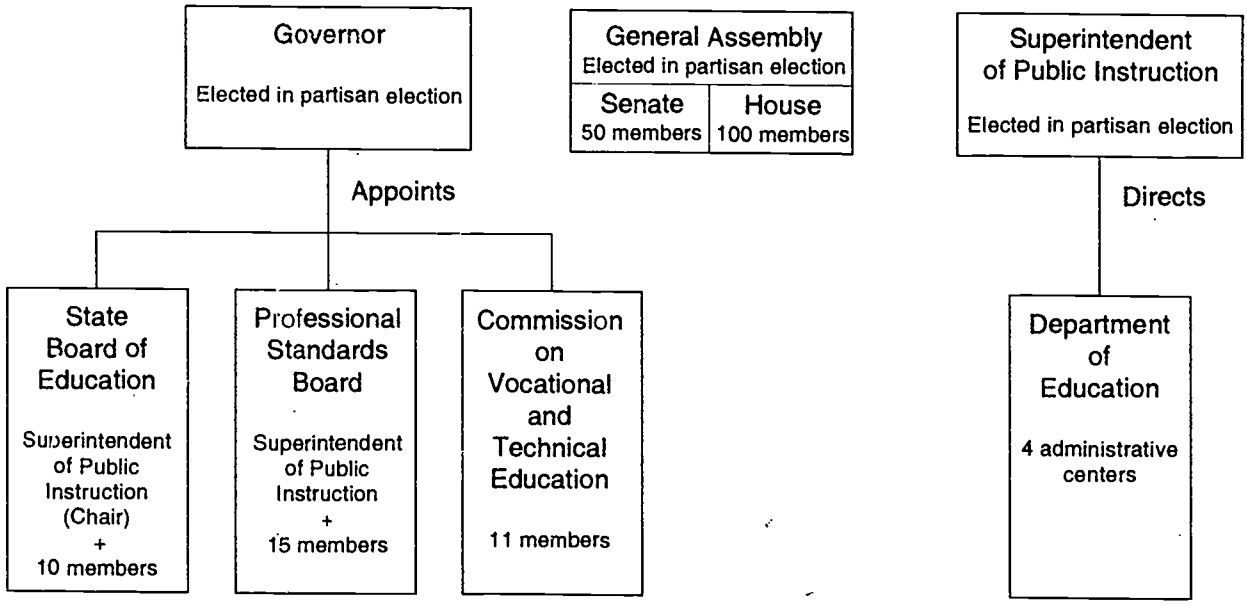
The center stage of education in Indiana as everywhere else is the classroom, where teachers strive to teach the young people of this state the things that will help them lead productive and fulfilling lives. But in many ways what goes on in the classroom is a function of what goes on in the boardroom, in the central office, in the halls and chambers of the capitol. There decisions are made that can significantly affect what teachers teach and what students learn.

This chapter examines the governance structure of education in Indiana, from the Governor's office and legislature through the various state-level bodies involved with education to local school corporations. It also provides information on the number and type of school corporations and schools, both public and private. Finally, it briefly addresses the governance of higher education in Indiana.

State-Level School Governance

At the state level, public elementary and secondary schools are governed by three elected authorities (the Governor, the Superintendent of Public Instruction, and the General Assembly), three appointed bodies (the State Board of Education, the Professional Standards Board, and the Commission on Vocational and Technical Education), and one administrative entity (the Indiana Department of Education). In addition, there are a number of other state entities that affect the operation of schools, such as the State Board of Health and the Education Employment Relations Board. Figure 1.1 shows graphically how the primary state authorities are constituted and what formal relationships exist between them.

FIGURE 1.1
STATE-LEVEL SCHOOL GOVERNANCE STRUCTURE



SOURCES: *Indiana Code*, 1992; McCarthy, Langdon, & Olson, 1993.

These state officials and agencies have a number of key responsibilities in the governance of schools in the state:

- The General Assembly, according to Article 8 of the Indiana Constitution, has a duty to establish "a general and uniform system of Common Schools wherein tuition shall be without charge, and equally open to all." Legislators discharge this duty by passing statutes to fund, organize, and regulate public schools. The Senate and House Education Committees deal with legislation that affects schools. The House Ways and Means Committee and the Senate Finance Committee deal with the state education budget and school finance.

- The Superintendent of Public Instruction is a constitutionally established office charged with the administration of the state's system of public schools. By statute, the Superintendent chairs the State Board of Education, directs the Department of Education, and serves on the Professional Standards Board. The Superintendent also makes recommendations to the General Assembly.

The General Assembly receives recommendations on education policy from a number of state agencies and officials.

- The Governor, also a constitutionally established office, is responsible for administering the state budget and, therefore, the funding that the General Assembly makes available for public education. The Governor also makes recommendations to the General Assembly.
- The State Board of Education was created by statute to adopt rules for public schools, to establish and monitor the achievement of state goals for public education, and to make recommendations to the General Assembly on the educational needs of the state. The Board's 10 appointed members represent the state's Congressional districts and may include no more than 6 members from a single political party.
- The Professional Standards Board, created by statute in 1992, regulates the licensing of education professionals and the related college and university preparation programs. The Board's 15 appointed members include one school superintendent, one school principal, one school corporation board member, three employees of teacher training institutions who hold a teaching license, and nine public school teachers. The appointed teachers must include at least one person licensed at each of four levels—early childhood, elementary, middle/junior high, and high school—and at least one person licensed in each of the following areas: special education, vocational education, student services, fine arts, mathematics, and science.

The Professional Standards Board is the most recent addition to Indiana's state-level governance structure.

- The Indiana Commission on Vocational and Technical Education, also created by statute, governs vocational education in the state. The Commission consists of 11 persons, 10 of whom represent the state's Congressional districts and one of whom serves at large. These 11 members must also include one representative of a private industry council, one officer or employee of a state postsecondary education institution, and one officer or employee of a school corporation. The Commission sets goals, develops a comprehensive plan, provides coordination, and makes recommendations for vocational education in the state's schools and postsecondary institutions.
- The Department of Education was established by statute to carry out designated state statutes, implement State Board of Education policies, conduct research to assist the State Board in establishing policies, and provide technical assistance to school corporations. The Department includes four

administrative centers: Administration and Financial Management; Assessment, Research, and Information Technology; Community Relations and Special Populations; and School Improvement and Performance.

School Corporations

School corporations conduct education programs for children within their jurisdictions according to the statutory requirements of the state. More specifically, they must provide an education for all enrolled children in grades K-12; an appropriate education for all preschool children with disabilities; and, on their own or by contract, latchkey services before and after school for school-age children. School corporations may offer a number of other services, including adult education, vocational education, school and public libraries, and summer school. In 1989, school corporations were granted "home rule," or full powers necessary to conduct their affairs, as long as those powers (a) have not been forbidden by statute or delegated to another agency, (b) are used in a manner consistent with prevailing state statutes and rules, and (c) are exercised through written policies adopted by the corporation's governing body. Prior to that time, state courts had limited school corporation authority to that explicitly provided in statute.

Since being granted "home rule" in 1989, Indiana school corporations can exercise powers not specifically limited by the state.

In most school corporations, final administrative authority is held by a corporation board of trustees that in all but a few cases is elected. Eight corporations operate under the jurisdiction of a township trustee rather than a board.

Currently there are 296 school corporations in Indiana, a decrease of 6 since 1990 resulting from consolidation. These corporations fall into a number of different legal categories—township schools, city schools, town schools, county schools, consolidated schools, metropolitan schools, community schools, and unified schools—categories that were created by reorganization statutes enacted at various times over the past century. Most school corporations now are classified as community schools under the most recent major reorganization plan, initiated in 1959.

The Indiana Department of Education (IDOE) also classifies school corporations according to the student population density of the area they serve (see Table 1.1).

TABLE 1.1
STUDENT POPULATION DENSITY OF SCHOOL CORPORATIONS, 1993

Category	Number
Metropolitan (inside an SMSA* with a density greater than 200 students per square mile or with a city of at least 50,000 residents)	32
Suburban (inside an SMSA with a density between 20 and 200 students per square mile)	65
Town (outside an SMSA with a density greater than 20 students per square mile)	33
Rural (an area with a density less than 20 students per square mile)	166
TOTAL	296

*U.S. Census Standard Metropolitan Statistical Area.

SOURCE: Indiana Department of Education (unpublished data), 1993.

Public Schools

Indiana school corporations operate public schools under statutes passed by the General Assembly and administrative rules adopted by the State Board of Education. In June 1993, there were 1,897 public schools, a slight decrease from the 1,910 public schools in 1990. The largest change was in the number of junior high schools, with 11 fewer in 1993 than in 1990. The development of middle schools, included with other schools in Combined Elementary and Junior High Schools, may account for this change. Table 1.2 shows the number of public schools according to the grades they include or the type of programs they offer.

TABLE 1.2
PUBLIC SCHOOLS BY TYPE, 1993

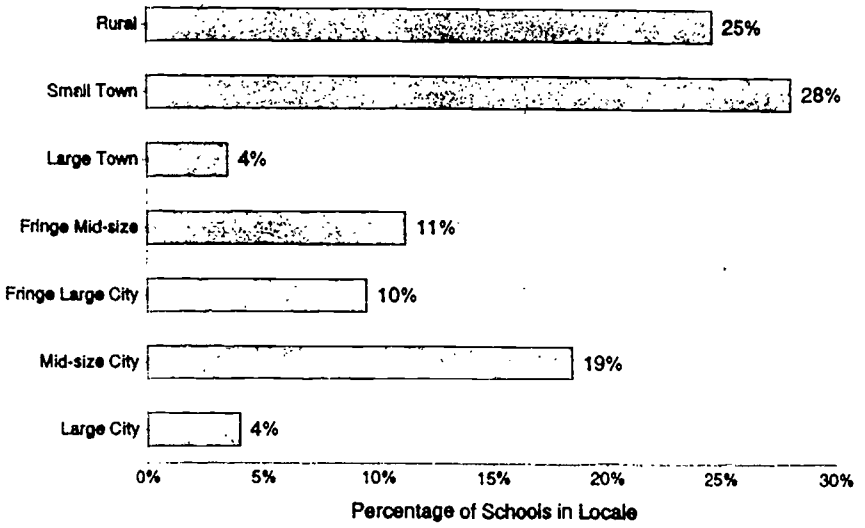
	Grade Span*	Number
Pre-Kindergarten and Kindergarten Only	PreK-K	6
Elementary Only	PreK-6	1137
High School Only	9-12	230
Combined Elementary and High School	PreK-12	10
Combined Elementary and Junior High	PreK-8	224
Combined Junior High and High School	7-12	112
Junior High School Only	7-9	94
Special Ed., Vocational, Alternative	Variou	84
TOTAL		1897

*Schools counted in each category include some but not necessarily all of the grades indicated. For example, a school with grades 4-8 would be a combined elementary and junior high school.

SOURCE: Indiana Department of Education (unpublished data), 1993.

The IDOE also classifies schools according to the population density of their locales. Figure 1.2 shows that over half of the schools in Indiana are located in rural areas or small towns (areas with fewer than 25,000 residents). These proportions of schools in various locales have changed little over the past three years.

FIGURE 1.2
PUBLIC SCHOOLS BY LOCALE, 1993



Rural = An area with a population less than 2,500.
Small town = An area not within a U.S. Census Bureau Standard Metropolitan Statistical Area (SMSA) with a population between 2,500 and 25,000.
Large town = An area not within an SMSA with a population over 25,000.
Urban fringe of mid-size city = An area within an SMSA with a population less than 400,000 but not in the central city region.
Urban fringe of large city = An area within an SMSA with a population over 400,000 but not in the central city region.
Mid-size city = An area in the central city of an SMSA with a population of less than 400,000.
Large city = An area in the central city of an SMSA with a population over 400,000.

SOURCE: Indiana Department of Education (unpublished data), 1993.

Indiana 2000 encourages educational innovation by permitting selected schools to invoke waivers from certain state laws.

Based on legislation adopted in 1991, the State Board of Education has recognized certain schools as participants in the Indiana 2000 school restructuring program. Schools selected for this program must involve teachers, parents, and the business community in developing plans for restructuring. The program provides small grants to the designated schools and permits school corporations, on behalf of those schools, to invoke waivers of State Board of Education rules and those state statutes that relate to the curriculum and to textbook selection if such rules or statutes limit the schools' ability to carry out their plans. To date, the State Board has designated 138 schools as Indiana 2000 schools. Another 68 schools have received planning grants to assist in the Indiana 2000 application process.

State-Operated Schools

Indiana operates seven special schools. Four are for children with disabilities, and three are operated in conjunction with juvenile correctional facilities.

Nonpublic Schools

Nonpublic schools choosing to seek accreditation are required to participate in ISTEP.

Approximately 10% of Indiana's children attend nonpublic schools. By statute, the State Board of Education maintains a voluntary system of recognition for nonpublic schools and permits voluntary accreditation of such schools based on standards similar to those used for accrediting public schools. Nonpublic schools seeking state accreditation must participate in ISTEP (Indiana Statewide Testing for Educational Progress), which is provided to such schools free of charge. Nonpublic schools that are not accredited or approved by the State Board of Education are explicitly exempted from administrative rules that define school curriculum requirements. Currently there are 732 nonpublic schools registered with the IDOE; 309 of these schools are accredited by the state. Table 1.3 reports the number of nonpublic schools according to the grades they include or the type of programs they offer.

Students who attend accredited nonpublic schools and who meet federal eligibility criteria for free lunches can receive state reimbursement of required school fees for textbook rental and supplies. In addition, school corporations must provide parochial school students with free transportation to and from school along established public school bus routes.

TABLE 1.3
NONPUBLIC SCHOOLS BY TYPE, 1993

	Grade Span*	Number
Pre-Kindergarten and Kindergarten Only	PreK-K	91
Elementary Only	PreK-6	120
High School Only	9-12	28
Combined Elementary and High School	PreK-12	144
Combined Elementary and Junior High	PreK-8	329
Combined Junior High and High School	7-12	19
Junior High School Only	7-9	0
Special Ed., Vocational, Alternative	Various	1
TOTAL		732

*Schools counted in each category include some but not necessarily all of the grades indicated. For example, a school with grades 4-8 would be a combined elementary and junior high school.

SOURCE: Indiana Department of Education, 1993.

Home Schools

State law permits parents of school-age children to provide schooling at home, as long as the instruction provided is equivalent to that given in the public schools. Parents who wish to home school their children are to notify the local school superintendent that they are choosing this option. In 1993-94, IDOE records show that 2,807 children are receiving home instruction.

Higher Education

The Commission for Higher Education coordinates public postsecondary education in Indiana. The Commission is appointed by the governor and has 14 members. The members must represent each of the state's Congressional districts. In addition, the Commission includes one student and one faculty member from the state's postsecondary institutions. The Commission develops a long-range plan for higher education, reviews institutional budget requests, conducts research, approves new campuses and programs, and makes recommendations to the General Assembly.

State universities and colleges are governed by boards of trustees. Most trustees are appointed by the governor, but some are selected by alumni. The number of members and the constitution of these boards are determined by statute and vary from institution to institution.

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With particular emphasis on accountability, testing, and curriculum, Indiana's state-level education reform has intensified over the past decade.

Chapter 2

Recent State Education Reform

Since the release of *A Nation at Risk* 10 years ago, education reform has risen to the top of the political agenda in many states. Indiana is no exception. Although some earlier reforms were undertaken, the 1987 A+ Program for Educational Excellence initiated a high level of activity in education by Indiana's governors, superintendents of public instruction, and General Assembly that has continued ever since. These reforms have touched the lives of teachers, students, parents, school administrators, school board members, and other interested parties in various and significant ways.

This chapter examines reform initiatives in Indiana since 1980. It places reforms into 12 different categories, provides examples of each category of reform, and analyzes patterns and trends among the categories.

Legislative Impetus

Since 1980, Indiana's General Assembly has become the primary agent of education reform in the state. During this time, state officials and education interest groups wanting major changes in Indiana public education routinely sought to bring about those changes through legislation. Although governors and state superintendents have taken leadership on reform, the type and cost of reform they proposed made it necessary to obtain the General Assembly's support and concurrence.

Legislation has been the primary instrument of education reform in Indiana since 1980.

In some instances, education reform in Indiana has taken years to define and enact, while the broad political support needed for legislative adoption has developed. In other instances, reform has been enacted quickly and with relatively little public debate. Often, education reform has taken shape as omnibus education legislation, which changes many different policies at once. During the past few years, these legislative reform packages have included:

- A+ Program for Educational Excellence, 1987
- Governor's Excel Program, 1989
- Bayh-Evans Joint Education Program, 1990
- Work Force Development Act, 1992

Types and Examples of Reform

An analysis of the state's education reforms from 1980 to 1993 shows that almost all of them fall into 12 general categories:

- Accountability, standards, and testing
- Adult and work force education
- Curriculum and instruction
- Early childhood education
- Education governance
- Education professionals
- Educational technology
- Instructional time
- School finance
- School restructuring
- Special populations
- Students

Definitions and examples of each type of reform are provided below. Other chapters of this report include more details about many of these programs and other recent initiatives.

Accountability, Standards, and Testing

These reforms make schools, school corporations, and students responsible for particular educational outcomes, usually based on statewide definitions and measures of the desired results.

- *Indiana Statewide Testing for Educational Progress (ISTEP,* 1987). Established a statewide test of student achievement in English/language arts, mathematics, and other subjects. At present, the test is administered in grades 2, 3, 6, 8, and 9.
- *ISTEP Remediation* (1987). Requires students in grades 2, 3, 6, and 8 who do not meet state standards on the ISTEP test to attend remediation classes. At the end of those classes, students are retested. Those who still do not meet state standards are retained in grade. (Funds are also provided for remediation of 1st-grade students identified by local teachers.)
- *Performance-Based Accreditation* (1987). Requires schools and school corporations to be reviewed every five years for compliance with legal standards, state performance standards (based on student attendance rates, high school graduation rates, ISTEP results, and state proficiencies in mathematics and language arts), school improvement plans, and implementation of a professional development and evaluation program.
- *Performance-Based Awards* (1987). Provides funds to schools that have improved performance in two of four areas—attendance rates, English/language arts proficiencies, mathematics proficiencies, and average ISTEP scores.
- *School Report Card* (1989). Requires school corporations to publish an annual financial report and an annual performance report that includes for each school ISTEP scores, proportion of students required to attend ISTEP remediation, student attendance rates, graduation rates, class size information, and SAT scores.
- *Gateway (Grade 10)* and *Grades 3, 4, 8, and 12 Performance Assessments* (1992 and 1993). Modifies the current ISTEP program in 1995-96 to include "application-oriented" and "interdisciplinary" assessments in English/language arts and mathematics based on essential skills standards adopted by a panel representing business, labor, and education and approved by the State Board of Education. The legislation (a) moves ISTEP testing from spring to fall; (b) maintains remediation and retention provisions for students who do not meet state standards in grades 3, 4, and 8; (c) requires a passing score on the 10th-grade gateway test for high school graduation; (d) requires students who fail the gateway test to take specific high school courses; and (e) authorizes alternative school programs for these students.

Recent reforms in student assessment testify to widespread concern for accountability in Indiana's education system.

Adult and Work Force Education

These reforms provide education to out-of-school adults, particularly those with limited educational backgrounds, and prepare elementary and secondary students for roles in the work force.

- *Adult Literacy Coalition* (1986). Established a statewide panel of 35 representatives of state government, adult basic education programs, local libraries, community organizations, business, labor, and employment and training programs to coordinate, publicize, provide information about, and expand adult literacy services in the state.
- *Work Force Development Legislation* (1992 and 1993). Requires (a) career education in grades 1-12; (b) student development of a career plan for high school course work; (c) student choice of either a vocational, a college preparatory, or a combined program in grades 11 and 12; (d) school maintenance of student portfolios for release to prospective employers; (e) state sponsorship of vocational and subject-matter certificates of achievement; and (f) cooperation among schools, industrial-vocational institutions, and universities to develop regional work force development plans.

Curriculum reform has focused on specifying and increasing requirements and adding education programs.

Curriculum and Instruction

These reforms define the curriculum that schools must offer, regulate the use of instructional materials, and establish course requirements for students.

- *Increased Graduation Requirements* (1983). Increased, as of 1988, the total number of credits required for graduation from 32 to 38 credits; specified additional course requirements in English, mathematics, and science.
- *Honors Diploma* (1986). Permits students to elect to earn a state Honors Diploma requiring 47 credits in specified subjects.
- *Technology Preparation Curriculum* (1987). Funded the development and piloting of models of performance-based curriculum to provide students with skills necessary for employment and further education. All school corporations are required to offer the curriculum by 1994-95.
- *AIDS Education* (1988) and *Drug Education* (1989). Requires that these subjects be included in the public school curriculum.

Early Childhood Education

These reforms enhance the availability and quality of educational services provided to preschool children, children in grades K-3, and their parents.

- *Prime Time* (1984). Provides incentives to school corporations to reduce pupil/teacher ratios to a corporation-wide average in grades K-1 of 18:1 (24:1 with an instructional aide) and in grades 2-3 of 20:1 (27:1 with an aide).
- *Kindergarten* (1984). Requires all school corporations to offer kindergarten programs of at least one-half day in length.
- *Preschool Special Education* (1990 and 1991). Requires school corporations to provide an appropriate education to all

preschool children with disabilities. At present, $2,750 from local and state funds is made available for each qualifying child.

- *Step Ahead* (1991). Provides grants to Indiana counties to implement, coordinate, and monitor early childhood programs in their jurisdictions.

Education Governance

These reforms redefine the structure, composition, and responsibilities of decision-making authorities at the state and school corporation levels.

- *State Board of Education Consolidation* (1984). Replaced the previous Board of Education (consisting of Commissions on General Education, Textbook Adoption, and Teacher Training and Licensing) with a consolidated Indiana State Board of Education, reduced membership from 18 to 10, limited to 6 the number of board members from a single political party, and made the Board responsible for establishing state education goals.
- *Indiana Commission on Vocational and Technical Education* (1987). Established to plan and coordinate vocational and employment training in the state. The Commission was given authority to develop a plan for secondary vocational education that is binding on the State Board of Education.
- *Home Rule* (1989). Provides school corporations with full powers, express and implied, necessary to conduct their affairs as long as those powers are exercised in accordance with relevant statutes or, if statutes do not exist, with written and adopted policies of school boards.

Several reforms have addressed the maintenance of a high quality education work force.

Education Professionals

These reforms redefine the licensing requirements, conditions of service, and educational opportunities for current and prospective professional educators in the public schools.

- *Licensing Examinations* (1984). Requires all candidates for an initial teaching license after June 30, 1985, to demonstrate their proficiency in communication, general education, professional education, and the teaching field by passing a written examination.
- *Staff Evaluation* (1987). Requires each school corporation to develop and implement an Indiana Department of Education approved plan to evaluate the performance of each certified employee.
- *Beginning Teacher Internship* (1987). Assigns a mentor teacher to each beginning teacher to assist in the improvement and monitoring of professional skills; requires the principal to evaluate beginning teacher performance at the end of the internship year.

- *Professional Standards Board* (1992). Delegates authority over professional education programs and professional certification to an independent board consisting of the Superintendent of Public Instruction, one corporation superintendent, one principal, one school board member, three teacher educators, and nine public school teachers.

Educational Technology

These reforms provide for the acquisition of educational technology equipment (especially computers), planning for and testing the use of that technology, and training teachers in techniques of instruction using that technology.

- *Indiana Consortium for Computer and High Technology Education* (1983). Established to provide grants to schools for the purchase of hardware and software.
- *Project 4Rs* and *The Buddy System* (1990 and 1991). Provides state funds for computer use in the teaching of reading, writing, and arithmetic in grades K-1; in remediation programs in grades K-3; and in the homes of students in grades 4-6.

Instructional Time

These reforms regulate the length of the school day and school year and define how school time is to be used.

- *Modification of the School Year* (1987). Changed the mandatory length of the school year from 175 to 180 days.
- *Modification of Mandated Instructional Time* (1992). Provides schools more flexibility in scheduling instructional time in basic subjects. New curriculum guidelines define learning opportunities that are to be provided for all students, but beginning in 1994-95, the current State Board requirements for weekly minutes of instruction in each subject will become recommendations.

Reforms have lengthened the school year and just recently given schools flexibility in scheduling instructional time.

School Finance

These reforms change the amount, use, and distribution of state and local funding for public schools.

- *Categorical Funding of State Education Initiatives* (1984 and 1987). Earmarks state funding for Prime Time and At-Risk Programs.
- *School Funding Formula Revision* (1993). Promises, over a six-year period, to guarantee similar tax rates for similar spending school corporations, to establish a ceiling and a floor for per-pupil expenditures, and to adjust tax rates for disparities in assessed valuations.

Through Indiana 2000 and RE:Learning, Indiana schools are participating in the nationwide school restructuring movement.

School Restructuring

These reforms enhance the authority of schools to plan and conduct their own educational programs and foster the use of innovative educational techniques.

- *21st Century/Discovery Schools/Indiana 2000* (1990 and 1991). Initially provided grants to pilot schools that proposed to increase parent, teacher, principal, and community involvement in the design of school programs. The program was expanded to permit other schools to participate and to invoke waivers from state rules and statutes.
- *RE:Learning* (1990). Enables Indiana schools to participate in a national program, sponsored by the Coalition of Essential Schools and the Education Commission of the States, to plan and implement change at the school level based on Coalition principles.

Special Populations

These reforms provide special learning and other opportunities for particular groups of students, including disadvantaged, disabled, and gifted students.

- *Educational Opportunity for At-Risk Students* (1987). Provides assistance to school corporations to establish specific programs for students deemed to be at risk of school failure. Amount of funding depends upon proportions of families in poverty, single-parent households, and adults without a high school diploma in the school corporation. Since 1991, funding has been built into the state tuition support formula. Beginning in 1994, funding will be available only to school corporations with the highest rates of at-risk characteristics.
- *Latch Key Programs* (1985, 1989, and 1991). Requires school corporations to provide or contract for school-age child-care programs in grades K-6 unless the corporation can demonstrate financial hardship due to low attendance.

Students

These reforms regulate the attendance, conduct, and discipline of public school students and the student records schools must maintain.

- *Kindergarten Entry* (1987). Defined July 1 as the date on which a child must be five years old in order to enter kindergarten as of the 1991-92 school year.
- *Driving Privileges* (1989). Prohibits students under 18 who are suspended for a second time, expelled, or habitually truant from obtaining a learner's permit or driver's license.
- *Exit Interviews* (1992 and 1993). Requires 16- and 17-year-old students who wish to drop out to have an exit interview with their parents and school principal and requires parents' and principal's agreement to permit withdrawal.

Patterns of Reform

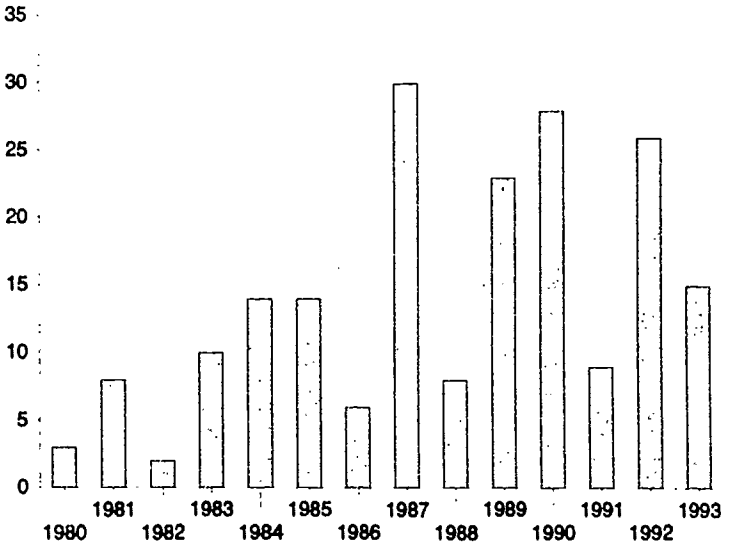
This section analyzes patterns and trends in Indiana education reform based on simple counts of state-level reform provisions enacted at various times during the past 14 years. These counts do not necessarily reflect the pervasiveness, significance, value, or cost of the specific reform provisions, but they can provide a rough indication of the frequency and focus of reform activity in the state.

The pace of education reform legislation has more than doubled in the past seven years.

Figure 2.1 shows the number of reform provisions enacted each year from 1980 to 1993. The pace of state-level reform grew in the early 1980s to a peak in 1987, when the A+ Program was passed, and it has remained fairly high since that time. The figure also shows that reform activity is greatest in each of the years in which omnibus education legislation was passed—1987, 1989, 1990, and 1992.

The peak of state-level reform activity in 1987 is also noteworthy because it included reforms in 11 of the 12 reform categories. The years 1989 and 1990 were relatively high on this measure of the comprehensiveness of reform, each including reforms in 9 of the categories.

FIGURE 2.1
EDUCATION REFORM IN INDIANA: NUMBER OF MAJOR PROVISIONS BY YEAR, 1980-93

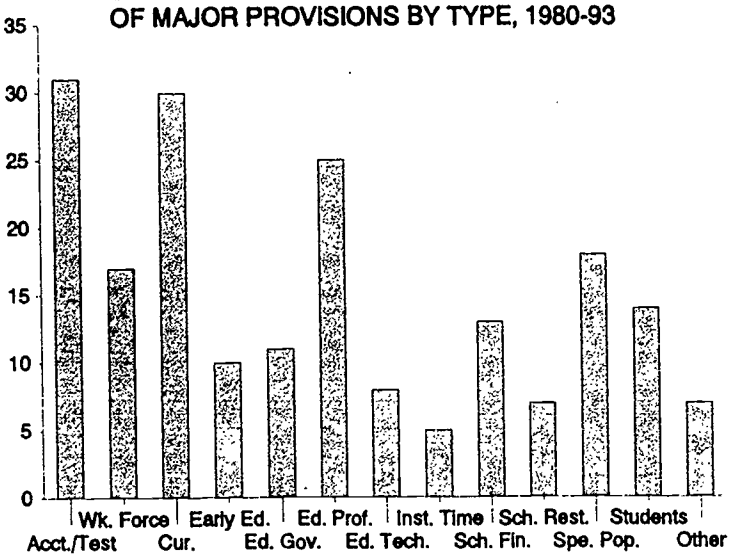


SOURCE: Indiana Education Policy Center, 1993.

Figure 2.2 shows the reform provisions enacted during 1980-93 in the different categories of reform used in this report. Across the entire period, the emphasis in state-level education reform has been on accountability and testing, curriculum, education professionals, and special populations. Reforms focusing on the curriculum and education professionals also received the most constant attention during the past 14 years, each being acted upon in 11 of those years.

Education reform in Indiana has affected most aspects of the education system.

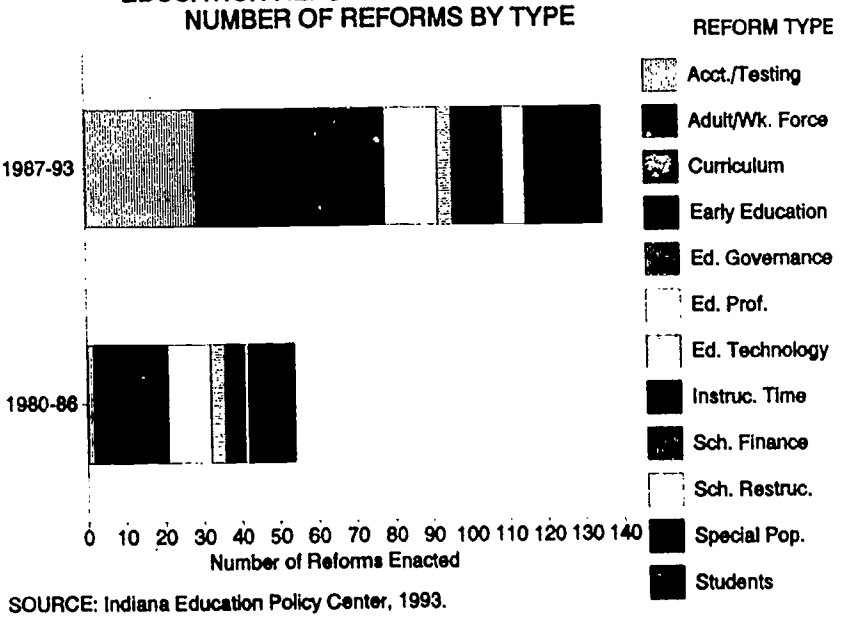
FIGURE 2.2
EDUCATION REFORM IN INDIANA: NUMBER OF MAJOR PROVISIONS BY TYPE, 1980-93



SOURCE: Indiana Education Policy Center, 1993.

Figure 2.3 compares reforms enacted in the first seven years (1980-86), or the period before the A+ Program, with the last seven years (1987-93). This figure confirms the earlier observation that state-level education reform activity has increased dramatically since A+ was enacted. There were on average only 8 reform provisions enacted each year prior to A+; since then an average of 20 reform provisions have been enacted each year. In addition, the emphasis of reform has shifted from education professionals and governance in 1980-86 to accountability and testing in 1987-93. Curriculum and instruction received attention in both periods.

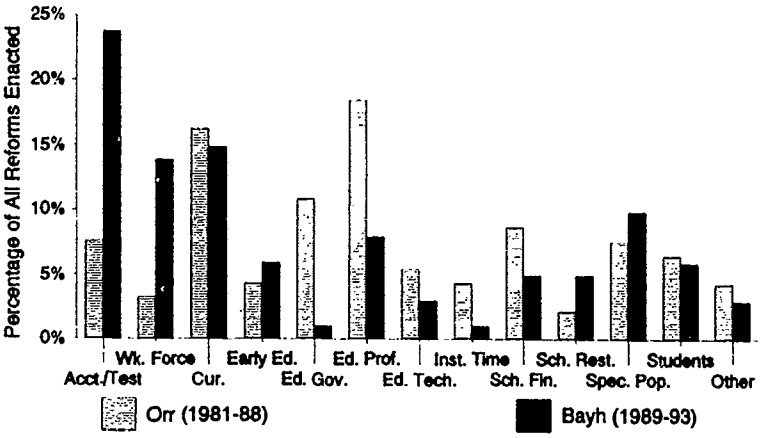
FIGURE 2.3
EDUCATION REFORM 1980-86 AND 1987-93: NUMBER OF REFORMS BY TYPE



SOURCE: Indiana Education Policy Center, 1993.

Figure 2.4 compares the state-level education reforms enacted during Governor Orr's administration (1981-88) and those enacted so far during Governor Bayh's administration (1989-93). Of course, the governors were by no means single-handedly responsible for the indicated reforms. For example, H. Dean Evans' term as Superintendent of Public Instruction spanned both governors' terms in office. Nevertheless, this division permits comparison of what might be thought of as the initial wave of recent state education reform with subsequent developments.

FIGURE 2.4
ORR AND BAYH ERA REFORMS COMPARED
BY TYPE OF REFORM ENACTED



SOURCE: Indiana Education Policy Center, 1993.

Although the reforms of the Orr and Bayh eras address some different education issues, both administrations have emphasized accountability and testing.

Overall, each reform era witnessed about the same number of reform provisions enacted, 92 during the Orr era and 101 during the Bayh era. However, because the Orr administration spanned eight years and the Bayh administration so far spans five years, the average pace of reform during the Bayh administration has been greater, with about 20 provisions enacted per year in the Bayh era and about 11 per year in the Orr era.

The emphases in reform enacted during these eras also differ. During the Orr era, education professionals, curriculum, and governance were the top categories of reform. During the Bayh era, accountability and testing has been the most frequent category of reform (representing almost one quarter of reform provisions), with curriculum and adult/work force education in the second and third positions. Thus, while the state's overall reform emphasis on accountability began under the Orr administration's A+ Program, its prominence results as well from the continuing attention it has received under the Bayh administration. The focus on adult and work force education during the Bayh administration has increased dramatically. And the attention that education governance, education professionals, and, to a lesser extent, instructional time received during the Orr administration has

dwindled considerably during the past five years. Once again, it is notable that the curriculum has been the most consistent subject of reform in both eras.

Conclusion

Data, analysis, and critical reflection can help determine how Indiana policymakers can best serve the state's future interests in education.

State involvement in schooling has become more and more persistent in Indiana during the past 14 years. This chapter's numerical analysis of the categories, emphases, and trends of this state-level education reform provides only the raw material for critical reflection on a number of questions of central concern to citizens and policymakers in the state: Is a high level of state involvement in education policy a good idea, or would it be better for such policy to be shaped at school corporation, school, and classroom levels? Has the state involved itself in the right way in education policy—emphasizing accountability, testing, and the regulation of curriculum and instruction? Or should the state focus on other arenas and issues of education policy? Has the state adequately supported its reforms by providing sufficient resources and authority to carry them out? Do these reforms produce the results that they intend, and are these results worthwhile? Do they produce unanticipated consequences? Do these reforms form a coherent strategy for the improvement of education, or do they send mixed signals to schools, teachers, and students?

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Although Indiana is more stable demographically than many other states, economic and social changes are presenting challenges to its education system.

Chapter 3

Demographic, Economic, and Social Conditions

Any examination of Indiana's education system should be prefaced by an examination of the state's overall demographic, economic, and social conditions because of their potential relevance to the goals and conduct of schooling. This chapter briefly examines population trends, the structure of the economy, and the wealth and health of Hoosier families and children. Where applicable, we compare Indiana socio-economic statistics with those from neighboring states (Illinois, Kentucky, Michigan, and Ohio) and the nation as a whole.

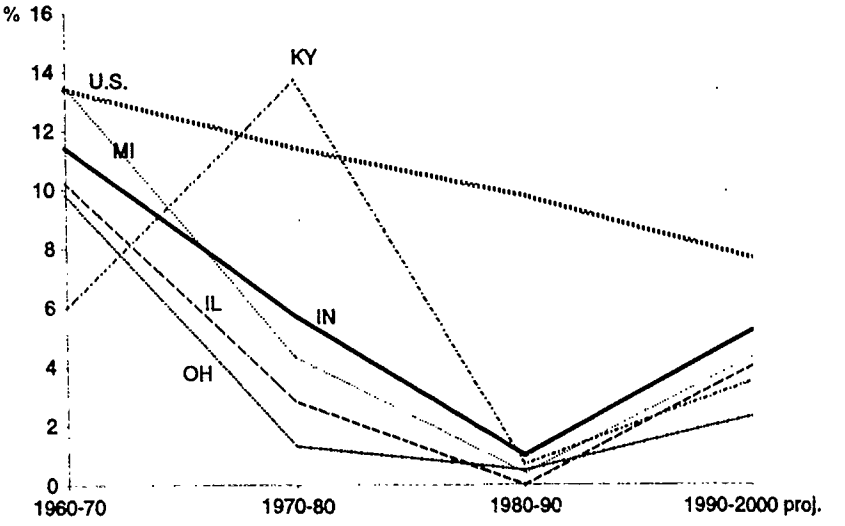
Population

Indiana and its neighbors are growing slower than the nation as a whole, reflecting a general population shift from the rust belt to the sun belt.

- In 1970, Indiana was the 11th largest state in the nation. By 1990, Indiana had dropped to 14th, with a population of 5,544,159.
- As Figure 3.1 shows, from 1980 to 1990, Indiana's population grew by 1% while the U.S. population grew by almost 10%. Despite the low rate of growth, Indiana grew faster than any of its neighboring states.
- From 1990 to 2000, Indiana is projected to grow at a rate of 5.5%, below the projected U.S. rate of 7.7%.

Indiana's population growth rates are comparatively low, and the growth of its white population is lower than that of its minority populations.

FIGURE 3.1
POPULATION GROWTH RATE
BY DECADE



SOURCE: Indiana Business Research Center, 1993b.

Minority Populations

Minority populations in Indiana are growing more rapidly than the white population. However, Indiana's minority populations are not growing as fast as those in the rest of the U.S., nor do they form as large a proportion of the overall Indiana population.

- In 1990, 9.4% of Hoosiers were minorities, up from 8.8% in 1980.
- Indiana's 432,092 African-Americans are by far the largest minority group in the state, making up 7.8% of the overall population. All other racial groups combined—American Indians, Eskimos, Aleuts, Asians, Pacific Islanders, and others—make up only 1.6% of Indiana's overall population.
- Latinos are not considered a racial group by the Census Bureau, since persons of Latino origin cut across racial lines.

In 1990, there were almost 100,000 people of Latino origin in Indiana, or 1.8% of the total population.

- From 1980 to 1990, Indiana's white population grew 0.2%, compared with 4.2% for African-Americans and 14.2% for Latinos. Other racial groups grew even faster, but their overall numbers remain small.
- In the U.S. as a whole, minorities comprised 19.7% of the population in 1990, up from 16.9% in 1980. Among neighboring states, only Illinois had a higher percentage of minorities (21.7%) than the U.S. average (see Table 3.1).

Youth Minority Populations

Across the state, region, and country, minorities make up a larger percentage of the youth population than they did a decade ago. Also, minorities form a larger percentage of the youth population than of the general population.

- The number of minority children under 18 in Indiana actually dropped by 3% over the past decade, from 200,421 in 1980 to 194,193 in 1990. However, the decline in the white youth population was much greater (11%). The result, as Table 3.1 indicates, was that a higher percentage of Hoosier children were minorities in 1990—13.3%—than in 1980—12.4%.
- Across the U.S., 31.1% of children were minorities in 1990, compared to 26.2% in 1980.

Minorities make up a larger proportion of the youth population than of the population as a whole.

TABLE 3.1
MINORITY POPULATION AND YOUTH MINORITY POPULATION, 1980-90

	1980		1990	
	Minorities as % of Total Population	Minorities as % of Population under 18	Minorities as % of Total Population	Minorities as % of Population under 18
U.S.	**16.9%**	**26.2%**	**19.7%**	**31.1%**
IL	19.2%	28.9%	21.7%	32.7%
IN	**8.8%**	**12.4%**	**9.4%**	**13.3%**
KY	7.7%	9.4%	8.0%	10.2%
MI	15.0%	19.9%	16.6%	22.3%
OH	11.1%	14.3%	12.2%	16.2%

SOURCES: Indiana Business Research Center, 1992, 1993b; Indiana Youth Institute, 1993.

According to demographer Harold Hodgkinson, the percentage of minority youth will continue to grow. By the year 2010, over 19% of Hoosiers under 18 will be minorities (compared with 13.3% in 1990). Nationwide, over 38% of children under 18 will be minorities.

Non-Native Speakers

Non-native speakers often have a more difficult time in school than native English speakers. Almost 14% of children across the U.S. speak a language other than English at home, up from 9.6% in 1980. The percentages are much smaller for Indiana: only 4.9% of Hoosier children do not speak English at home, up from 3.6% in 1980. Of the states in the region, only Illinois is currently above the national average, with a rate of 14.4%.

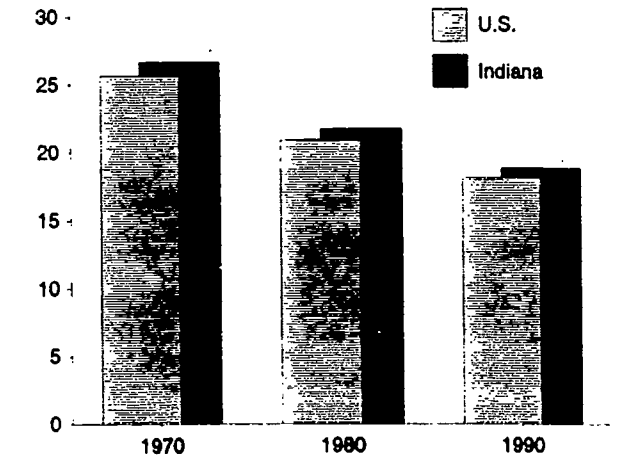
Age Groups

The U.S. population is growing older as the baby boom generation moves into middle age. The median age of the U.S. population has risen from 28.1 in 1970 to 32.9 in 1990. Indiana's population has aged slightly faster, from 27.2 in 1970 to 32.8 in 1990. Ohio has the highest median age in the region at 33.3, Michigan the lowest at 32.6.

Similarly, the percentage of school-age children (5 to 17) is declining relative to the population as a whole, both in this region and across the United States. As Figure 3.2 shows, in 1970, 5- to 17-year-olds made up 25.7% of the U.S. population and 26.7% of Indiana's population. In 1990, this same group made up only 18.2% of the U.S. population and 18.9% of Indiana's population.

In Indiana as well as the rest of the nation, the proportion of the population that is school age is declining.

FIGURE 3.2
SCHOOL-AGE YOUTH (5-17) AS A PERCENTAGE OF TOTAL POPULATION



SOURCE: Indiana Business Research Center, 1993b.

Population Projections for Children

According to recent projections by the Indiana Business Research Center, total population in Indiana is predicted to increase slowly over the next 40 years, from 5,544,159 in 1990 to 5,881,200 in

2030 (an increase of 6.1%). During this same period, however, the population of Hoosiers under age 18 will decrease slightly—by about one third of one percent. The decrease in the under-18 population will be smallest between 1990 and 2000, only 0.1%. Between 2000 and 2010, the decrease in under-18 population is projected to be about 0.5%, and between 2010 and 2030 another 0.4%.

Population projections for the next few decades suggest that school enrollments across Indiana will be relatively stable.

These changes in the number of children in the state will be distributed unevenly among Indiana's 92 counties. For example, between 1990 and 2000 the under-18 population in 2 counties will increase by over 10%, and in 20 counties the under-18 population will decrease by over 10%. Most counties will face a decrease in their number of children during the next 10, 20, and 40 years. However, the annual rate of decrease for these counties will be small, with none worse than an average of -1.8% each year. Over this same period, a much smaller number of counties can expect an increase in their number of children. However, the 16 counties that can expect an increase between 1990 and 2000 include about 45% of the state's under-18 population. In later decades, the proportion of under-18s who live in counties with an increase is much smaller, under 10%. Here, too, few if any counties will experience unusually high annual rates of increase in their under-18 population.

On the whole, these projections present a picture of relative stability in the numbers of children to be served by the state's schools, certainly nothing like the rapid fluctuations experienced by schools since World War II. In most parts of the state, there will be a slight decline in the population of children, but not of a magnitude that will be likely to create dramatic dislocations in the schools. In most places where the number of children is growing, the increases are also likely to be of manageable size.

Household Types

Two trends with implications for education have continued over the past decade, both in Indiana and in the U.S. as a whole:

- *The percentage of households with children has decreased.* In 1980, 40% of Hoosier households had children under age 18. By 1990, this number had dropped to 35%. Nationwide, the drop was from 37.9% to 36.0% (see Table 3.2, next page).
- *The percentage of single-parent families has increased.* Over 22% of Hoosier households with children under 18 were headed by a single parent in 1990, up from 17.2% in 1980. Nationally, 25.7% of families with children were headed by a single parent in 1990, up from 18.7% in 1980 (see Table 3.2, next page). Single-parent families, especially those headed by women, are much more likely to be poor than two-parent families.

TABLE 3.2
HOUSEHOLDS WITH CHILDREN AND SINGLE-PARENT FAMILIES

	% of All Households with Children under 18		% of Households with Children under 18 Headed by Single Parent	
	1980	1990	1980	1990
U.S.	**37.9%**	**36.0%**	**18.7%**	**25.7%**
IL	37.4%	33.4%	20.3%	24.0%
IN	**40.0%**	**35.0%**	**17.2%**	**22.1%**
KY	41.2%	36.1%	16.2%	21.6%
MI	40.3%	34.9%	21.0%	26.7%
OH	38.6%	33.8%	18.2%	23.8%

SOURCE: U.S. Bureau of the Census, 1982, 1992.

Educational Attainment

The percentage of Hoosier adults with high school diplomas has increased considerably over the past decade and now surpasses the national average. However, Indiana continues to rank near the bottom of the states in the percentage of residents with college degrees.

TABLE 3.3
EDUCATIONAL ATTAINMENT, 1990

	% Population over 25 with High School Diploma	Rank	% Population over 25 with College Degree	Rank
U.S.	**75.2%**	**--**	**20.3%**	**--**
IL	76.2%	28	21.0%	19
IN	**75.6%**	**31**	**15.6%**	**45**
KY	64.6%	49	13.6%	48
MI	76.8%	25	17.4%	34
OH	75.7%	30	17.0%	39

SOURCE: U.S. Bureau of the Census, 1992.

Indiana is above the U.S. average in percentage of residents with high school diplomas, but near the bottom in percentage of those with college degrees.

- In 1980, 66% of Hoosiers over the age of 25 had graduated from high school, compared to a national average of 69%. By 1990, Indiana had surpassed the national average: 75.6% of Indiana adults had high school diplomas, higher than the national average of 75.2%. Indiana ranks 31st in the nation in this category.
- In 1990, only 15.6% of Hoosiers over 25 had college degrees. Although this is up from 12.5% in 1980, it is still well

below the national average of 20.3%. Only five states, including Kentucky, have a lower percentage of college graduates than Indiana.

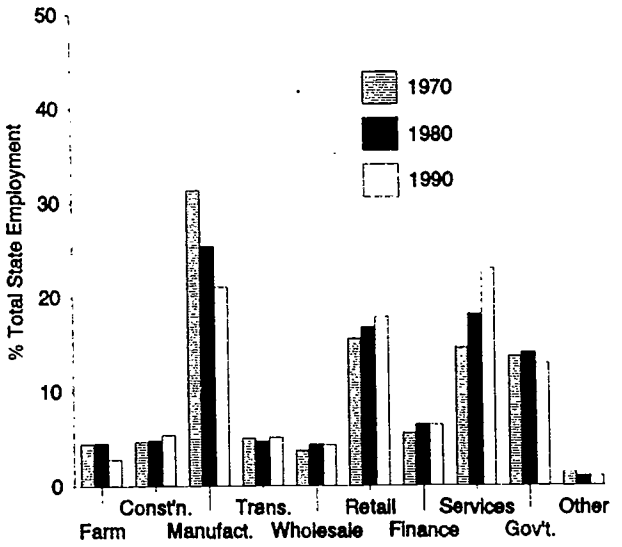
Structure of the Economy

Employment by Industry

Employment trends in Indiana—like those in the rest of the nation—show decreases in manufacturing and agriculture and increases in service and retail industries.

The structure of employment in Indiana—the proportions of people employed in various sectors, such as manufacturing and service—has changed over the past two decades, as Figure 3.3 indicates. Employment in manufacturing and agriculture has fallen considerably—in Indiana as in the nation as a whole—since 1970, while employment in retail and service industries has increased.

FIGURE 3.3
INDIANA EMPLOYMENT
BY INDUSTRY, 1970-90



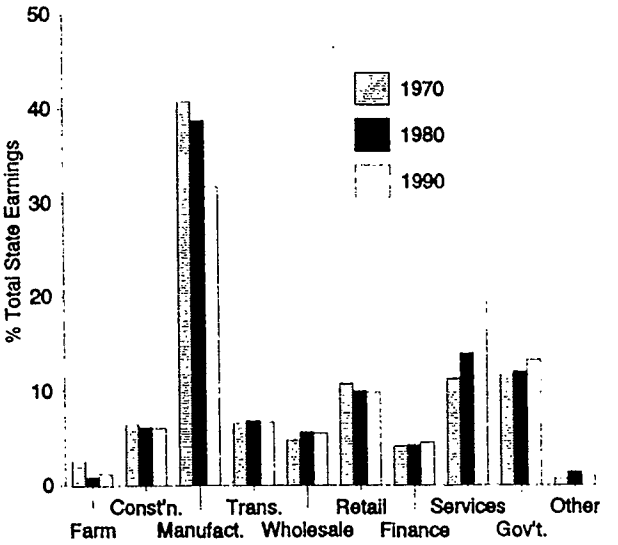
SOURCE: Indiana Business Research Center, 1993b.

- Manufacturing jobs in Indiana decreased from 31.3% of the work force in 1970 to 21.1% in 1990, the largest change in any category of employment. Nationwide, the decrease was from 21.6% to 14.2%.
- Farm employment in Indiana decreased from 4.5% of the work force in 1970 to 2.8% in 1990. Nationwide, the decrease was from 3.0% to 1.6%.
- Service jobs in Indiana increased from 14.6% of all jobs in 1970 to 23.1% in 1990. Nationwide, the increase was from 18.4% to 26%.
- Retail jobs in Indiana increased from 15.6% of all jobs in 1970 to 17.9% in 1990. Nationwide, the increase was from 15.0% to 16.6%.
- These trends are projected to continue. By 2010, only 2.5% of all Indiana jobs will be in farming a[illegible] 19.9% in manufacturing. By contrast, 26.2% of jobs will be service related.

Earnings by Industry

Figure 3.4 shows that earnings by industry have followed a trend similar to employment by industry: lower total earnings in manufacturing over the past two decades and higher total earnings in service jobs.

FIGURE 3.4
INDIANA EARNINGS
BY INDUSTRY, 1970-90



SOURCE: Indiana Business Research Center, 1993b.

Jobs in the service sector have much lower average wages than those in manufacturing.

A comparison of Figures 3.3 and 3.4 reveals that, while more people were employed in service jobs than in manufacturing jobs in 1990, total earnings for manufacturing jobs were half again as much as total earnings for service jobs. Indeed, the average annual wage for a manufacturing job in 1990 was over $33,000, compared to an average wage of $19,000 for service jobs. Retail, the third largest category of jobs in 1990, had the lowest annual wage of all non-farm jobs: $12,000.

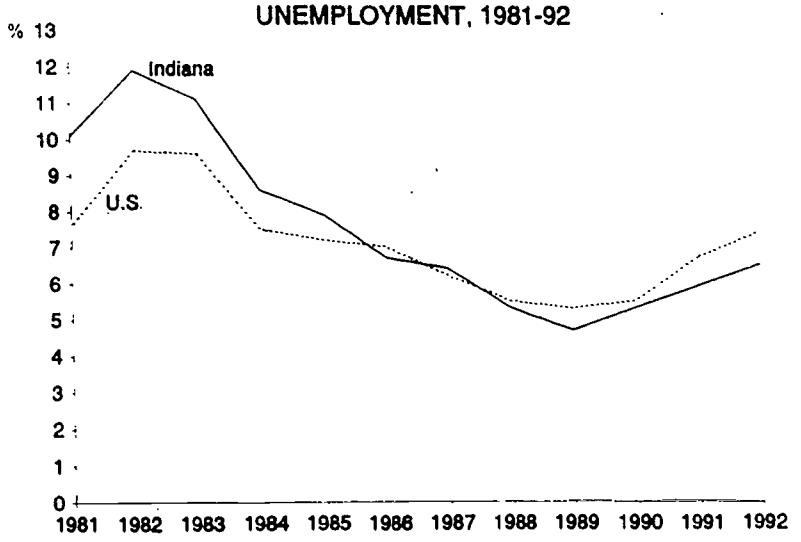
Overall, then, employment in Indiana is shifting from manufacturing to service and retail, but in terms of earnings, manufacturing is still a major force in Indiana's economy.

Unemployment

During the recession of the early 1980s, Indiana had one of the highest unemployment rates in the nation. In 1982, for example, Indiana's unemployment rate was 11.9%, compared to a U.S. average of 9.7%. Over the past five years, however, Indiana's unemployment rate has been lower than the national average (see Figure 3.5) and lower than the rate of all other states in the region. In 1992, Indiana's unemployment rate was 6.5%, compared to a U.S. average of 7.4%. Michigan had the highest unemployment rate of neighboring states at 8.8%.

Although unemployment rates were higher in Indiana than in most other states a decade ago, the state is faring comparatively well in recent years.

FIGURE 3.5
UNEMPLOYMENT, 1981-92



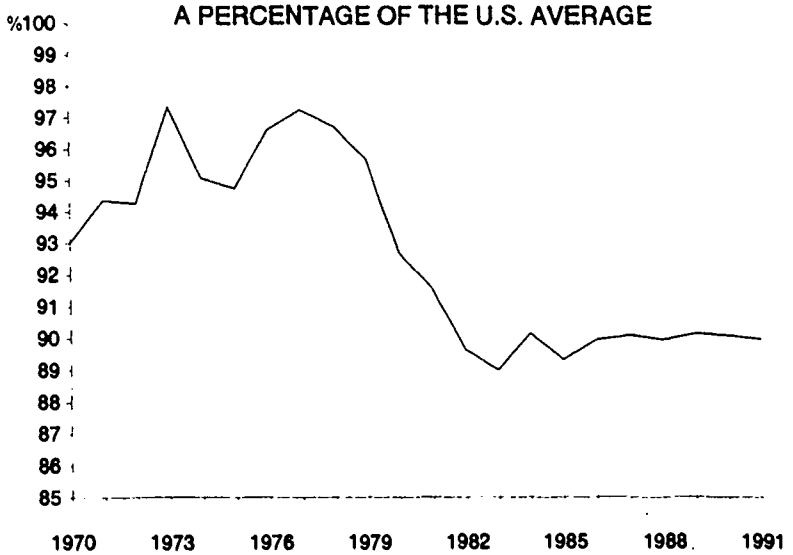
SOURCE: Indiana Business Research Center, 1993b.

Per-Capita Income

Per-capita income is generally considered one of the better indicators of a state's ability to pay for education and other government services. As Figure 3.6 shows, Indiana's per-capita income has dropped over the past 15 years relative to the U.S. average.

- In 1977, Indiana's per-capita income of $7,067 was 97.3% of the U.S. average of $7,267, and Indiana ranked 23rd among the states.
- By 1982, Indiana's per-capita income of $10,385 was only 89.6% of the U.S. average of $11,587, and Indiana had dropped to 34th among the states.
- For 1991, Indiana ranked 32nd with a per-capita income of $17,179—90% of the U.S. average of $19,092.

FIGURE 3.6
INDIANA PER-CAPITA INCOME AS A PERCENTAGE OF THE U.S. AVERAGE



SOURCE: Indiana Business Research Center, 1993b.

Table 3.4 compares the per-capita income of Indiana with that of neighboring states for 1991. To help put the numbers in perspective, figures on the cost of living for each state are included.

Using per-capita income as an indicator, Indiana may be less able to finance public education now than it was 20 years ago.

TABLE 3.4
PER-CAPITA INCOME OF INDIANA AND NEIGHBORING STATES, 1991

	Per-Capita Income	% of U.S. Average	Rank	Cost of Living as % of U.S. Average
U.S.	**$19,092**	**100%**	**--**	**100%**
IL	$20,731	109%	11	97%
IN	**$17,179**	**90%**	**32**	**91%**
KY	$15,626	82%	39	88%
MI	$18,655	98%	20	93%
OH	$17,770	93%	25	93%

SOURCES: Indiana Business Research Center, 1993b; Indiana Department of Education, 1993.

Poverty

A lower percentage of Hoosier families and children live in poverty than the national average, but both percentages are growing. Since poverty statistics are U.S. Census Bureau estimates based on samples within each state rather than overall counts, sampling errors can be fairly large within individual states. Thus, state figures and comparisons, such as those cited below, must be interpreted cautiously.

- In 1989, 10.7% of Indiana's population had incomes below the official poverty level, compared with a national average of 13.1%. Indiana's rate was lower than any of its neighboring states. Kentucky was highest with a rate of 19%, followed by Michigan at 13.1%, Ohio at 12.0%, and Illinois at 11.9%. However, the rates of all neighboring states except Kentucky are close enough to Indiana's rate that one cannot say for sure whether differences are real or a function of sampling error.
- In 1989, 12.8% of Hoosier school-age children (5-17) were living in poverty, compared with 17.0% of all school-age children in the U.S. Indiana had fewer children living in poverty than any neighboring state.
- The rate of poverty for school-age children in Indiana rose from 11.0% in 1979 to 12.8% in 1989. For the U.S., the corresponding rise was from 15.3% to 17.0%. So the child poverty rate in Indiana is actually rising faster than that in the U.S. as a whole.

Indicators of Child Well-Being

Child poverty is one of 10 indicators used by the Center for the Study of Social Policy to gauge the well-being of children across the U.S. Two other indicators used by the Center are the percentage of children living in single-parent families, which was discussed earlier in this chapter, and the high school graduation rate, which is discussed in Chapter 4. The remaining seven indicators are included in Table 3.5, along with national rankings for each state.

Overall, Indiana ranks 29th in the nation in terms of the well-being of its children, according to the Center for the Study of Social Policy. Ohio is 24th, Kentucky 32nd, Illinois 38th, and Michigan 40th.

TABLE 3.5
INDICATORS OF CHILD WELL-BEING, 1990[1]

	Infant Mortality Rate (per 1,000 live births)		% Low Birth-Weight Babies		Child Death Rate, Ages 1-14 (per 100,000 children)		% of All Births That Are to Single Teens		Juvenile Violent Crime Arrest Rate, Ages 10-17 (per 100,000 youths)[2]		% Teens Neither in School Nor in Labor Force, Ages 16-19		Teen Violent Death Rate, Ages 15-19 (per 100,000 youths)	
U.S.	**9.2**		**7.0%**		**30.5**		**8.7%**		**466**		**5.0%**		**70.9**	
IL	10.7	(44)	7.6%	(38)	28.7	(20)	10.6%	(41)	289	(19)	5.4%	(32)	73.2	(27)
IN	**9.6**	**(32)**	**6.6%**	**(22)**	**29.8**	**(26)**	**9.9%**	**(36)**	**398**	**(35)**	**4.7%**	**(27)**	**62.4**	**(15)**
KY	8.5	(20)	7.1%	(26)	29.4	(24)	9.0%	(31)	246	(16)	6.2%	(43)	74.7	(30)
MI	10.7	(44)	7.5%	(37)	29.8	(26)	9.1%	(32)	356	(32)	6.7%	(48)	72.6	(24)
OH	9.8	(36)	7.1%	(26)	29.2	(23)	10.3%	(40)	306	(22)	4.3%	(21)	54.7	(08)

[1] National ranking for each indicator is in parentheses.
[2] 1991 data.

SOURCE: Center for the Study of Social Policy, 1993.

Conclusion

A number of social, economic, and demographic trends are taking place nationwide that will continue to affect education in the coming years. More Americans are members of minority groups. The percentage of families with school-age children is shrinking, but more children are growing up in single-parent homes and in poverty. The economy is shifting from a manufacturing base to a service base.

Indiana generally reflects these trends, with some variation in degree.

- Unemployment has been lower in recent years in Indiana than in the rest of the U.S.

- Indiana is less racially and ethnically diverse than the U.S. as a whole.
- Indiana has a lower percentage of single-parent families and children living in poverty than the national average (but the numbers are growing).
- Indiana's per-capita income is slipping relative to that in other states, and Indiana's adult population is near the bottom in the proportion of college graduates.

Schools may need to modify services to better assist Indiana's growing population of at-risk children.

What are the implications for Indiana? Relative stability in the population of children may permit schools and communities to focus on issues other than enrollment management. At the same time, schools may need to modify the services they offer to better assist the growing proportion of at-risk children in the state. Such services can be expensive, however, and as the proportion of taxpayers with children shrinks, education may prove increasingly difficult to fund.

Yet the need for high quality education may never be greater, as manufacturing jobs become more complex (and fewer in number) and as some of the newly created service jobs demand technical, communications, computer, and learning skills unnecessary in the past.

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**The Indiana Factbook* and EDIN are compilations of data from various state and federal sources, primarily the U.S. Bureau of the Census and the U.S. Bureau of Economic Analysis.

After a 20-year decline, Indiana K-12 public school enrollment promises to remain relatively stable through the year 2000.

Chapter 4

Student Enrollment and Attainment

All children living in the state are required by law to attend school from the fall semester of the school year they turn 7 years old until they are 16. They must attend public schools or other schools where teaching is conducted in the English language.

This chapter examines the composition of the K-12 student body in Indiana: public, private, and home school enrollment; minority enrollment; and the enrollment of other populations such as special education and homeless students. It also looks at attendance laws, attendance rates, and high school graduation rates. Finally, the chapter touches briefly on postsecondary enrollment to give some indication of the paths students follow once they graduate from high school.

Attendance Laws

Parents are responsible for ensuring that their children attend school, and a parent who knowingly violates compulsory attendance laws may be charged with a Class B misdemeanor. Schools may report habitually truant students to the juvenile court. Habitually truant students who are 13 or 14 years old may be denied a learner's permit or driver's license until they are 18.

A student can withdraw from school at the age of 16. However, the student and a parent or guardian must attend an exit interview conducted by the school principal. The parent or guardian and the principal must provide written permission for the student to withdraw, and the student must provide written acknowledgement of the withdrawal. If a student is 18 or older, an exit interview is not required.

All public and private schools are required by law to keep daily attendance records and to report this information to the state. Public school corporations must submit annual attendance and membership reports to the state to receive state support.

K-12 Public School Enrollment

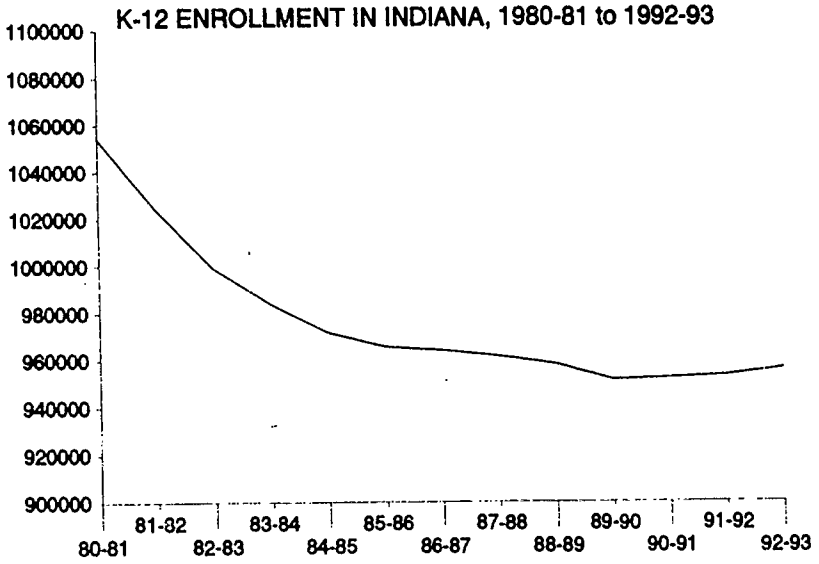
During the 1980s, public school enrollment in Indiana dropped by more than 100,000 students.

Total K-12 enrollment in the U.S. and Indiana rose rapidly during the 1950s and 1960s, peaked in 1971, and then began dropping. In the U.S., enrollment began increasing again in 1985. In Indiana, enrollment did not begin increasing until 1990.

- In the 1980-81 school year, 40,877,481 students were enrolled in public K-12 schools across the nation. After dropping for four more years and then rising for the rest of the decade, enrollment in 1989-90 stood at 40,542,707, an overall decline of 0.8%. U.S. enrollment continued to rise the next two years to a 1991-92 total of almost 42 million.
- Among Indiana and neighboring states, Illinois had the largest student population in 1991-92 (1.85 million). Ohio was second (1.75 million), Michigan third (1.6 million), Indiana fourth (0.95 million), and Kentucky fifth (0.65 million).
- All of Indiana's neighboring states saw enrollment drop during the 1980s. Michigan had the largest drop (12.3%), followed by Ohio (9.9%), Illinois (9.4%), and Kentucky (5.8%).
- From 1980-81 to 1989-90, student enrollment in Indiana fell from 1,054,280 to 951,442, a drop of 9.8%. Enrollment has increased slightly each of the past three years. The 1992-93 enrollment was 956,226 (see Figure 4.1).
- Enrollment declines were distributed unevenly throughout Indiana's school corporations. Between 1980 and 1990, a few school corporations experienced enrollment gains, while most others experienced declines. Dwindling enrollments in some corporations could lead to as many as 30 high school consolidations in the next eight years, according to demographer Jerry McKibben.

FIGURE 4.1

K-12 ENROLLMENT IN INDIANA, 1980-81 to 1992-93



SOURCE: Indiana Department of Education (unpublished data), 1993.

Elementary (K-6) and Secondary (7-12) Enrollment in Indiana

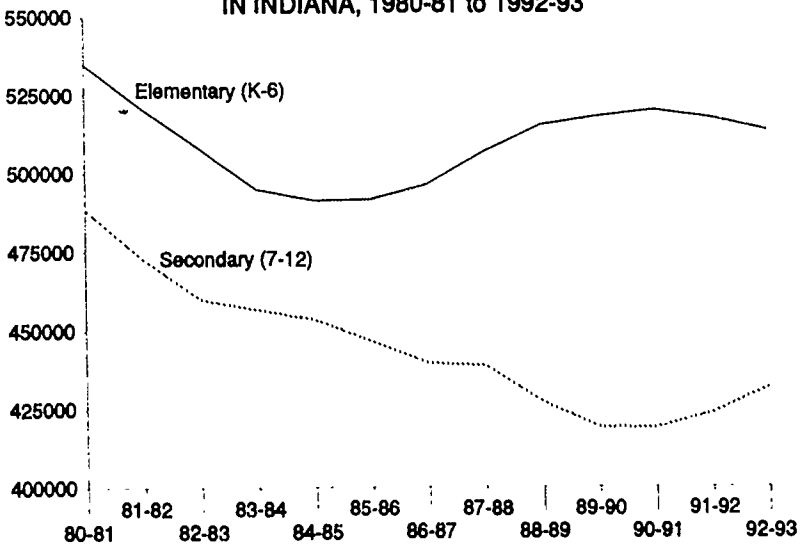
Elementary enrollment reached its lowest point to date in 1984-85, while secondary enrollment continued to decline until 1989-90.

Although total K-12 enrollment in Indiana did not bottom out until 1989-90, elementary enrollment actually began increasing in 1985-86. Secondary enrollment, by contrast, continued to decline until 1989-90, when, echoing the elementary trend, it began increasing and continues to do so. Meanwhile, from 1990-91 to 1992-93, elementary enrollment dropped slightly (see Figure 4.2).

In 1992-93, Indiana elementary enrollment was 513,304 and secondary 431,810.

FIGURE 4.2

ELEMENTARY AND SECONDARY ENROLLMENT IN INDIANA, 1980-81 to 1992-93



SOURCE: Indiana Department of Education (unpublished data), 1993.

Kindergarten Enrollment

In approximately half the states, including Indiana, attendance in kindergarten is not mandatory. Nevertheless, about 91% of eligible Indiana children attend kindergarten.

Indiana's kindergarten enrollment peaked in 1985-86 at over 72,000. It has dropped fairly steadily since then to its 1992-93 figure of 66,044.

Enrollment Projections

Indiana's total K-12 public school enrollment is projected to top 970,000 in 1996-97 and then fall below current levels at the turn of the century.

- According to the National Center for Education Statistics, K-12 public school enrollment in the U.S. is projected to increase by almost 6 million students over the next decade, reaching 48 million in 2003-04.
- According to Indiana Department of Education (IDOE) figures, Indiana's total K-12 public school enrollment is expected to increase by almost 20,000 students over the next four years (a 1.9% increase), peaking in 1996-97 at over 970,000 students. Then it is projected to decrease through the end of the century, falling below current levels in school year 2000-01.
- Elementary enrollment (K-6) is projected to decline fairly steadily over the next decade, from 513,304 in 1992-93 to 492,000 in 2002-03. Secondary enrollment (7-12) is projected to rise from 431,810 in 1992-93 to over 454,000 in 1996, then to fall back to 441,000 by 2002-03.

Private School Enrollment

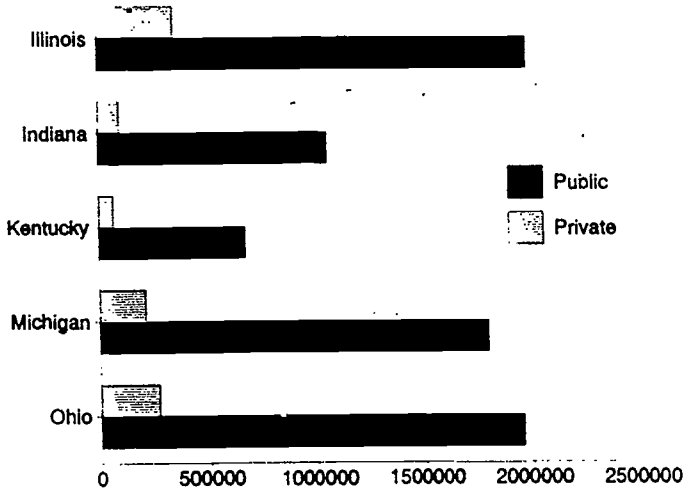
Nationally, 11%-12% of all K-12 students attend private schools, a figure that has remained fairly constant over the past decade.

The percentage of students who attend private school in Indiana rose from 8.3% in 1980-81 to 9.8% in 1983-84. Since then it has dropped slightly to its current 1992-93 level of 9.5%, or 100,637 students. (It should be noted that some private schools in Indiana do not release enrollment figures to the IDOE, so the actual number of private school students is slightly larger than the reported number.)

As Figure 4.3 shows, in 1980-81 (the last year for which rates are available for comparison) Illinois had the highest private school enrollment rate in the region—14.9% of total K-12 enrollment—followed by Ohio with 12%, Michigan with 10.5%, Kentucky with 9.4%, and Indiana with 8.6%.

FIGURE 4.3

1980 PUBLIC AND PRIVATE SCHOOL ENROLLMENT FOR INDIANA AND NEIGHBORING STATES



SOURCE: National Center for Education Statistics, 1992a.

Student Ethnicity

Almost 33% of K-12 public school enrollment nationwide is classified as minority, compared to 13.6% of public school enrollment in Indiana.

- In 1992-93, 86.3% of the total K-12 student population enrolled in Indiana's public schools was white, 10.9% African-American, 1.9% Latino, 0.7% Asian-American, and 0.1% American Indian.
- The 1992-93 minority figures are an increase over the 1980-81 figures, as Table 4.1 indicates.

Minorities represent an increasing proportion of Indiana's K-12 public school enrollment.

TABLE 4.1
ENROLLMENT BY ETHNICITY IN INDIANA, 1980-81 to 1992-93

	1980-81	1992-93
White	87.9%	86.3%
African-American	10.0%	10.9%
Latino	1.5%	1.9%
Asian-American	0.4%	0.7%
American Indian	0.1%	0.1%
Total Minority	12.0%	13.6%

SOURCE: Indiana Department of Education (unpublished data), 1993.

- As shown in Table 4.2, Indiana has a smaller proportion of minority students than all neighboring states except Kentucky.

TABLE 4.2
K-12 PUBLIC SCHOOL ENROLLMENT BY ETHNICITY, 1990-91

	White	African-American	Latino	Asian-American	American Indian
U.S.	**67.4%**	**16.4%**	**11.8%**	**3.4%**	**1.0%**
IL	65.7%	21.6%	9.8%	2.7%	0.1%
IN	**86.3%**	**11.0%**	**1.8%**	**0.7%**	**0.1%**
KY	89.8%	9.5%	0.2%	0.5%	<0.1%
MI	78.3%	17.2%	2.2%	1.2%	1.0%
OH	83.3%	14.3%	1.3%	0.9%	0.1%

SOURCES: National Center for Education Statistics, 1992a; U.S. Department of Education (unpublished data), 1993.

Minorities represent a smaller segment of Indiana's student population than of the U.S. as a whole.

- In 1992-93, accredited private schools in Indiana enrolled a smaller percentage of African-Americans than public schools (6.9% of the private school student population vs. 10.9% in public schools) but more Latinos (3.6% vs. 1.9%), Asian-Americans (1.4% vs. 0.7%), and American Indians (0.2% vs. 0.1%). Overall, private school minority enrollment was 12.1% compared with 13.6% in public schools.

Selected Student Populations

Special Education Enrollment

As in the rest of the nation, special education enrollment in Indiana has been increasing over the past decade.

The number of Indiana students enrolled in special education has increased from 92,000 in 1980-81 (8.7% of the total student population) to almost 116,000 in 1992-93 (12.1%). (Special education enrollment will be treated again in Chapter 6.)

Nationwide the number of children 21 years old and under who are served in federally supported special education programs grew from 8.3% of total enrollment in 1976-77 to 11.4% in 1989-90.

Home School Enrollment

In Indiana, home schools are considered private schools (each registered home school is given a private school number). Home schooling must be "equivalent to that given in the public schools" (*Indiana Code Annotated*, 1992). Parents who opt for home schooling are encouraged to register the names of their children

The number of Hoosier children being schooled at home is four times higher than it was six years ago, but still less than one half of 1% of the state's entire student population.

with both the state attendance officer at the IDOE and the superintendent of the local school corporation. They are required by law to keep attendance records. There are no qualifications for home school educators, and the state does not require children schooled at home to take standardized achievement tests or other forms of assessment.

A precise determination of the number of children being educated at home is difficult to obtain, but it is estimated that nationwide the number has grown from 15,000 children in the early 1970s to 350,000 children in 1991 (about 0.8% of total enrollment). In Indiana, the number of registered home-schooled children has more than quadrupled over the past six years, rising from 667 in 1987-88 to 2,807 in 1993-94. This number still represents less than 0.3% of the entire student population.

Homeless Students

Homeless children are defined as those who lack a regular, adequate nighttime residence. The IDOE estimates that as of November 1993 there were almost 17,000 school-age homeless children in Indiana (and another 8,000 preschool homeless children).

According to both federal and state law, homeless children, like all other Indiana children under 18, are entitled to a free public education. However, homeless children's temporary living conditions sometimes make it difficult to establish which public school the children should attend. The IDOE's legal counsel and attendance officers have determined that homeless children may attend either their "home" school (the school they attended before becoming homeless) or the school serving the attendance area where they currently reside. Schools are also directed to enroll homeless children even if the children lack birth, health, or academic records required by law.

Prekindergarten

Public prekindergarten enrollment in Indiana has grown from 0.1% (1,040 students) of the total public school enrollment in 1980-81 to 0.3% (3,180 students) in 1992-93.

Indiana private prekindergarten enrollment has grown from 6.1% (5,806 students) of the total private school enrollment in 1980-81 to 11.6% (11,706 students) in 1992-93.

Attendance Rates

On a typical day during 1991-92, 95.3% of enrolled K-12 public school students in Indiana were in school, up from 95.0% two years earlier.

Public High School Graduation Rates

High school graduation rates are notoriously difficult to calculate and compare. Districts, states, and federal agencies all have different ways of determining who has graduated and defining the initial population for comparison. For example, some states adjust for student migration; others do not. Therefore, the numbers presented in Table 4.3 need to be interpreted with care.

The table provides two complementary measures of high school graduation. The first is the four-year cohort survival rate, which divides the number of public high school graduates by the number of 9th-graders enrolled four years earlier, adjusted for migration. The second is the high school completion rate, which divides the number of 19- and 20-year-olds who have graduated from high school by the total number of 19- and 20-year-olds. This second number is higher than the first because it includes older students who may have earned GEDs or gone back to school after dropping out.

TABLE 4.3
HIGH SCHOOL GRADUATION RATES

	Cohort Survival Rate, 1990[1]	Completion Rate, 1991[2]
U.S.	**68.7%**	**85%**
IL	72.9%	86%
IN	**72.2%[3]**	**86%**
KY	68.5%	82%
MI	62.0%	86%
OH	76.4%	87%

[1] The number of high school graduates divided by the 9th-grade enrollment four years earlier.
[2] The number of 19- and 20-year-olds who have graduated from high school divided by the total number of 19- and 20-year-olds.
[3] Indiana's cohort survival rate ranked 26th among the states.

SOURCES: Center for the Study of Social Policy, 1993; National Education Goals Panel, 1992.

Even with the adoption of tougher graduation requirements in 1988, Indiana's high school graduation rate reached an all-time high in 1992.

Because the data in Table 4.3 are several years old, they do not report a significant improvement in Indiana's graduation rate over the past three years. (The Indiana State Board of Education defines the graduation rate in yet another way, as the probability that a student will complete four years of high school without dropping out, calculated from the percentage of dropouts in each grade 9-12.) After falling under 76% in 1989, Indiana's graduation rate reached 82.5% in 1992, an all-time high. This increase occurred despite the adoption of more rigorous graduation requirements in 1988 (discussed in Chapter 6).

Despite the improving graduation rate, the total number of high school graduates has dropped considerably since 1980 due to declining enrollments. In 1992, there were fewer than 58,000 high school graduates, compared with more than 75,000 in 1980.

Postsecondary Student Enrollment

Although the primary focus of this report is K-12 education, it is advisable in a chapter on enrollment and attainment to provide some indication of the paths students follow once they graduate from Indiana high schools. The remainder of this chapter offers a brief examination of postsecondary enrollment and enrollment trends at Indiana postsecondary institutions.

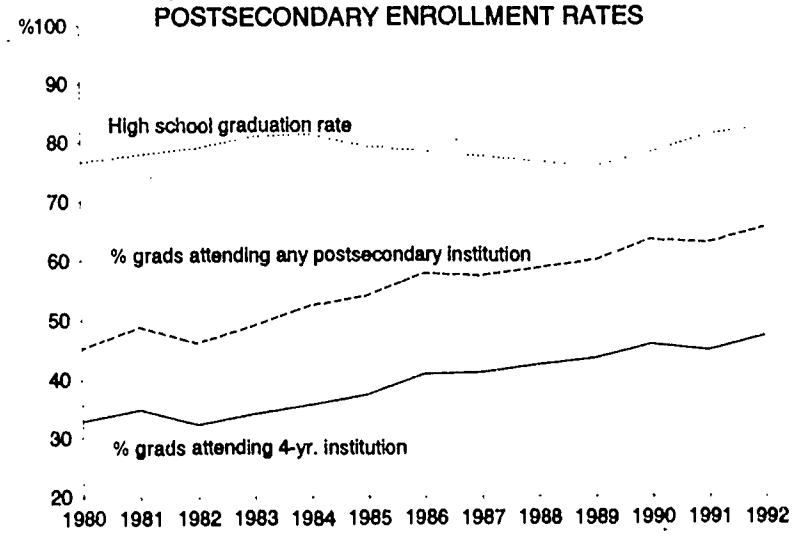
Since 1980, Indiana has seen steady growth in the rate of high school graduates enrolling in postsecondary institutions.

Percentage of High School Graduates Enrolling in Postsecondary Institutions

As Figure 4.4 shows, the percentage of high school graduates enrolling in postsecondary institutions has increased steadily since 1980, according to data taken from the IDOE Intentions Survey (completed by high school counselors each year).

- In 1992, 47.1% of Indiana high school graduates enrolled in four-year colleges or universities, compared with 32.9% in 1980.
- In 1992, an additional 18.3% of high school graduates enrolled in postsecondary institutions other than four-year colleges or universities (including two-year institutions, vocational/technical/trade schools, business schools, and nursing schools).
- Overall, then, 65.4% of Indiana high school graduates enrolled in postsecondary institutions in 1992, up from 45.3% in 1980.

FIGURE 4.4
INDIANA HIGH SCHOOL GRADUATION AND POSTSECONDARY ENROLLMENT RATES



SOURCE: Indiana Department of Education (unpublished data), 1993.

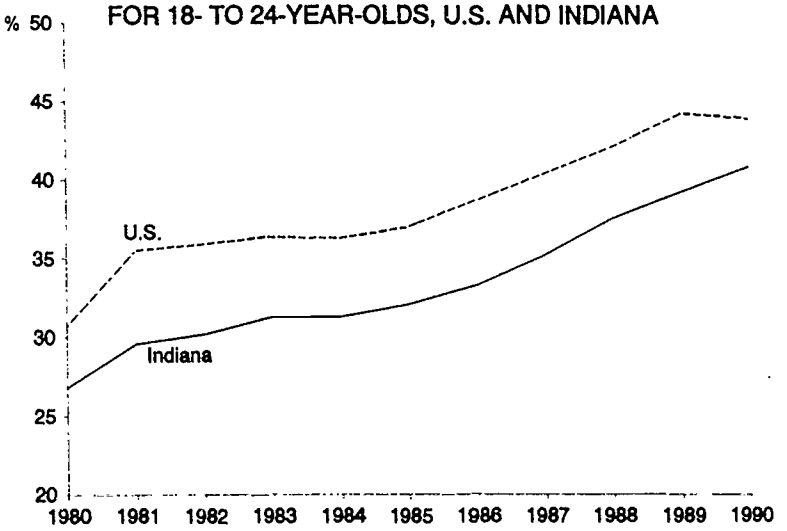
Postsecondary Participation Rates

A different measure of postsecondary enrollment among college age youth is the postsecondary participation rate for 18- to 24-year-olds, a measure that enables comparisons between Indiana and the rest of the nation. The postsecondary participation rate is the percentage of all 18- to 24-year-olds in the state who are enrolled as undergraduates in the state's four- and two-year postsecondary institutions. Naturally, this rate is lower than the percentage of high school graduates enrolling in these institutions because many of the 18- and 19-year-old postsecondary enrollees drop out or graduate by the time they reach their early twenties.

The postsecondary participation rate for Indiana 18- to 24-year-olds rose during the 1980s but is still below the national average.

Figure 4.5 shows that Indiana's postsecondary participation rate improved considerably during the 1980s, rising from 26.8% in 1980 to 40.8% in 1990. However, Indiana gained little ground on the rest of the country, as the national rate improved from 30.7% to 43.9%.

FIGURE 4.5
POSTSECONDARY PARTICIPATION RATES
FOR 18- TO 24-YEAR-OLDS, U.S. AND INDIANA



SOURCES: Indiana Commission for Higher Education, 1989; National Center for Education Statistics, 1990-92a; U.S. Bureau of the Census, 1992.

Of Indiana's four neighboring states, only Kentucky had a lower postsecondary participation rate among 18- to 24-year-olds than Indiana in 1990 (see Table 4.4).

Although 1991 figures are unavailable for the rest of the nation, Indiana's 1991 postsecondary participation rate was 43.9%, according to the Indiana Commission for Higher Education, a three-percentage-point increase over the 1990 figure.

TABLE 4.4
POSTSECONDARY PARTICIPATION RATES FOR 18- TO 24-YEAR-OLDS IN INDIANA AND NEIGHBORING STATES, 1990

	Total Undergraduates	Total 18- to 24-year-olds	Participation Rate
U.S.	**11,862,910**	**27,038,000**	**43.9%**
IL	623,525	1,212,950	51.4%
IN	**246,902**	**604,882**	**40.8%**
KY	155,271	399,989	38.8%
MI	500,739	1,004,527	49.8%
OH	480,616	1,136,418	42.3%

SOURCES: National Center for Education Statistics, 1992a; U.S. Bureau of the Census, 1992.

Public University Undergraduate Enrollment

Undergraduate enrollment in Indiana's public four- and two-year postsecondary institutions has increased considerably since 1980-81, but African-American enrollment has dropped.

- As Table 4.5 shows, 274,482 undergraduates were enrolled in public four- and two-year institutions in 1991-92, a 24.9% increase over 1980-81.
- Almost 400 fewer African-American undergraduates were enrolled in 1991-92 than in 1980-81, representing a drop from 8.3% of overall enrollment to 6.5%. This drop occurred even as the percentage of African-Americans enrolled in K-12 public schools in Indiana increased from 10.0% to 10.9%.
- Over the same period, the number of minority undergraduates other than African-Americans increased from 6,552 to 9,244.

Except among African-Americans, undergraduate enrollment in Indiana's public two- and four-year postsecondary institutions has increased over the past decade.

TABLE 4.5
UNDERGRADUATE ENROLLMENT IN INDIANA PUBLIC FOUR- AND TWO-YEAR POSTSECONDARY INSTITUTIONS, 1980-81 to 1991-92

	1980-81		1991-92	
	Number	Percent	Number	Percent
Total Undergraduate Enrollment	219,740	100%	274,482	100%
White	195,019	88.7%	247,442	90.1%
African-American	18,169	8.3%	17,796	6.5%
Other Minority	6,552	3.0%	9,244	3.4%

SOURCE: Indiana Commission for Higher Education (unpublished data), 1993.

Conclusion

Continued improvement in Indiana's educational attainment rates is vital to the state's well-being.

Some 950,000 students were enrolled in Indiana public elementary and secondary schools in 1992-93, down about 100,000 from 1980-81 figures. Despite this decline, special education enrollment has increased from 92,000 in 1980-81 (8.7% of the total student population) to almost 116,000 in 1992-93 (12.1%). The percentage of minority students enrolled in Indiana schools also increased to 13.6% of total enrollment in 1992-93.

Perhaps the most significant improvement reported in this chapter is the recent increase in the high school graduation rate. It rose from 75.7% in 1989 to 82.5% in 1992, despite the adoption of more rigorous graduation requirements in 1988. The percentage of high school graduates enrolling in postsecondary institutions has also increased. In 1992, 65% of Indiana high school graduates went on to postsecondary institutions, compared with only 45% in 1980.

Nevertheless, postsecondary participation in Indiana still lags below regional and national averages. Also, even as African-Americans are making up a larger portion of the population in Indiana, the proportion of African-Americans enrolling in postsecondary education is dropping. Since African-Americans were underrepresented in the state's college population to begin with, this is a trend that needs to be reversed.

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In addition to the published sources cited above, this chapter contains unpublished data from the following organizations, agencies, and individuals:

- Indiana Commission for Higher Education
- Indiana Department of Education
- Jerry McKibben, demographer (Indianapolis)
- National Dropout Prevention Center
- U.S. Department of Education

In elementary through junior high grades, Indiana students compare well with students nationwide on standardized tests.

Chapter 5

Student Achievement

The main function of schools is to help students learn. And the main question on the minds of everyone concerned with education in Indiana, from parents to the Governor, is how much students are learning. Grades are one way of assessing student achievement, but grades are directed almost exclusively toward students and their parents. Standardized assessments—usually multiple-choice tests—measure student achievement in ways that may be informative not only to the students and their parents, but also to teachers, principals, school corporation officials, state policymakers, and the public at large.

This chapter discusses three different nationally normed standardized tests: ISTEP (Indiana Statewide Testing for Educational Progress), NAEP (National Assessment of Educational Progress, and the SAT (Scholastic Aptitude Test). Two other indicators that the Indiana Department of Education uses to measure the performance of schools, the attendance rate and the graduation rate, were discussed in Chapter 4.

Note on Standardized Testing

Standardized tests are the most readily available measures of student performance, but they must be interpreted with caution.

Nationally normed standardized tests are used to inform education policymakers in two ways. First, test scores can place states in a regional or national context. Second, the scores can be used to make comparisons between school corporations and even between individual schools.

Such comparisons must always be made with caution, however. For one thing, it is still an open question whether standardized multiple-choice testing adequately measures important learning goals such as students' ability to write, solve problems, think critically, and apply what they know in real-life settings. For another, comparing schools, school corporations, or states on any measure of achievement is problematic because of disparities in resources available to schools and variations in the academic and socio-economic backgrounds of students, among other concerns.

ISTEP

The ISTEP program was initiated as part of the education reform legislation of 1987, the A+ Program. Every spring since 1988, Indiana students in grades 2, 3, 6, 8, and 9 have taken a series of standardized tests to assess their achievement in reading, language arts, mathematics, science, and social studies. (Originally grades 1 and 11 were included in the testing program, but those grades were dropped in 1992.) Students in grades 2, 3, 6, and 8 who score below designated state standards in language arts and mathematics are required to attend state-funded remediation classes. These students must then retake the test, and those who fail are retained in grade.

ISTEP scores also play an important role in determining whether schools receive accreditation. If a school's scores fall too far below expected levels of performance, the school may be placed on probation.

The ISTEP test currently includes the Comprehensive Test of Basic Skills, Fourth Edition (CTBS/4), a nationally normed achievement test, and additional items that test for essential skills based on the *Indiana Curriculum Proficiency Guide.* The test, administered over the course of a week, provides scores that are both norm-referenced (that is, they compare the achievement of Indiana students to those in the rest of the country) and criterion referenced (they provide information about individual and group attainment of specified levels of performance for particular skills.) Norm-referenced scores are based on the CTBS/4. Criterion-referenced scores are based on certain test items selected from CTBS/4 that correspond with Indiana's essential skills, along with supplementary items that provide additional information on whether students are mastering the skills.

Student Performance on ISTEP

One type of norm-referenced score plots student results on a normal curve with a national mean score of 50. As Table 5.1 shows, the 1992 mean score for Indiana students at all grade levels in all subjects was higher than the national mean. The results for other years are similar.

Indiana students in grades 2,3,6,8, and 9 have consistently scored above national norms on ISTEP.

TABLE 5.1
NORMAL CURVE EQUIVALENT MEAN SCORES ON ISTEP, 1992*

Grade	Reading	Language	Mathematics
2	61.5	64.1	66.8
3	61.6	64.1	63.7
6	59.3	60.1	61.2
8	59.6	58.2	58.5
9	57.8	60.1	59.2

*The national mean for each grade and subject is 50.

SOURCE: Indiana Department of Education (unpublished data), 1992.

Overall, then, Indiana students in all subjects and all grades score well compared to national norms. Hoosiers also want to know whether Indiana scores are improving over time. Unfortunately, this question cannot be answered with certainty.

In all grades and all subjects (with the exception of 8th-grade math), normed scores seemed to improve from 1988 to 1992. However, comparing scores from year to year is problematic because the test itself keeps changing. Until 1990, for example, ISTEP used the California Achievement Test, Form E (CAT/E). In 1991, CAT was replaced by the CTBS/4, a test that is supposed to measure higher-order thinking skills better than CAT/E.

For technical reasons, whether ISTEP scores are improving cannot be determined with certainty.

In theory, since both CAT/E and CTBS/4 are nationally normed based upon representative samples of students, this switch should have had no effect on scores. In fact, the test questions and the national norm groups are different for each test, making comparisons difficult. In Table 5.2 (see next page), for example, which shows 8th-grade scores in reading, language arts, and mathematics, the largest improvement over the period in reading and language arts was from 1990 to 1991. Whether that improvement was real or simply reflected the use of different tests is impossible to determine.

TABLE 5.2
NORMAL CURVE EQUIVALENT MEAN ISTEP SCORES FOR 8TH GRADE, 1988-92*

	Reading	Language	Mathematics
1988	55.4	55.8	60.1
1989	55.4	55.7	59.3
1990	56.0	56.4	60.0
1991	58.3	58.0	60.5
1992	59.6	58.2	58.5

*The national mean each year is 50.

SOURCE: Indiana Department of Education (unpublished data), 1993.

ISTEP Funding

State funding for the ISTEP program averaged about $20 million per year for the first four years of the program, most of which was used for remediation. The most cost-intensive years were 1989 through 1991, when school corporations were able to set local standards for ISTEP performance—over and above the standards mandated by the state—and to provide state-funded remediation to students based on those standards.

School corporations no longer have this prerogative. Partially because of this change, and partially for other reasons—testing fewer grades, eliminating the writing portion of the exam, and allocating fewer dollars per student—the cost of ISTEP has now decreased to around $15 million per year.

Eighty percent of state funding for ISTEP is used to provide mandatory remediation for students who score below state standards.

ISTEP Remediation

Of the money allocated to ISTEP by the state, approximately 80% goes towards one of the major purposes of the test: identifying and aiding students who need remediation. Students in grades 2, 3, 6 and 8 are required to attend summer remediation classes (known as the Extended Learning Program) if their ISTEP scores fall below a statewide cut score. (This requirement may be waived for a number of reasons, including the local teacher's and principal's belief that the ISTEP score does not accurately reflect a student's achievement.) Although 1st graders no longer take ISTEP, state-funded remediation is still provided for locally selected 1st-grade students, but the number of these students is limited by the state.

Because Indiana students scored higher than expected relative to national norms in 1988 and 1989, fewer students than expected (4.1% and 3.7%, respectively) fell below the cut score. As a result, higher cut scores were adopted, and the percentage of students falling below the cut scores has risen accordingly, as Table 5.3 shows.

TABLE 5.3
PERCENTAGE OF STUDENTS FALLING BELOW ISTEP CUT SCORES, 1988-93*

1988	4.1%
1989	3.7%
1990	6.8%
1991	5.2%
1992	7.4%
1993	8.0%

*The cut scores have changed from year to year.

SOURCE: Indiana Department of Education (unpublished data), 1993.

Changes in ISTEP cut scores over recent years reflect the tension between students' need for remediation and the cost of running remediation programs.

The perception that too few students were being identified for remediation has prompted higher cut scores in recent years. However, limits on state funding have kept the cut score lower than some think appropriate. Indeed, a tension has always existed between serving all Indiana students identified as needing academic help and serving the number the state could afford to accommodate in remediation programs. The state has applied various formulas to balance the tension between student needs and cost.

The remediation program itself consists of a minimum of 80 hours of summer instruction in classes no larger than 10 students per teacher. At the end of instruction, students retake the ISTEP test. Those who pass are promoted to the next grade; those who fail are retained (unless, as mentioned above, a waiver is granted based upon the discretion of the teacher and principal). Over the course of the ISTEP program, some 80% of students in the remediation program have passed the retest.

Work Force Testing

The modified ISTEP will include performance-based items and will require passing the grade 10 gateway test for graduation.

By 1995 ISTEP will evolve into a new set of tests as part of the Work Force Development Act passed in 1992 (and altered in 1993). Students in grades 3, 4, 8, 10, and 12 are to be tested under a plan that will include short answer and other performance-based responses in addition to traditional multiple-choice responses. An integral portion of this new program is the 10th-grade gateway assessment examination, which students must pass to graduate from high school. The gateway exam requirement starts for students graduating in 1998.

National Assessment of Educational Progress (NAEP)

Since 1969 the National Assessment of Educational Progress (NAEP) has been used to test American students and report national and regional data on academic progress in a variety of subjects. When the U.S. Congress reauthorized NAEP in 1988, it permitted data to be reported on selected subjects on a state-by-state basis for those states that volunteered to participate. Indiana has participated in all the tests given so far.

Indiana is one of over 40 states that have participated in state-level NAEP testing.

8th-Grade Mathematics Test

Indiana was one of 37 states to participate in the inaugural 8th-grade mathematics test in 1990. In 1992, 41 states participated. In each state, a sample that is as representative as possible of the general student population of the state is tested. In 1992, for example, 2,659 8th graders from 105 schools across Indiana took the mathematics test.

The test, which included both multiple-choice question and problems on which students had to show their work and explain their reasoning, covered six content areas: (a) numbers and operations, (b) measurement, (c) geometry, (d) data analysis including statistics and probability, (e) algebra and functions, and (f) estimation.

Indiana students scored higher than students in all neighboring states and higher than the national average in both years. However, it was not among the highest scoring states in the nation.

- In 1990 Indiana's overall 8th-grade math proficiency score was 267, six points above the national average. Of the 37 states participating in 1990, Indiana's score tied for 13th with Colorado.
- In 1992 Indiana's score of 269 was one point higher than the national average, and Indiana ranked 17th of 41 states. North Dakota and Iowa tied for the highest score at 283.

Indiana students have scored at or above national norms on NAEP 8th-grade mathematics and 4th-grade reading tests.

Test scores in 1992 were categorized into four achievement levels: below basic, basic, proficient, and advanced. As Table 5.4 shows, the proportion of Indiana students scoring at basic, proficient, and advanced levels was higher than or equal to all other states in the region, and comparable to the U.S. as a whole.

Overall, however, the sizable proportion of students who did not reach even basic levels of proficiency (37% nationwide, 34% in Indiana) and the small proportion of students scoring at the proficient and advanced levels is a cause for concern, both locally and nationally. (It should be noted that the validity of these achievement levels has been called into question by some testing experts.)

TABLE 5.4
8TH-GRADE NAEP MATH SCORES, 1990 AND 1992*

	Overall Math Proficiency, 1990	Overall Math Proficiency, 1992	% of Students at Each Level, 1992			
			Below Basic	Basic	Proficient	Advanced
U.S.	**261**	**268**	**37**	**38**	**21**	**4**
IL	260	--	--	--	--	--
IN	**267**	**269**	**34**	**42**	**21**	**3**
KY	256	261	43	40	15	2
MI	264	267	37	40	20	3
OH	264	267	36	42	20	2

*Small differences in scores may be statistically insignificant.
--Illinois did not participate in 1992.

SOURCES: Blank & Gruebel, 1993; Council of Chief State School Officers, 1993.

4th-Grade Reading Test

Indiana was one of 41 states that took part in the 1992 NAEP trial assessments in 4th-grade reading. Results of this test were similar to those of the 8th-grade math test (see Table 5.5). Indiana's average proficiency rating was 222, higher than all neighboring states and the U.S. average of 216. Indiana tied for 10th with five other states: Minnesota, Nebraska, Pennsylvania, Utah, and Virginia.

TABLE 5.5
4TH-GRADE NAEP READING SCORES, 1992*

	Overall Reading Proficiency	% of Students at Each Level			
		Below Basic	Basic	Proficient	Advanced
U.S.	**216**	**43**	**33**	**20**	**4**
IL	--	--	--	--	--
IN	**222**	**36**	**37**	**23**	**4**
KY	214	45	36	17	2
MI	217	41	36	20	3
OH	219	40	36	21	3

*Small differences in scores may be statistically insignificant.
--Illinois did not participate.

SOURCE: Mullis, Campbell, & Farstrup, 1993.

Scholastic Aptitude Test (SAT)

The Scholastic Aptitude Test is taken by many high school seniors who plan to apply to a college or university. The test has two parts, a verbal skills test and a mathematics skills test, with scores ranging from 200 to 800 points on each test. Results are often reported as a combined score (from 400 to 1600) by adding the verbal and mathematics scores together.

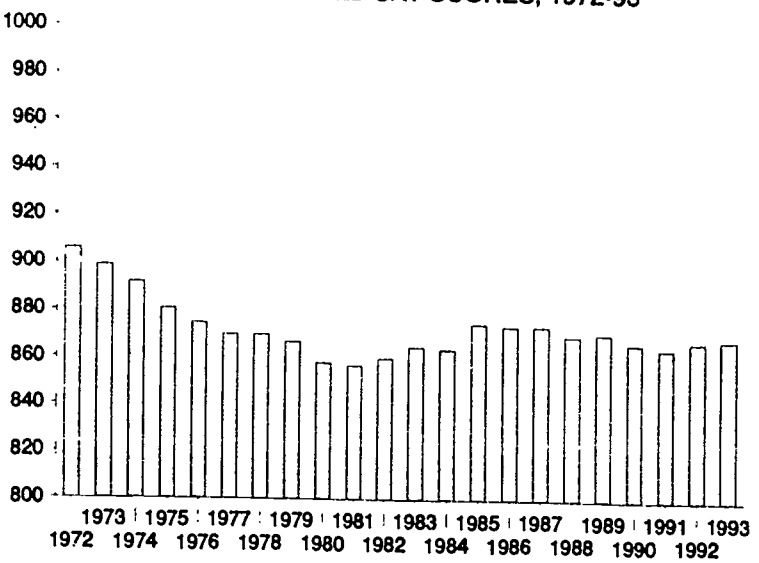
In Indiana as in the nation as a whole, SAT scores have fallen since 1972 but have been relatively stable since the mid-1980s.

Indiana's Scores

Mirroring national trends, Indiana's SAT scores dropped during the 1970s and made a slow, erratic comeback during the 1980s and early 1990s. The 1972 combined score was 906; in 1981 the score bottomed out at 857; by 1993 it had climbed back to 869 (see Figure 5.1).

FIGURE 5.1

INDIANA COMBINED SAT SCORES, 1972-93



SOURCES: College Board, 1993b; Indiana Department of Education, 1992a.

The SAT is often used to compare states, although it was not designed for that purpose.

Comparison with Other States

Unlike the new NAEP, the SAT was never intended to be used as measure for ranking states or judging the overall quality of a state's education system. Its primary purpose is to help colleges make admission decisions about individual students, in conjunction with grades, class rankings, and other factors. The College Board, which develops and administers the SAT, stresses this every year when it releases SAT data: "Using these scores in aggregate form as a single measure to rank or rate teachers, educational institutions, districts, or states, is invalid because it does not include all students. In being incomplete, this use is inherently unfair" (College Board, 1993b).

Despite this admonition, the use of SAT scores to compare states is widespread. Yielding to popular demand, the College

Board itself now issues state-by-state scores. On such comparisons, Indiana consistently ranks near the bottom. In 1993 only three states had lower SAT scores than Indiana.

Influence of Participation Rate on Scores

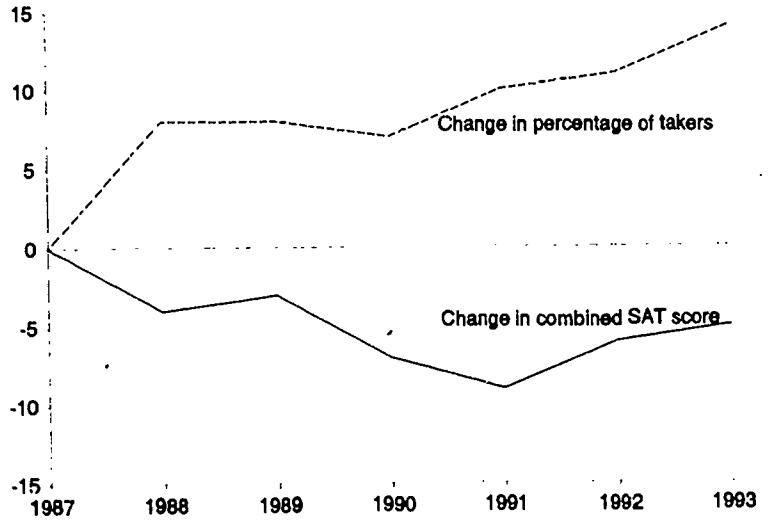
At first glance, Indiana's drop in scores over time would seem to indicate that Hoosier high school students are not performing as well as they used to, and the state's low ranking that Hoosier students are not performing as well as their counterparts around the country. However, such a judgment would be inadequate without taking the participation rate of students into consideration.

Average SAT scores tend to decrease as the proportion of students who take the exam increases, and the proportion of students taking the SAT in Indiana has risen significantly over the years. In 1973 less than 43% of high school seniors took the test, compared with 61% in 1993. This increase in the test-taking population accounts for much of the drop in scores, since the growing number of average and below-average students who are now taking the SAT tends to pull down the average state score.

Indiana's SAT scores are among the lowest in the nation, a fact that is partly explained by the state's high participation rates.

The dependence of scores upon the number of test takers is suggested by Figure 5.2, which compares the change in the percentage of SAT takers in Indiana to the change in the combined SAT scores from 1987 to 1993. The two lines closely mirror each other, at least until 1992. In 1992 and 1993 the test scores rose even as the percentage of students taking the SAT went up, making an apparently small gain in scores more significant than it would have been had the percentage of test takers stayed the same or dropped.

FIGURE 5.2
CHANGE IN SAT SCORES COMPARED TO CHANGE IN PERCENTAGE OF TAKERS, 1987-93



SOURCE: Indiana Education Policy Center calculations based on data from College Board, 1987-93b, and Indiana Department of Education, 1992a.

Similarly, Indiana's poor showing in state-by-state comparisons can be partially explained by variations in the percentage of students who take the test. Over half of the states require the ACT (American College Testing) for college admission rather than the SAT. Students in ACT states who do take the SAT tend to be high achievers who are considering attending college out of state. It is not surprising, therefore, that the average SAT score in these states is higher than in SAT states like Indiana.

Indiana's four neighboring states are all ACT states. In 1993, 15% of Illinois high school seniors, 11% of Kentucky seniors, 11% of Michigan seniors, and 22% of Ohio seniors took the SAT, compared to 61% in Indiana. The national average of high school seniors taking the SAT was 43%.

Other Factors

Although much of the difference in SAT scores can be attributed to variations in the percentage of students taking the test—fully 75% according to the Educational Research Service (1992)—such variation does not explain the entire difference. Indeed, a number of states with a higher percentage of students taking the SAT than Indiana have higher average scores. In Connecticut, for example, where 88% of high school seniors took the SAT in 1993, the average score was 904, 35 points higher than Indiana's score.

Parents' education level and students' academic courses may also affect Indiana's SAT scores.

Two additional factors that affect SAT scores are the educational attainment of parents and the number of academic courses students have taken. In these two areas, Indiana lags behind the rest of the nation.

- 51% of SAT takers nationwide had parents with a bachelor's or graduate degree, compared to 39% of Hoosier SAT takers.
- 42% of SAT takers nationwide had taken more than 40 credits (semester courses) of study in academic courses, compared to 33% of Indiana SAT takers.

This second figure does not necessarily demonstrate a causal relationship between taking academic courses and getting higher scores on the SAT. After all, more talented students may be the ones taking more academic courses. It does suggest, however, that there may be troubling gaps in the academic preparation of Indiana's college-bound students.

Conclusion

There is something perplexing about the performance of Indiana's students on nationally normed tests. Evidence from ISTEP and NAEP seems to indicate that elementary and junior high/middle school students are achieving at or above national norms. Evidence from the SAT seems to indicate that high school students are performing well below national norms.

The contrast between Indiana students' performance on ISTEP and the SAT is perplexing.

What accounts for the apparent disparity? Part of the explanation no doubt lies in differences in testing format, methodology, and purpose. ISTEP and NAEP were designed to compare Indiana students to students nationwide; the SAT was not. As discussed above, the high percentage of SAT takers in Indiana puts the state at a disadvantage in national comparisons.

Still, the performance of Indiana high school students on the SAT may be cause for some concern. Indiana high schoolers take fewer academic courses than their counterparts in most other states. Also, although the numbers are improving, a smaller proportion of Indiana high school graduates attend postsecondary institutions than the national average (see Chapter 4). Is there something happening in Indiana high schools, or perhaps in the culture at large, that discourages academic pursuits during the later teen years? Do high schools make fewer demands on students than elementary schools? Do parents have lower expectations? (Recall from Chapter 3 that Indiana ranks 45th in the nation in the proportion of adults with college degrees.) Do state policies still not require enough of high school students, despite a recent increase in graduation requirements (discussed in the next chapter)? Will changes in high school education brought about as a result of the work force legislation help improve the performance of Indiana high school students on national assessments?

At present, we have no answers for these questions. We simply offer them for reflection on the part of educators and policymakers around the state.

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- College Board
- Indiana Department of Education

Educational excellence requires that standards be high and that opportunities for learning reach every student.

Chapter 6

Educational Requirements and Opportunities

Like all states, Indiana sets forth certain requirements for schools and students covering instructional time, special education, high school graduation, and other areas. In some of these areas, such as special education, the state's requirements are in part dictated by federal law.

In addition to requirements, Indiana also offers a variety of programs to schools and students above and beyond the regular K-12 curriculum. Programs for gifted/talented students and at-risk students, summer school programs, technology programs, and others are intended to enhance educational opportunities for Hoosier students.

This chapter highlights some of the most important educational requirements demanded of Indiana's schools and students and some of the main opportunities afforded them.

School Year

From 1972 to 1988, Indiana's 175-day school year was one of the shortest in the nation. However, in 1988-89 the minimum school year in Indiana was lengthened to 180 days, bringing it on par with 35 other states. Ohio has the longest minimum required school year in the nation at 182 days; Missouri has the shortest at 174 days.

School Day

Public schools in Indiana are to provide students in grades 1-6 with at least five hours of instruction per day, excluding lunch and recess, and at least six hours of instruction per day for students in grades 7-12 (including a reasonable amount of time for students to pass between classes). This is also comparable to requirements in other states.

Instructional Time

For years, state regulations have contained strict requirements for the scheduling of instructional time in elementary and junior high schools. In 1992, however, the State Board of Education changed the current weekly minimum instructional time requirements to recommendations, effective July 1994. Table 6.1 shows the weekly time allotments for selected grades.

Minimum instructional time requirements become recommendations in July 1994.

TABLE 6.1
MINIMUM WEEKLY INSTRUCTIONAL TIME RECOMMENDATIONS* IN GRADES 1-6

	Grades 1-3 (minutes)	Grades 4-6 (minutes)
Language Arts	750	525 (grade 4) 450 (grades 5-6)
Mathematics	225	225
Science	150	180
Social Studies	150	150 (grade 4) 225 (grades 5-6)
Health/Safety/ Physical Education	105	150
Music	60	90
Visual Arts	60	90

*These recommendations are requirements until 7/1/94.

SOURCE: *Indiana Administrative Code*, 1990.

High School Graduation Requirements

Indiana standards for high school graduation are higher now than in 1984, but they still lag behind standards in most other states.

Prior to 1984, Indiana high school students had to earn only 32 credits (each representing one semester course) to graduate. Only 14 of these credits were required in the core academic subjects of English, mathematics, science, and social studies. Beginning with the freshman class of 1984-85 (the graduating class of 1988), standard graduation requirements were increased from 32 total credits to 38 total credits, including 20 core academic credits. (These are the minimum requirements under state law. Individual corporations may establish graduation requirements that exceed the minimum.)

Since 1988, students have also had the opportunity to earn an academic honors diploma, which requires 47 credits and a B average or better. The percentage of students earning the honors diploma rose from 3% in 1988 to 15% in 1993.

The credit requirements for high school diplomas are shown in Table 6.2.

TABLE 6.2
CREDIT REQUIREMENTS FOR HIGH SCHOOL GRADUATION

Academic Area	Pre-1988 Diploma	Post-1988 Standard Diploma	Post-1988 Honors Diploma
Language Arts	6 credits	8 credits	8 credits
Mathematics	2	4	8
Science	2	4	6
Social Studies	4	4	6
Health and Safety	1	1	1
Physical Education	1	1	1
Foreign Language	0	0	6 or 8*
Fine Arts	0	0	2
Electives	16	16	9
TOTAL	32	38	47

*6 credits in one language or 4 credits in each of two languages.

SOURCE: *Indiana Administrative Code*, 1990.

Despite the higher standards, Indiana still requires fewer academic credits than most states. According to a Council of Chief State School Officers survey (1990), 27 states require more credits than Indiana does, 9 require the same number, and 7 require fewer. (Six states have no requirements or leave them to individual districts.) Most of the states with higher standards than Indiana require an extra two credits of social studies or an extra two credits of math (or, in a few cases, an extra two credits of both). Very few states require more than four credits in science.

Curriculum Requirements

In addition to instructional time requirements for elementary and junior high schools and course requirements for high schools, Indiana law and State Board regulations mandate instruction in certain subjects in certain grades For example, elementary schools must teach the principles of good hygiene to 5th graders, and secondary schools must devote at least five periods to a discussion of the U.S. system of government in the two weeks preceding each general election.

In addition to traditional academic subjects, Indiana school curriculum requirements include instruction on drugs and AIDS.

Two curricular requirements that have received considerable attention involve drug education and AIDS education.

Drug Education

Prior to 1991, state law required that students in grades 4-12 be provided instruction concerning the effects of tobacco, alcohol, prescription drugs, and controlled substances on individuals and society at large. Since 1991, state law has mandated that students in every grade receive such instruction. In addition, the federal Drug-Free Schools and Communities Act of 1986 provided funding for drug education programs in schools. Over $8 million in federal funds supported drug education programs in Indiana schools in 1992, along with $104,000 from state funds.

AIDS Education

State law mandates AIDS instruction in the curriculum and the integration of this instruction with information on other communicable diseases. The law requires that abstinence be stressed as the best prevention against AIDS and that school corporations maintain the confidentiality of infected students and staff.

Special Education

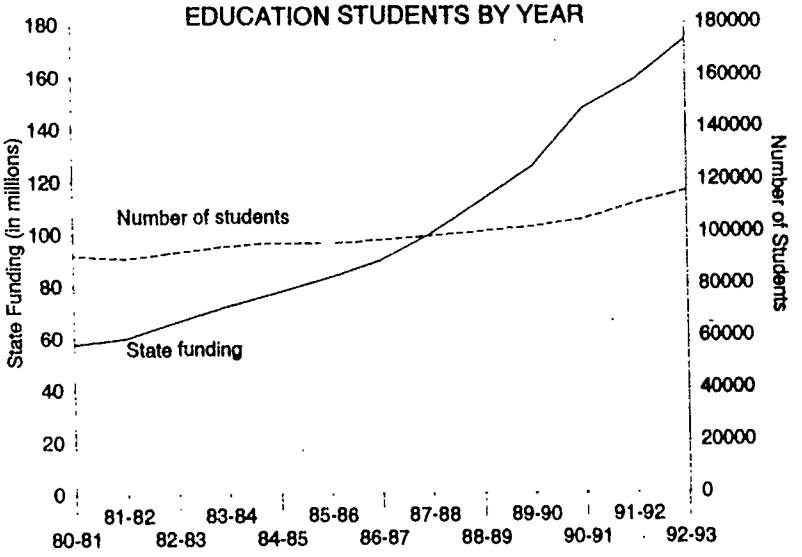
Under federal law—the Individuals with Disabilities Education Act of 1990 (IDEA)—and state regulations, all children with disabilities are entitled to a free and appropriate education that includes individualized education programs and extensive procedural protection in evaluation and placement decisions. Children with disabilities must be placed in the least restrictive environment, one that is appropriate for their needs but as close as possible to that of children without disabilities of comparable age and ability.

As mentioned in Chapter 4, the number of students who are enrolled in special education has been steadily increasing, from under 92,000 in 1980-81 (8.7% of the total student population) to 115,684 in 1992-93 (12.1%). Programs for children with disabilities aged three to five also have continued to increase since the passage of P.L. 99-457 in 1986, which requires preschool programs for children with disabilities.

The number of special education teachers has risen as well. From 1988-89 to 1992-93, the total number of full-time equivalent teachers rose from 5,083 to 5,685.

State funding for special education services has increased even faster than enrollment trends, from $58 million in 1980-81 to $158 million in 1991-92 (see Figure 6.1). Taking inflation into account, the state expenditure per special education student has risen at an average annual rate of 3.5% over the past decade, compared to an average enrollment increase of 1.8%.

FIGURE 6.1
STATE FUNDING AND NUMBER OF SPECIAL EDUCATION STUDENTS BY YEAR



SOURCE: Indiana Department of Education, 1993.

Funding and enrollments in special education have been rising steadily for more than a decade.

In addition to state funds, Indiana receives federal funds for special education programs. Federal funds may be used to provide special education and related services as required under IDEA. In 1991-92 federal support for Indiana special education programs was approximately $50 million, including $42 million for school-aged students with disabilities, $3.5 million for preschool children with disabilities, and $4.5 million for state-operated programs.

The 1992 Indiana General Assembly authorized the distribution of $200,000 to 10 special education inclusion pilot sites. An inclusion site places students with disabilities in regular education classes and provides additional special education services at the neighborhood school.

Vocational Education

Vocational programs have been established to prepare students for employment opportunities in industry, trades, agriculture, health and medical fields, b iness and marketing fields, home economics related occupations, and other occupations. In addition

to school-based coursework, vocational education allows for on-the-job training and apprenticeships through cooperative education programs with employers.

Indiana is divided into 49 area vocational districts, of which 47 are functioning. In about half of these districts, a central facility houses all vocational programs. In the remaining districts, programs are distributed among area high schools.

State funding for vocational programs increased from $18 million in fiscal year 1980 to almost $38 million in fiscal year 1993. Federal funding for vocational education over the same period increased from $16 million to $23 million. However, only about 60% of these funds are targeted to secondary vocational programs.

As alternatives to the college prep curriculum, Indiana high schools offer vocational and Tech Prep programs.

Enrollment in vocational programs has been on the decline recently, from a high of 95,524 in 1986-87 to about 87,000 in 1991-92. Among probable reasons for this decline are (a) the increase in state graduation requirements, (b) the availability of the honors diploma, and (c) more stringent college admission requirements.

Consumer and Homemaking Education programs account for approximately 50% of the total student enrollment in vocational programs. Trade & Industry and Agriculture, the next two largest programs, account for approximately 17% and 14%, respectively. In 1991-92, 55% of the enrolled students were female.

Technology Preparation Curriculum

Beginning in the 1994-95 school year, all Indiana school corporations must make available to high school students the Technology Preparation Curriculum. Tech Prep is a blend of academic and vocational technical courses in a structured program of study that spans the secondary and postsecondary levels of education. The purpose of the curriculum is to provide vocational students and students who are now selecting less challenging courses of study with the foundations necessary for success in postsecondary education and in an increasingly technological workplace.

Through 14 regional consortia projects, all Indiana public high schools—in partnership with postsecondary institutions and local businesses and industries—are completing their Tech Prep curricula in preparation for the 1994-95 school year. For the 1993-94 school year, $2.4 million in federal funds have been made available for use by the regional consortia.

Bilingual Education

State policy requires a bilingual-bicultural program for all students enrolled in Indiana public schools who do not speak English as their main language. This program provides instruction for these students in their native language.

Because of the small number of schools with limited-English-proficient students speaking a given language, there are only five bilingual programs currently in operation. Two federally funded programs are in School City of Hammond and River Forest/Lake Station Community Schools; the other three programs, which are locally funded, are in South Bend, Gary, and East Chicago. Each of these programs serves a Spanish-speaking population.

College-Level Preparation in Mathematics and Science

Since 1990-91, each Indiana school corporation has been encouraged to provide qualified students with the College Board's science and mathematics Advanced Placement (AP) courses in secondary schools. Beginning in 1994-95, school corporations will be required to do so.

In 1990-91 the state, in conjunction with College Board representatives, began providing week-long training sessions for teachers of AP courses. (The curriculum in these courses is tightly regulated by the College Board.) Over the next two years, 435 teachers took part.

To encourage greater student participation, the state in 1990-91 began paying the testing fees for students who take AP exams in mathematics and science. Students scoring high enough on the exam may earn college credit for that subject.

In 1991-92, $548,050 was appropriated for the funding of the AP exams. Since this program was implemented, the number of students taking the AP exams has sharply increased, as Table 6.3 indicates.

TABLE 6.3
NUMBER OF STUDENTS TAKING THE ADVANCED PLACEMENT EXAM

	Year	Calculus	Biology	Chemistry	Physics
Before Funding	1989-90	269	121	104	33
After Funding	1990-91	1,852	900	1,014	579
	1991-92	2,318	936	1,190	650
	1992-93	3,003	1,127	1,388	720

SOURCE: Office of the Governor, 1993.

Regular Summer School Programs

Regular summer school includes remediation for low achieving students as well as a variety of enrichment programs for students interested in additional learning. (Regular summer school is separate from ISTEP remediation, which is discussed in Chapter 5). One example of a summer enrichment program was the Focused Learning Experience (FLEX). Established in 1988,

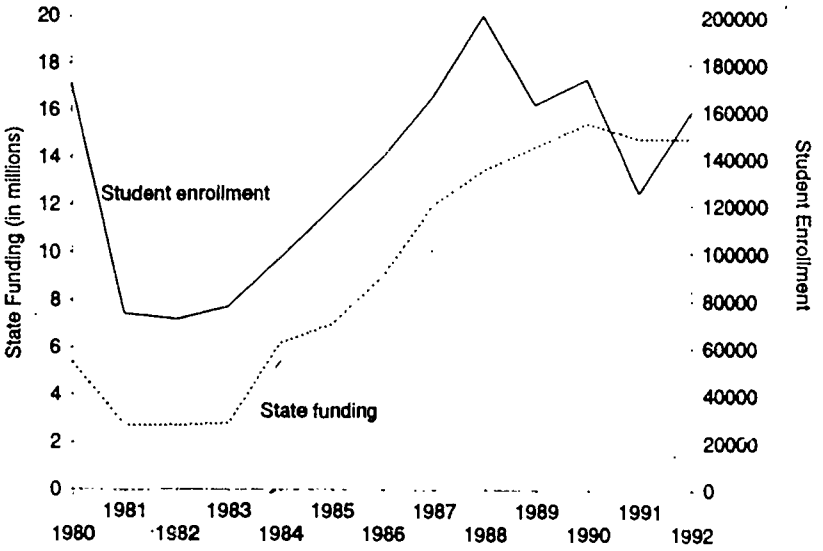
FLEX combined out-of-classroom experiences with classroom learning. This program was discontinued in 1991 due to funding shortages.

After a drop in 1981, state funding for summer programs increased until 1990, when it dropped slightly. The number of students involved in summer programs has varied across the years, as Figure 6.2 indicates. (The graph gives numbers for duplicated student enrollment, which means that some students are counted more than once, depending upon the number of summer programs they attended. Non-duplicated counts are generally 20,000 to 30,000 less than the duplicated counts.)

Summer school programs offer educational opportunities for remediation and enrichment.

FIGURE 6.2

SUMMER SCHOOL FUNDING AND NUMBER OF STUDENTS ENROLLED, 1980-92



SOURCE: Indiana Department of Education (unpublished data), 1993.

Gifted and Talented Programs

Since 1981, the Indiana Department of Education (IDOE) has administered programs for gifted K-12 students to encourage intellectual, social, and artistic development. Gifted and talented programs provide students with educational opportunities that are not available in regular school programs. Although such programs are not mandated, most Indiana school corporations offer them.

The number of students participating in gifted and talented programs has increased significantly over the past three years, from 70,285 in 1990-91 to 85,192 in 1992-93. About 9% of Indiana students and 89% of school corporations participated in gifted and talented programs in fiscal year 1993. Despite increased participation, state funding for gifted and talented programs has remained constant at around $6 million per year since 1988.

At-Risk Programs

The 1987 A+ legislation made funds available for school districts to develop new programs or expand existing ones that help students who are at risk for school failure. Programs and activities for at-risk students include: expanded use of counseling, tutoring, alternative education programs, parent/community involvement, remediation, individualized programs, transition programs, preschool and full-day kindergarten, home school advisors, after-school enrichment, and alcohol and drug abuse prevention.

During the 1991-92 school year, 681 at-risk programs in all 296 school corporations served 211,697 students, or over 22% of the total public school student population in Indiana (see Table 6.4). Three types of programs received the majority (68%) of the funding: expanded counseling, tutoring, and alternative education programs.

The IDOE distributes funds for at-risk programs to school corporations through a formula that considers the percentage of:

- families whose income is below the poverty level;
- single-parent households;
- adults who do not have a high school diploma.

Incidentally, because the U.S. Census Bureau has yet to map 1990 census data onto to the school corporation level, the distribution of at-risk funds in Indiana is still based on 1980 census data. Some Indiana educators believe that at-risk funding would be allotted differently if the most current census data were used.

At-risk programming is multi-faceted and targets communities with the greatest educational needs.

Since 1988-89, at-risk programs have been allocated $20 million in state funds each year. Local funds have also been used for at-risk programs, increasing from $2.5 million in 1988-89 to $13 million in 1990-91 (see Table 6.4).

TABLE 6.4
ENROLLMENT AND FUNDING OF AT-RISK PROGRAMS

	1988-89	1989-90	1990-91	1991-92
Number of Programs	759	723	642	681
Number of At-Risk Students Served	124,460	124,529	163,893	N/A[1]
Number of Non-At-Risk Students Served[2]	86,658	95,895	80,045	N/A[1]
Total Number of Students	211,118	220,424	242,938	211,697
Local Funding	$2.5M	$7.5M	$13M	N/A[1]
State Funding	$20M	$20M	$20M	$20M

[1] Information not collected due to change in application process.
[2] Some students not identified as at risk may be served along with at-risk students in certain programs.

SOURCE: Indiana Department of Education (unpublished data), 1993.

The new school finance formula passed by the General Assembly in 1993 changes the funding mechanism for at-risk programs. Beginning in 1994-95, at-risk monies for most school corporations will be included within general tuition support. Additional at-risk funding will be provided for corporations with the highest rates of poverty, single-parent households, and adults without a high school diploma (68 corporations in 1994-95). These corporations are still required to use this additional funding for approved projects targeted to their at-risk populations.

Educational Technology

Through a number of educational technology programs, computers are becoming a part of the educational experience of Indiana students.

Many schools in Indiana are making efforts to capitalize on the power of technology to deliver instruction and enhance student learning. This is especially true with regard to the use of computers and distance-learning technology. A few of these efforts are highlighted below.

School Technology Advancement Account

The School Technology Advancement Account, established by the General Assembly in 1983, provides low interest loans to school corporations for purchasing computer hardware and software for classroom instruction. This account is also used to fund a variety of innovative technology projects.

Buddy System Project

Schools participating in the Buddy System extend learning from the school day into the evening and facilitate parent/teacher communication by loaning a computer to the families of each student in grades 4-6. (Some schools allow the parents to purchase the computers.) At home, students use the computers for homework, school projects, networking, and accessing on-line services. Parents and teachers use electronic mail to communicate with each other. Students in the Buddy System Project also use computers at school to enhance their learning in all subject areas. This project has grown from 5 pilot sites in 1988 to 50 schools with 5,000 students in 1993.

The Buddy System Project is an alliance of government, business, and education communities. Current project partners include the IDOE, numerous Indiana foundations and businesses, and various computer vendors.

The long-range vision for the Buddy System is to expand the project statewide for grades 4-12. In addition, the Buddy System may soon grow beyond Indiana's borders. Federal legislation has been proposed to fund Buddy System pilots in three other states.

4Rs Technology Grant Program

The 4Rs Technology Grant Program, part of Governor Bayh's education program for lifelong learning, provides incen-

tive grants for purchasing computer hardware, software, teacher training, and instructional materials. The program focuses on using technology as a tool for learning, with special emphasis on teaching kindergarten and 1st-grade students reading, writing, and arithmetic.

Over 400 schools in 204 school corporations have received 4Rs technology grants. According to Governor Bayh's 10-year education plan, the program will expand to all grades (K-12) by the year 2000.

Educational Technology Program

In 1990 the General Assembly established the Educational Technology Program. Among other things, this legislation allows school corporations to use their capital-projects funds to purchase certain technology equipment.

With the passage of PL165 in 1991, the legislature formally added the 4Rs Technology Grant Program and the Buddy System Project to the Educational Technology Program. In addition, the 1991 legislation established the Corporation for Educational Technology, a state-level, private, not-for-profit corporation whose tasks include seeking funds, conducting conferences, administering the Buddy System, and overseeing other projects that encourage the productive use of technology for K-12 instruction.

During the 1992-93 school year, $4,000,000 from the Indiana General Fund was expended for the technology program, including $1.5 million on the Buddy System.

Distance Learning

Technological advances are expanding the potential of distance education for students and distance training for teachers.

Distance learning technologies have the potential to expand course offerings for students and in-service training opportunities for teachers. These instructional options, often in the form of video and multimedia computer presentations, can be delivered to remote sites via telephone lines or satellite transmission.

Distance education is not new in Indiana: The state has allowed credit for educational television instruction since 1975 as long as it was approved by the State Board of Education. However, with the evolution of telecommunications technology, it has become easier to deliver instruction to a variety of locations without the restrictive scheduling of early educational television efforts. Currently, over 300 schools have installed satellite dishes for instructional programming.

In July 1993, 47 distance learning projects received technology grants totalling $186,800 from the IDOE. Thirty-three schools and three regional Educational Service Districts received planning grants, and 11 schools or school corporations were awarded implementation grants for 1993-94. Projects that provide students with specialized opportunities (e.g., offering advanced chemistry or calculus in rural schools) and that prepare teachers for their changing roles are given preference in awarding grants.

Student Service

Legislation passed in 1993 allows school corporations to grant academic credit to students who perform approved community service. A student must perform at least 48 hours of service to earn one academic credit and can apply no more than two credits toward graduation in this manner.

The state is tying learning to community service in other ways as well. In 1992, the IDOE was awarded a federal grant to fund local community service projects as part of the "Serve America" program. That year, 28 Indiana schools and agencies received grants totalling $250,000. In 1993, the IDOE was awarded an additional $312,000 to continue promoting community service among youth and will be making 35 additional grants to schools and community-based organizations across Indiana.

Adult Education

Indiana has two main types of state-supported adult education programs: Adult Basic Education (ABE) and Adult Secondary Credit (ASC).

ABE provides instruction to adults in basic academic subjects necessary for achieving up to an 8th-grade level of knowledge. As a part of ABE, English as a Second Language assists adults who cannot read, write, or speak English at a functional level. ABE is supported by federal and state funds and serves 88 of Indiana's 92 counties.

ASC offers instruction providing high school credit leading toward a high school diploma. ASC is supported solely with state funds and is available in 23 counties.

Participation in adult education programs in Indiana has been increasing, as has the number of adults taking the test for the GED.

To be considered eligible for any of these programs, an adult student must be an Indiana resident who (a) has officially withdrawn from a K-12 program and does not have a high school diploma; (b) is a high school graduate deemed to need basic skill development; or (c) cannot read, write, or speak English at a functional level. A school corporation may allow other individuals into the ABE or ASC programs, but corporations are not reimbursed for these students.

In 1987-88, 48,251 adults were served by either ABE or ASC. This total increased to 51,147 in 1991-92, with 7,478 obtaining a GED or high school diploma. The number of adults taking the GED test in 1991-92 was 19% greater than in the previous year.

Federal, state, and local funds support adult education. In 1991-92, adult education programs received $3.6 million in federal funds, $11.6 million in state funds, and $3.2 million in local funds.

Adult Literacy

It is estimated that 20% of the U.S. population and 12% to 19% of Indiana residents over age 25 (400,000 to 600,000 adults) cannot read or write at a functional level. Functional illiteracy can be defined as the inability to use written information to succeed at work or achieve one's personal goals.

Staffed primarily by volunteers, literacy programs in Indiana have grown but still reach only a small segment of the target population.

Five Indiana organizations dedicated to promoting adult literacy are:

- the Indiana Adult Literacy Coalition
- the Governor's Voluntary Action Program
- the Division of Adult Education (part of the IDOE)
- the Office of Work Force Literacy (part of the Indiana Department of Work Force Development)
- the Indiana State Library.

Since the Adult Literacy Coalition was formed in 1986, over 3,000 volunteers have participated in 101 literacy programs in Indiana. In 1988, literacy programs served 39,000 adults, a 41% increase over 1982. In 1992, literacy instruction was available in 90 of 92 Indiana counties. Additionally, out of a statewide system of 238 libraries, 139 reported supporting literacy efforts in 1991. Despite these efforts, adult literacy programs are reaching less than 10% of the target population.

Conclusion

Indiana has made progress in raising academic standards, but there is still room for improvement.

Indiana has made progress over the past decade in raising academic standards for all students and providing extra help for special populations. The state has lengthened the school year, raised graduation requirements, instituted an honors diploma, begun to support and fund AP exams, established programs for gifted and talented students, funded programs for at-risk students, and continued to increase funding for students in need of special education.

There is still room for improvement, however. Despite the significant increase in graduation requirements, for example, Indiana still requires fewer credits than 27 other states. Additionally, funding for some programs, such as gifted/talented and at-risk programs, has remained flat over the past few years.

In short, the first steps have been taken, but continued effort will be necessary to move Indiana education forward.

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- The Buddy System Project
- Education Commission of the States
- Indiana Commission on Vocational and Technical Education
- Indiana Department of Education (multiple divisions)
- Indiana Legislative Services
- Indiana State Board of Education
- U.S. Department of Education

On many criteria, such as test scores and educational background, Indiana's teachers compare favorably with their colleagues across the nation.

Chapter 7

Education Work Force

A state's schools can be only as good as the people who work in them. The education work force provides vision and leadership, helps establish and implement policies, and, most importantly, teaches our children. One of the challenges Indiana faces, therefore, is to ensure that its education work force is of the highest quality.

Numerous factors help determine the quality of the work force. One is the sheer number of educators and the ratio of educators to students. Other important factors include measures of the education and experience of the work force, minority representation, and teacher and administrator salaries. The state also has a direct influence through its certification requirements on who becomes a teacher or an administrator. Finally, the state can influence the quality of the work force through programs intended to improve educators' professional skills. These and other aspects of the education work force in Indiana are discussed in this chapter.

Total Work Force

The education work force includes teachers, principals, district officials, and support staff. Almost 4.5 million people were employed nationwide in public elementary and secondary schools in 1990-91, 53% of whom were teachers.

The education work force in Indiana has grown by almost 7% over the past six years, from 104,000 in 1987-88 to 111,000 in 1992-93. An increase in the number of non-certified support staff accounts for most of the increase in total employment.

Most of the recent growth in Indiana's education work force has been in non-certified support staff.

In 1992-93, Indiana's 111,000 education employees were divided as follows (numbers are rounded):

- 54,000 (49%) teachers;
- 8,000 (7%) certified employees other than teachers, including superintendents, assistant superintendents, principals, assistant principals, instruction/curriculum staff (school corporation directors and supervisors for areas such as special education and reading), technical support staff (counselors, librarians, nurses, and so forth), and personnel, business, and buildings staff;
- 49,000 (44%) non-certified employees (teacher's aides, secretaries, bus drivers, food service workers, and maintenance workers).

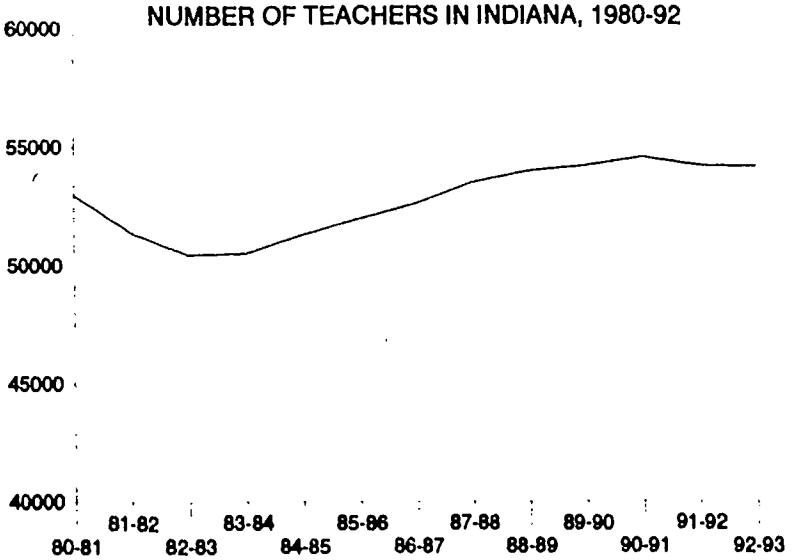
Teacher Demographics

Total Number of Teachers

Almost 2.5 million men and women teach in elementary and secondary public schools in the U.S. Over 54,000 of these are currently teaching in Indiana. As Figure 7.1 shows, the number of Indiana teachers dropped somewhat during the mid-1980s, grew slowly until 1990-91, and has declined slightly the past two years to its 1992-93 total of 54,172 teachers (full-time equivalent).

FIGURE 7.1

NUMBER OF TEACHERS IN INDIANA, 1980-92



SOURCE: Indiana Department of Education (unpublished data), 1993.

Race and Gender of Teachers

The American teaching force is largely white and female. According to a nationwide survey conducted in 1987-88 (the Schools and Staffing Survey, or SASS), 88% of all teachers were white and 71% female. Indiana Department of Education (IDOE) data for that same year indicate that 94% of Indiana teachers were white and 68% female.

Indiana's proportion of minority teachers has fallen at the same time that its proportion of minority students has increased.

Over the past decade, both the percentage of minority teachers and the percentage of male teachers in Indiana have dropped.

- The proportion of minority teachers in Indiana fell from 6.2% in 1982-83 to 5.5% in 1992-93, even as the proportion of minority students rose to over 13%.
- The proportion of male teachers in Indiana fell from 35.8% in 1982-83 to 30.0% in 1992-93.

Although women make up over 70% of the overall teaching force nationwide and over 86% of the elementary teaching force, at the secondary level the numbers of male and female teachers are much closer. In fact, in Indiana there were slightly more male than female secondary teachers in 1987-88.

Assignment

In 1982, the number of elementary teachers in Indiana was roughly equal to the number of secondary teachers. However, mainly as a result of Prime Time legislation (passed in 1984), elementary teachers now outnumber secondary teachers by about 3,000.

Pupil/Teacher Ratio

The pupil/teacher ratio for a given state is the total number of pupils in the state divided by the total number of full-time equivalent teachers.

- From 1955 to 1990, the pupil/teacher ratio nationwide dropped by almost 10 pupils per teacher, from 26.9 to 17.2.
- As Figure 7.2 (see next page) indicates, Indiana's pupil/teacher ratio has been higher than the nation's as a whole but has declined more rapidly, almost matching it in 1989-90. Both that year and the next, Indiana's pupil/teacher ratio was 17.5, compared to the U.S. ratio of 17.2.

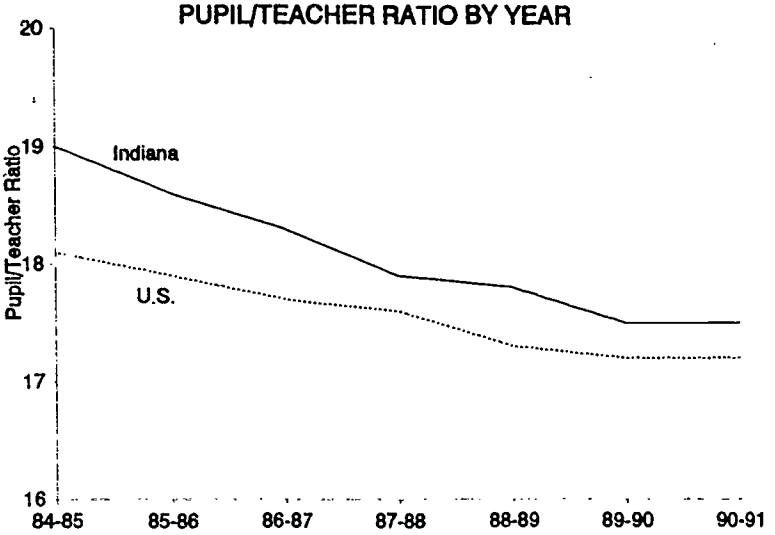
Indiana's pupil/teacher ratio is now down near the national average but is no longer improving.

In 1990-91, Indiana's pupil/teacher ratio was the second highest in the region:

Michigan:	19.8
Indiana:	17.5
Kentucky:	17.3
Ohio:	17.2
Illinois:	16.7

Over the past two years, Indiana's pupil/teacher ratio has risen slightly, ending a long downward trend. National data for these years are not yet available.

FIGURE 7.2
PUPIL/TEACHER RATIO BY YEAR



SOURCE: National Center for Education Statistics, 1988, 1992b.

Teacher Salaries

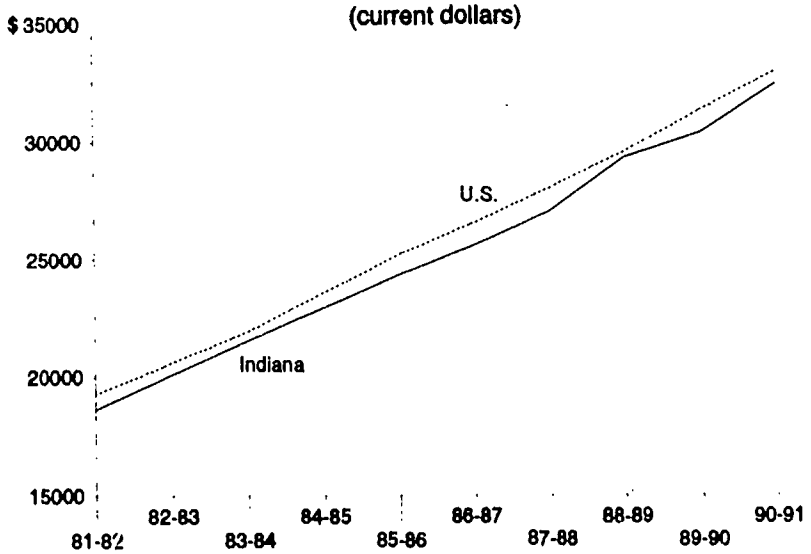
For more than a decade, Indiana teacher salaries have been just below the national average.

Nationwide and in Indiana, teacher salaries (adjusted for inflation) rose during the 1960s, fell during the 1970s, and rose again during the 1980s. In fact, from 1979 to 1991 teacher salaries rose 19.7% nationwide and 20.5% in Indiana, after adjusting for inflation.

In 1970, teacher salaries in Indiana were higher than the national average. By the 1979-80 school year, however, Indiana teacher salaries had slipped below the national average, where they remained in 1990-91.

Figure 7.3 compares Indiana teacher salaries with U.S. teacher salaries from 1981-82 to 1990-91.

FIGURE 7.3
TEACHER SALARIES BY YEAR
(current dollars)



SOURCE: National Center for Education Statistics, 1988-92b.

Although below the national average of $32,977, Indiana's 1990-91 average salary of $32,434 ranked 18th among all states. Michigan was 7th at $38,326, Illinois 12th at $34,605, Ohio 17th at $32,615, and Kentucky 30th at $29,115.

According to estimates by the American Federation of Teachers (as reported in National Center for Education Statistics, 1992b), the average salary of first-year teachers across the U.S. in 1990-91 was $21,542, or 65% of the average salary for all teachers. In Indiana the average beginning salary was $20,2 or 62% of Indiana's average salary.

Teacher Education and Experience

Degrees Earned by Indiana Teachers

A greater percentage of Indiana teachers have master's degrees than teachers in any other state. In 1987-88, 84% of Indiana teachers surveyed had a master's or higher degree, compared with a national average of 47% (see Table 7.1).

TABLE 7.1
DEGREES EARNED BY TEACHERS, 1987-88

	U.S.	IL	IN	KY	MI	OH
% with Master's or Higher Degree	**47%**	48%	**84%**	75%	60%	43%

SOURCE: National Center for Education Statistics, 1992b.

The main reason for Indiana's high standing is that until 1984, all Indiana teachers were required to start pursuing a master's degree within their first 5 years of teaching and complete the master's within their first 10. This requirement was rescinded in 1984, but a master's is still required for a professional license and is rewarded in the salary scale. (It should be noted that the fields of teachers' master's degrees are not necessarily related to subjects teachers teach in school. For example, a mathematics teacher may get a master's in school administration.)

Indiana teachers have received significantly more formal preparation for teaching than have teachers in most other states.

Surveys done in conjunction with the National Assessment of Educational Progress (NAEP) also suggest that Indiana teachers are well prepared for their positions:

- 96% of Indiana 8th graders who took the mathematics test in 1990 were being taught mathematics by a certified mathematics teacher, well above the national average of 84%. In fact, only 1 of the 37 participating states—Minnesota—had a higher percentage of certified math teachers than Indiana.
- 83% of Indiana 4th graders who took the 1992 reading test were being taught by a teacher who had at least a master's or Ed.S degree, compared with a nationwide average of 46%. Also, 77% of the Indiana students had a teacher who had the highest level of teaching certification recognized by the state, compared with 57% nationwide.

Teachers' Experience

The average Indiana teacher has 15.3 years of teaching experience, slightly above the national average of 14.5. Of adjoining states, Michigan has the most experienced teachers (16.5 years) and Kentucky the least (14.4 years).

Becoming a Teacher

Since 1992, Indiana's teacher education institutions have applied for accreditation through the Professional Standards Board.

To become eligible for a teaching license in Indiana, candidates must complete a four-year baccalaureate program in education at a state-accredited teacher education institution and pass general and subject area competency tests.

Accreditation of Institutions

Indiana has 39 accredited teacher education institutions, ranging from large universities like Indiana University, Purdue University, Ball State University, and Indiana State University, which graduate hundreds of education majors each year, to small colleges like Calumet College, which graduate only a few.

Prior to 1992, Indiana teacher education institutions were accredited by the State Board of Education. As a result of legislation passed in 1992, the Board's duties regarding teacher preparation and certification were transferred to the newly established Professional Standards Board. The Standards Board has 16 voting members, nine of whom are teachers. (See Chapter 1 for a more detailed description of the Professional Standards Board.)

One way for Indiana teacher education institutions to get accredited is to undergo a joint state/NCATE review process. NCATE is the National Council for Accreditation of Teacher Education, an organization that sets national standards to help assure quality in the preparation of teachers. In 1988, the state entered into partnership with NCATE, in effect adopting the more rigorous NCATE standards as its own. As Table 7.2 shows, 31 of

Most of Indiana's teacher education institutions are accredited by the National Council for Accreditation of Teacher Education (NCATE).

TABLE 7.2
TEACHER EDUCATION INSTITUTIONS AND NCATE ACCREDITATION, 1992

	# State-Approved Institutions	# in NCATE System	% in NCATE System
U.S.	**1279**	**521**	**41%**
IL	53	16	30%
IN	**39**	**31**	**79%**
KY	26	11	42%
MI	28	18	64%
OH	48	19	40%

SOURCE: National Council for Accreditation of Teacher Education, 1993.

Indiana's 39 teacher education institutions (79%) have completed or are undergoing the joint review process. The other 8 institutions have elected to be accredited by the state alone. This 79% rate compares favorably with neighboring states and the nation.

Degree Requirements

All prospective public school teachers must complete a certain number of education courses and fulfill a student-teaching requirement. Beyond that, state course requirements vary depending upon the type of education license sought. For example, a candidate seeking an elementary education license must complete at least 124 semester hours as follows:

- 30 professional education hours (including 10 weeks of full-time student teaching)
- 70 general education hours in language arts, math, science, social studies, and the arts
- 24 hours of electives

A secondary education license requires only 24 professional education hours, but the candidate also must have an academic major, such as biology, English, or mathematics.

Programs at specific colleges and universities may exceed these state requirements.

Number of Graduates

The proportion of college students who major in education declined until the mid-1980s, when it began to increase gradually.

Available data suggest that, nationwide and in Indiana, interest in majoring in education bottomed out in the mid-1980s and then began rising again.

- Nationwide, over 190,000 people earned a bachelor's degree in education in 1972-73. By 1986-87, that number had dropped to 87,115. In the late 1980s, however, the number of education graduates started to rise again, topping 104,000 in 1989-90.
- In terms of percentages, in the early 1970s over 20% of all bachelor's degrees conferred nationwide were education degrees. By 1986-87, that figure had dropped to 8.8%; then it began rising again.
- In Indiana, the number of education bachelor's degrees conferred in 1985-86 was 8.5% of the total number of degrees conferred, rising to 9.7% in 1987-88.
- Education is the third most common degree in Indiana, behind business (24.1% of all degrees in 1987-88) and engineering (11.6%).

Teacher Testing

Some 45 states now require prospective teachers to pass a test (usually a paper and pencil test) to obtain an initial license. Since the mid-1980s, teacher candidates in Indiana have had to pass two written tests:

- the Core Battery of the National Teachers' Exam (NTE), which includes components on communication skills, general knowledge, and professional knowledge;
- a subject area test (e.g., biology, early childhood education, music, teaching students with learning disabilities).

As Table 7.3 indicates, the passing rate for the Core Battery tests is high. Also, the mean score of Indiana teachers on the three components of the Core Battery is above the national average.

TABLE 7.3
NTE CORE BATTERY TESTS, 1990-91

Component	Pass Rate, Indiana	Mean Score, Indiana	Mean Score, U.S.
Communication Skills	83%	665	658
General Knowledge	89%	663	655
Professional Knowledge	93%	662	659

SOURCE: Indiana Department of Education, 1992a.

Since the mid-1980s, teacher candidates have had to pass a written test to be certified.

As is the case in other states, minorities in Indiana pass the test at a lower rate than whites. For example, in 1990-91, 84% of whites passed the communication skills component, compared with 61% of minorities.

Teacher Certification

Teachers who meet the above requirements may obtain a standard teacher's license, which entitles them to teach in their field (e.g., biology, English) and level (e.g., early childhood, elementary, secondary). The number of initial standard teacher licenses issued each year has fluctuated over the past decade, from a low of less than 4,000 licenses in 1983 to a high of over 6,000 in several years.

Standard licenses are valid for five years. To renew a license, teachers must complete (a) 6 hours of approved coursework in their certification area, (b) 90 certification renewal units (CRUs), or (c) an equivalent combination of the two. One CRU is awarded for every two hours of participation in an organized, state-approved educational experience such as a workshop or seminar. Only teachers with a master's degree or at least 36 hours of academic credit beyond the bachelor's are eligible to apply CRUs toward license renewal.

Teachers with at least 5 years of experience and a master's degree in their field are eligible for a professional license, which is initially valid for 10 years and renewable every 5 years thereafter.

Under certain circumstances, such as a shortage of licensed teachers, persons who do not meet ordinary certification standards may be issued an emergency, or limited, teaching license.

Applicants must have a bachelor's degree and, if they are going to teach in junior high or high school, at least 15 semester hours in the subject to be taught. The license is valid for one year but may be renewed if the licensee completes 6 hours of coursework toward a standard license.

The number of limited licenses each year has varied over the past decade, averaging about 700 per year. The majority of limited licenses are issued in the area of special education.

Among Indiana teachers, the rate of certification in the field of assignment is higher than the national average.

As Table 7.4 shows, 93% of Indiana's teachers hold a standard license in their main assignment field, compared to a national average of 89%.

TABLE 7.4
DISTRIBUTION OF TEACHERS BY TYPE OF CERTIFICATION IN MAIN ASSIGNMENT FIELD, 1987-88

	U.S.	IL	IN	KY	MI	OH
Standard	**89%**	87%	**93%**	89%	87%	89%
Limited	**5%**	7%	**4%**	8%	7%	9%
Probation	**3%**	1%	**1%**	2%	3%	1%
No License	**3%**	5%	**2%**	1%	3%	1%

SOURCE: National Center for Education Statistics, 1992d.

It is also possible for schools to get staffing waivers from the State Board of Education which enable teachers certified in one area to teach other areas in which they are not certified. For example, a certified elementary teacher may be allowed to teach at-risk high school students in an alternative school setting. Indiana keeps no statistics on the number of teachers teaching out of field in any given year. Individual school corporations are required, however, to report the number of teachers teaching out of field as part of their Performance-Based Accreditation review, conducted every five years.

Alternative Certification

Although Indiana has no statewide alternative certification program, a few nontraditional certification programs are in operation.

Like Indiana, virtually all states have provisions for emergency licenses in case of teacher shortages. Some states also have programs that enable individuals to earn a standard teaching license without meeting all the ordinary certification requirements (New Jersey and Connecticut are among the most notable). The idea is to entice talented individuals into the teaching profession, especially those working in other fields who may want to teach but cannot afford the time or money to complete a traditional education degree.

Indiana has no statewide alternative certification program for teachers. Bills that would have established such a program have received little support from the General Assembly during recent legislative sessions.

There are, however, a number of what might be called nontraditional certification programs, whereby colleges or universities arrange for candidates other than the typical four-year undergraduate to earn a standard teaching license. One example is the Urban Teacher Education Program (UTEP), a collaborative effort among Indiana University Northwest (IUN) and the East Chicago, Gary, and Hammond school corporations. UTEP prepares people with bachelor's degrees in subjects other than education to teach middle or high school. Participants take at least 24 hours of urban-oriented education courses and fieldwork developed by IUN faculty and experienced urban teachers. Most participants teach with a limited license under the guidance of a mentor teacher while they take classes. Candidates receive a standard license upon completing the program.

Staying a Teacher

Beginning Teacher Internship Program

Since 1988-89 all first-year teachers have been required to serve a one-year internship under the guidance of a mentor teacher. The mentor is responsible for observing, advising, and supporting the beginning teacher. The school principal periodically evaluates the beginning teacher and is ultimately responsible for determining the success of the internship.

Beginning teachers serve a year-long internship in which they receive a mentor's feedback, guidance, and support.

Local school corporations develop their own internship programs based on general guidelines provided by the state. Since 1988 approximately 5% of all beginning teachers have had to repeat the program or have been denied continued certification. Costs include a stipend ($600) for each mentor and five days of release time per beginning teacher, which may be used for classroom observation. The state has spent about $1.8 million per year on the program, which has served more than 8,000 Indiana teachers since its inception.

A RAND study of the first year of the program (1988-89) concluded that the Beginning Teacher Internship program "appears to provide an improved learning environment for new teachers and shows promise of reducing their attrition rates" (Hudson, Grissmer, & Kirby, 1991).

Teacher Evaluation

Beginning teachers are not the only ones whose performance is reviewed. Since 1988-89, all certified teachers have been required to undergo periodic evaluations of their job performance. Evaluation plans are based on state guidelines but are developed locally. The plans must provide opportunities for the growth and development of teachers and may be used in making employment decisions.

Professional Development

Professional development opportunities for teachers are for the most part a corporation-by-corporation affair. Corporations determine—often as part of negotiations with the teachers' bargaining unit—how much time and money will be devoted to teacher development, usually in the form of inservice training or release time and funds for teachers to attend workshops. (Inservice days themselves are not always devoted to professional development; they often serve other functions, such as introducing teachers to new school policies or state mandates.) Teachers may have additional opportunities for professional development through professional associations, subject area organizations, or arrangements with local colleges or universities.

Most state-supported professional development is used to implement other state programs.

State Professional Development Activities

The Indiana Department of Education has no division that focuses exclusively on teacher development. Most professional development opportunities administered by the department are components of other programs: Indiana 2000, RE:Learning, gifted and talented programs, or technology programs, for example. According to one IDOE official, professional development opportunities offered by the state are usually one-time-only affairs, where training is provided for a short time but not sustained.

One exception is CLASS (Connecting Learning Assures Successful Students). Under CLASS, developed by Christa McAuliffe Award winner Barbara Pedersen, teachers learn about thematic instruction, cooperative learning, and other instructional innovations, which they then are encouraged to adapt to their own individual teaching styles and overall school vision. Along with training and continual follow-up coaching, participating schools get $150 dollars per teacher to cover release time and supplies. Overall, the state spent $155,000 on CLASS in 1990-91, $160,000 in 1991-92, and $360,000 in 1992-93, when participation jumped from 26 to 62 schools.

Legislation Focusing on Teacher Development

In 1985, the state legislature established the Teacher Quality and Professional Improvement Program to foster innovative professional development programs for teachers. The state allocated $10 million to fund innovative programs in areas such as inservice training, mentoring, and grants to individual teachers. An important feature of the Teacher Quality Program was the involvement of teachers themselves in the design of professional development projects. From 1985 to 1989, when the program ended, 181 projects were funded, involving over 12,000 teachers in 220 school corporations.

Under the Performance-Based Accreditation system (discussed in Chapter 2), schools must document professional development activities and plans to receive accreditation.

During the 1992 legislative session, a bill that would have established a professional development academy for teachers passed the Senate but died in the House Ways and Means Committee without a hearing. No similar bill was forthcoming during the 1993 session.

In 1993, a provision of House Bill 1003 would have permitted schools to use two of the 180 state-mandated instructional days for professional development activities. (Currently, this is possible only if schools meet certain requirements for banked time and receive a waiver from the State Board of Education.) However, HB 1003 did not pass, meaning that teachers and the General Assembly will continue to be at odds over the use of time in schools. The controversy began in 1987 when the legislature mandated the 180-day calendar and stipulated that all 180 days be used for student instruction. Teachers want to be able to use some of the 180 days for activities other than classroom instruction, such as professional development or parent/teacher conferences. However, the General Assembly, intent on increasing instructional time, has continually rebuffed legislation that would permit this. Of course, it is possible for individual school corporations to add noninstructional days to the calendar over and above the required 180 days (and the extra day or two already built into most contracts for inservice), but that would mean raising teacher salaries.

The Indiana General Assembly has resisted efforts to use instructional time for professional development.

Conditions of Teaching

A series of surveys conducted several years ago by the Carnegie Foundation examined teachers' impressions of their working conditions. Table 7.5 (see next page) highlights 10 key conditions from the hundreds of items covered by the surveys.

Although there were several areas in which teachers in Indiana and across the country reported a high degree of involvement, such as choosing textbooks, in most areas teachers were not particularly satisfied with their working conditions.

Indiana teachers reported greater involvement in textbook selection and curriculum development than other teachers. They also reported having more prep time. However, Indiana teachers reported less involvement in designing staff development programs, hiring colleagues, and determining school budgets than other teachers.

TABLE 7.5
CONDITIONS OF TEACHING: TEACHERS' IMPRESSIONS ACROSS THE REGION AND NATION

	U.S.	IL	IN	KY	MI	OH
Choosing Textbooks (% teachers reporting they were involved)	**79**	86	**90**	80	83	84
Shaping Curriculum (% involved)	**64**	71	**77**	64	72	71
Designing Staff Development (% involved)	**42**	46	**33**	41	47	48
Setting Standards for Student Behavior (% involved)	**61**	67	**57**	58	65	55
Hiring Teachers (% involved)	**10**	6	**6**	3	10	7
Deciding School Budgets (% involved)	**20**	15	**13**	16	19	13
% with 1 Hour or More of Prep Time per Day	**34**	29	**40**	29	36	27
Time for Meeting with Colleagues (% rating it excellent or good)	**15**	15	**14**	11	14	11
Teacher Morale (% excellent or good)	**39**	37	**40**	42	43	45
Parental Support (% excellent or good)	**37**	38	**36**	32	39	34

SOURCE: Carnegie Foundation for the Advancement of Teaching, 1990.

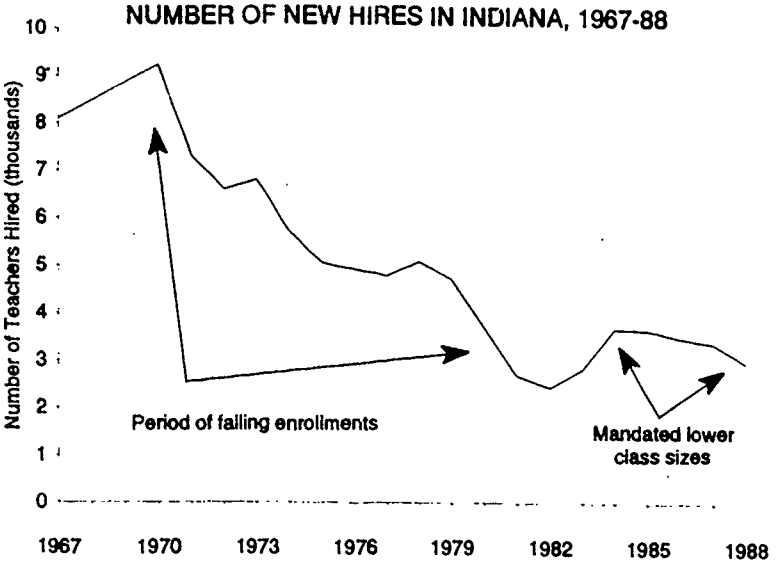
Teacher Supply and Demand

In 1984, RAND researcher Linda Darling-Hammond warned a nation gearing up for education reform that a major teacher shortage was imminent. However, several recent RAND reports focusing explicitly on teacher supply and demand within Indiana suggest that there is at present little cause for alarm, at least in this state.

RAND researchers found that the demand for new teachers in Indiana plummeted from about 9,000 new hires each year in the early 1970s to under 3,000 in the early 1980s (see Figure 7.4, next page). After a brief rise in the mid-1980s due to Prime Time, the number of new hires decreased again to around 3,000 in 1988.

FIGURE 7.4

NUMBER OF NEW HIRES IN INDIANA, 1967-88



SOURCE: Reprinted by permission from Kirby, Grissmer, and Hudson, 1991, p. 9.

With a large pool of experienced teachers, Indiana is not likely to confront a teacher shortage for at least another decade.

Part of the drop in demand was due to declining enrollment. Another factor was a drop in annual teacher attrition rates (the proportion of teachers who leave the teaching force each year), from 15% in the late 1960s to less than 5% in the late 1980s.

Additionally, the supply of teachers has been greater than expected because of a large reserve pool of experienced teachers available to fill the demand for open positions. By the mid-1980s, around 60% of new hires were experienced teachers, while only 40% of new hires had never taught before—the reverse of hiring patterns of a decade earlier. Projections of teacher shortages, which were based on a purported gap between the number of new education-school graduates and the number of positions available, failed to take into account this pool of experienced teachers.

Overall, Indiana should have a sufficient supply of teachers to meet demand at least through the year 2000. However, the RAND researchers suggest that as the pool of experienced teachers ages and current teachers begin to retire, a teacher shortage may loom in 10 to 15 years. Additionally, some corporations continue to experience shortages in certain areas, particularly special education.

Teacher Recruitment

Although there is apparently an adequate supply of teachers for the next decade in Indiana, there is a shortage of minority teachers. As mentioned earlier in this report, over 13% of Hoosier students are minorities compared to only 5.5% of teachers. Indiana has established two programs to help close this gap: Project SET and the Minority Teacher and Special Education Services Scholarship Program.

Two state programs in Indiana are designed to encourage minority students to become teachers.

Project SET (Student Exploratory Teaching), which is administered by the IDOE, aims to encourage exceptional high school and college students to enter the teaching profession, with particular emphasis on minority students, male students, and students with disabilities. Currently, over 1,000 students at 54 Indiana high schools are participating in Project SET activities, which include teaching clubs, Cadet teaching programs, and visits to college campuses. The program also awards college scholarships ($500-$1,000) to prospective teachers. From 1987 (the program's first year) through 1992, over 200 prospective teachers earned scholarships. After an initial grant of $28,000 from the Mellon Foundation in 1986, the project has been funded by the legislature at a rate of approximately $90,000 per year.

The Minority Teacher and Special Education Services Scholarship Program, which is administered by the State Student Assistance Commission, enables minority students pursuing an education degree to earn scholarships worth up to $4,000 per year. In return, they must agree to teach in Indiana schools on a full-time basis for at least three of the first five years after they are licensed. (Some thirty-one states have similar programs.) More than 100 Indiana teachers have passed through the program, and about 400 future teachers are currently involved. The legislature allocated $560,000 for the program during its first year, 1989-90, and has since funded the program at a rate of about $375,000 per year.

Administrators

Administrators are those who supervise the educational enterprise at the corporation and school levels, such as superintendents, assistant superintendents, directors of programs, school principals, and assistant principals. This section focuses exclusively on superintendents and principals.

Certification

There are administrative licenses for elementary principals, secondary principals, and superintendents, and requirements vary accordingly. For example, a candidate for the standard elementary administrative license must hold an appropriate teaching license and have completed at least 45 hours of graduate courses. A candidate for the superintendent's license must hold an appropriate teaching license and have an Ed.S. or higher degree, such as a doctorate. (An Ed.S. is an Education Specialist degree, which is between a master's and a doctorate.)

Race and Gender

In 1992-93, there were 289 superintendents and 1,797 principals in Indiana. As Table 7.6 (see next page) indicates, the vast majority of them were white and male.

TABLE 7.6
RACE AND GENDER OF INDIANA SUPERINTENDENTS AND PRINCIPALS, 1992-93

	Total #	% Minority	% Female
Superintendents	289	2%	4%
Principals	1,797	8%	27%

SOURCE: Indiana Department of Education (unpublished data), 1993.

Minority and female administrators are under-represented at the national level as well. According to the SASS survey, for example, 13% of America's principals in 1987-88 were minority and 25% female.

Little has changed over the past 10 years for superintendents: only 1% of superintendents were minority and 1% female in 1982-83, compared to 2% and 4% today. The race of principals also has changed little: 6% of principals were minority in 1982-83, compared to 8% today. However, there are considerably more female principals today (27%) than there were 10 years ago (10%).

Salary

The average salary for Indiana superintendents in 1992-93 was $68,253; for principals, it was $52,360. According to a national survey of administrator salaries, Indiana administrators make considerably less than their counterparts nationwide (see Table 7.7). Such comparisons must be made with caution, however, since data are taken from different sources.

Salaries of Indiana's K-12 administrators fall well below those of their counterparts nationwide.

TABLE 7.7
SUPERINTENDENT AND PRINCIPAL SALARIES, 1992-93*

	U.S.		Indiana
Superintendents	$85,120		$68,253
Principals	High School:	$63,054	$52,360
	Middle School:	$58,620	(all schools)
	Elementary:	$54,905	

*U.S. data are taken from a nationwide survey of school personnel. Since the survey included no state-by-state data, we used IDOE data for Indiana salaries.

SOURCES: Educational Research Service, 1993; Indiana Department of Education (unpublished data), 1993.

Education

Since Indiana administrators must have pursued education beyond the bachelor's degree simply to be certified, it is not surprising that they are a highly educated group. According to the 1987-88 SASS survey, 63% of Indiana's principals had more than a master's degree, compared to 44% nationwide.

Although no national comparisons are available, Indiana superintendents are also very well educated. In 1992-93, 48% of superintendents had doctorates (up from 42% 10 years ago), 39% Ed.S. degrees, and 13% master's.

Indiana Principal Leadership Academy

The Indiana General Assembly established a professional development academy for public school principals in 1986.

In addition to academic courses, principals can receive professional training from the Indiana Principal Leadership Academy, which was established in 1986 by the General Assembly. The Academy's purpose is to improve the leadership and management skills of practicing Indiana public school principals. Principals commit to 18 days of training over a two-year period, and training focuses on four major areas: educational leadership, communication, school culture, and school programs.

The Academy receives just under $500,000 annually in state funding. Thus far, 800 principals have graduated and 200 are currently enrolled. Another 100 Indiana principals attend the Academy's summer institute each summer for intensive leadership and management training.

Experience

Indiana administrators are a very experienced group of educators. Over 80% of superintendents and almost 60% of principals have more than 20 years of education experience.

Conclusion

Indiana's teachers fare reasonably well in comparison with adjoining states and the nation as a whole. On many indicators Indiana teachers are at or just below national averages. In several areas, Indiana teachers surpass national averages. For example, Indiana's prospective teachers score slightly higher than the national average on the NTE.

Indiana may need to increase its support for the professional development of teachers.

Additionally, Indiana's teacher preparation and licensing system compares well with that of other states.

- Almost 80% of Indiana teacher preparation institutions are accredited by NCATE, compared with a national average of 41%.
- Indiana teachers are among the best educated in the country. Nearly 85% have master's degrees, for example, compared with a national average of 46%.
- A higher percentage of Indiana teachers hold a standard license in their main assignment field than the national average (93% vs. 89%).
- The Beginning Teacher Internship program is helping new teachers adjust to the arduous first year of their career.

One area where the state may be able to improve is professional development. Few state-sponsored programs offer sustained, high-quality training opportunities to participating

teachers (CLASS is a notable exception), and few state funds are earmarked for professional development. Indeed, since the conclusion of the Teacher Quality Program in 1989, the General Assembly has not made the improvement of the teaching force a top priority. In this era of educational restructuring, when traditional methods are being vigorously called into question and new instructional techniques are at a premium, the state may want to consider making a renewed commitment to the development of its education work force.

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- Indiana Commission for Higher Education
- Indiana Department of Education
- Indiana Legislative Services
- Indiana Principal Leadership Academy
- National Council for Accreditation of Teacher Education
- State Student Assistance Commission
- Urban Teacher Education Program

Increased spending on public education and continuing efforts to address funding disparities have accompanied state education reforms over the past decade.

Chapter 8

Financing Education in Indiana

In many states, half or more of the annual budget is spent on public K-12 and higher education. This translates into over $6 billion each year in Indiana and hundreds of billions of dollars around the country.

This chapter discusses the financing of K-12 public education in Indiana—a highly complex and contentious process. The chapter covers education expenditures (both total and per-pupil), discusses the shift from local to state in sources of revenue, explains the funding formula, and examines funding disparities between school corporations. Finally, the chapter touches on some aspects of higher education funding, since K-12 and higher education together account for such a large portion of the state budget each year.

Education Expenditures

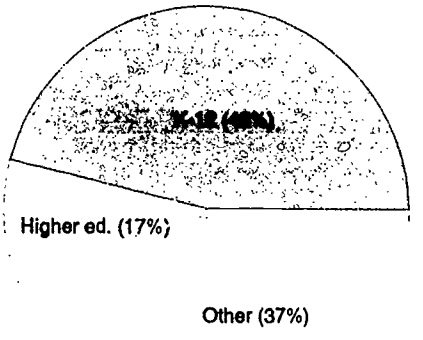
Current education expenditures consist of money spent for the general operation of K-12 public schools and institutions of higher education, including administration, instruction, books and materials, transportation, maintenance, energy costs, and other expenses. They also include State Board of Education expenses, Indiana Department of Education expenses, and contributions to the retirement system. Unless otherwise noted, the discussions that follow focus on current expenditures and exclude capital outlay (money spent on land, building construction, or building renovation) and interest on capital debt.

Total Expenditures

The primary source of revenue for most state functions, including education, is the General Fund, which is essentially the operating budget for the state. As Figure 8.1 shows, the portion of the General Fund budget devoted to current education expenditures is considerable. During the 1993 fiscal year, over $2.6 billion (46.0%) of Indiana's General Fund was appropriated for K-12 education, and $972 million (17.1%) for higher education. Thus in 1993, Indiana allocated 63.1% of its General Fund budget to education.

K-12 and higher education account for a majority of Indiana's General Fund expenditures.

FIGURE 8.1
PERCENTAGE OF GENERAL FUND APPROPRIATIONS FOR K-12 AND HIGHER EDUCATION, 1993



SOURCE: Indiana State Budget Agency (unpublished data), 1993.

As Table 8.1 indicates, these proportions have declined slightly since 1980, when 64.6% of the budget was devoted to education. The peak year for education spending as a proportion of the General Fund was 1982, when over 50% of the budget was spent on K-12 education alone and almost 70% on K-12 and higher education combined. Since 1989, both K-12 and higher education have been losing ground relative to the budget as a

whole. One reason for this decline is the rapid growth of Medicaid, which has risen from about 8% of the budget to almost 15% over the past six years.

TABLE 8.1
EDUCATION APPROPRIATIONS, 1980-93 (in millions of dollars)

	K-12	Higher Education	Total General Fund	K-12 as a % of General Fund	Higher Ed. as a % of General Fund	Total Ed. as a % of General Fund
1980	1,043	415	2,260	46.2%	18.4%	64.6%
1981	1,169	468	2,435	48.0%	19.2%	67.2%
1982	1,257	489	2,512	50.1%	19.5%	69.6%
1983	1,294	492	2,650	48.8%	18.6%	67.4%
1984	1,390	532	2,985	46.6%	17.8%	64.4%
1985	1,480	573	3,184	46.5%	18.0%	64.5%
1986	1,663	648	3,594	46.3%	18.0%	64.3%
1987	1,785	706	3,836	46.5%	18.4%	64.9%
1988	1,963	753	4,158	47.2%	18.1%	65.3%
1989	2,228	809	4,543	49.0%	17.8%	66.8%
1990	2,318	878	4,961	46.7%	17.7%	64.4%
1991	2,472	941	5,432	45.5%	17.3%	62.8%
1992	2,572	976	5,556	46.3%	17.6%	63.9%
1993	2,621	972	5,699	46.0%	17.1%	63.1%

SOURCE: Indiana State Budget Agency (unpublished data), 1993.

In unadjusted dollars, state appropriations for both K-12 and higher education have more than doubled since 1980.

Although declining slightly as a percentage of the total state budget, K-12 appropriations have more than doubled since 1980. This increase can be attributed largely to higher basic support for tuition but also in part to legislative initiatives such as a longer school year, reduced class size in the lower grades (Prime Time), and the implementation of new programs such as ISTEP, at-risk, and performance-based awards. Additionally, special education costs have been increasing considerably faster than other education costs.

Per-Pupil Expenditures

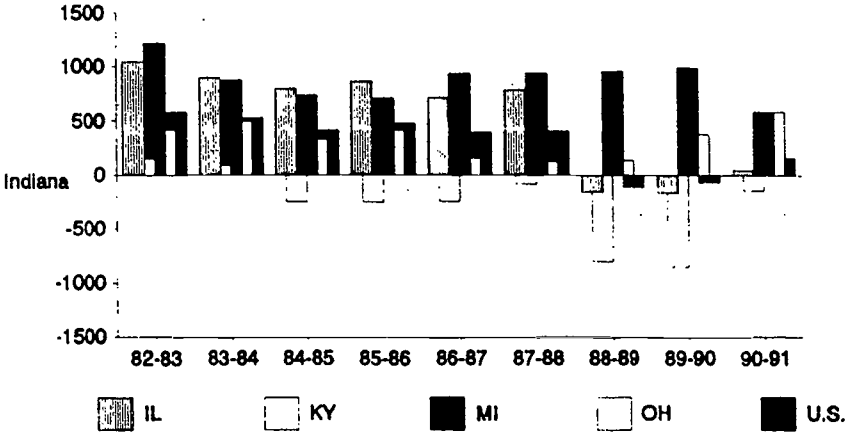
Per-pupil expenditures—that is, current public K-12 education expenditures divided by the total number of students—are probably a better measure than total expenditures in determining a state's financial commitment to education, since per-pupil expenditures take into account the number of students being served and make comparisons across states possible.

- In unadjusted dollars, the average per-pupil expenditure across the United States increased from $2,502 during the 1980-81 school year to $4,960 in 1989-90. Indiana's per-pupil expenditure over the same decade increased from $2,010 to $4,549—$411 below the national average. After accounting for inflation, this represents a 33.5% increase nationwide and a 47.7% increase in Indiana.
- When inflation and cost of living are taken into account, Indiana's per-pupil expenditure is closer to the national average. In fact, in two school years, 1988-89 and 1989-90, the state surpassed the national average. Indiana's per-pupil expenditure has also increased at a faster rate than that of all neighboring states and the U.S. as a whole. However, Indiana, Illinois, and Kentucky still lag behind Ohio and Michigan in spending per pupil.

When adjusted for inflation and cost of living, Indiana's per-pupil expenditures have been near the national average since 1988.

Figure 8.2 captures Indiana's improvement and current status by comparing per-pupil spending differentials adjusted for inflation and cost of living across the past decade. A bar appearing above the line indicates that the state represented by the bar spent more per pupil than Indiana in that year, while a bar below the line indicates the opposite.

FIGURE 8.2
INDIANA PER-PUPIL EXPENDITURES COMPARED TO NEIGHBORING STATES AND THE U.S.
(adjusted for inflation and cost of living)



SOURCE: Augenblick, Van de Water, & Fulton, 1993.

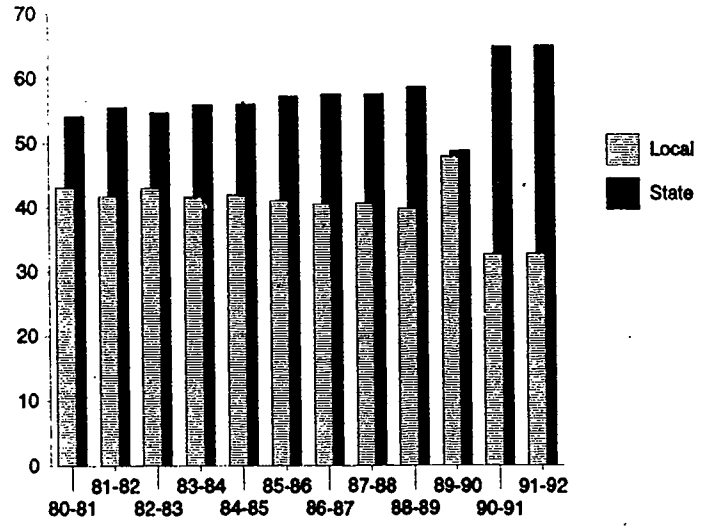
Sources of K-12 Education Revenue

The increases in education funding reported above require taxpayers to pay more to support their schools. Funding for K-12 public education derives from federal, state, and local sources. Since federal contributions are relatively small (less than 5% of all revenue for K-12 education in the state and less than 1% of General Fund receipts), the following discussion focuses on state and local sources.

State revenue comes primarily from the state income and sales taxes. The main source of local revenue is the property tax. Local revenue also derives from auto excise and financial institutions taxes. Two other taxes, the county adjusted gross income tax and the county option income tax, which are set by county taxing authorities as designated by state statutes, are used to offset school corporation property taxes.

In 1973 about two thirds of education revenue in Indiana came from local sources. That year, however, the General Assembly passed statutes that made it difficult for local corporations to raise additional property taxes. Other property tax relief measures, along with measures intended to reduce the reliance of education funding on local sources, have contributed to a virtual reversal in the portion of education expenditures funded by state and local sources. In 1991-92 almost two thirds of General Fund revenue support for K-12 education came from the state (see Figure 8.3).

FIGURE 8.3
PERCENTAGE OF GENERAL FUND REVENUE FROM LOCAL AND STATE SOURCES, 1980-81 TO 1991-92



SOURCE: Indiana Department of Education (unpublished data), 1993.

Twenty years ago two thirds of Indiana's education revenue came from local sources; almost that amount now comes from the state.

The anomaly in the graph in 1989-90 was the result of a mandated statewide reassessment of property values that year. The assessed value of property increased considerably, resulting in higher property tax bills for Hoosiers and higher local contributions to school funding. A 1990 increase in state property tax relief in response to the 1989 reassessment restored the state share of education revenue.

Of neighboring states, only Kentucky exceeds Indiana in the proportion of K-12 education revenue coming from the state. In Illinois and Ohio, more than half of K-12 funding comes from property taxes, and in Michigan the figure is almost two thirds. (This proportion will no doubt change in Michigan with the recent legislative repeal of property taxes.)

Distribution of Funds to Indiana Public K-12 Schools

State Funding System

Funding for public schools serves several functions: (a) tuition support to cover the costs of providing instruction and other services to students, (b) capital and debt service support to cover the cost of constructing and remodeling facilities, and (c) transportation support for moving students to and from school. State government and local school corporations share these costs in ways that are specified in state law. Since the largest and most important portion of public school funding goes for tuition, this section focuses only on tuition support.

The amount of tuition funding available to each corporation each year and the state and local shares of that funding are determined by complex formulas. In the most general terms, past and present state formulas have provided for (a) state and local base tuition, (b) tuition for categorical programs such as special and vocational education, and (c) tuition for a few other state programs such as Prime Time and ISTEP remediation. Since 1973 the state formula for base tuition has generally provided for annual incremental increases in tuition support beyond previous expenditure levels and has restricted the property tax rate that corporations may levy. Since 1986, the state formula has also included an element that attempts to equalize tuition spending per pupil in the various corporations by establishing a floor and ceiling for per-pupil expenditures.

Funding Disparities

Attempts to equalize spending per pupil among corporations have had some effect, but wide disparities among corporations still exist. As Table 8.2 indicates, in 1989-90 the lowest spending corporation spent only 43% as much per pupil as the highest spending corporation. The difference between them was over $3,000 per pupil. By 1991-92 the percentage was up to 54% and the dollar amount was under $2,500—an improvement, to be sure, but still a significant disparity.

Per-pupil spending in the lowest-spending Indiana school corporations is somewhat over half what it is in the highest-spending corporations.

Since using corporations at the extreme ends of the scale can exaggerate differences, Table 8.2 includes per-pupil expenditures for the corporation ranked 30th from the bottom (the 10th-percentile corporation) and the corporation ranked 30th from the top (the 90th-percentile corporation). Naturally, the disparity between these corporations is less than between the top and bottom corporations. However, the rate of improvement is also less. In 1989-90 the per-pupil expenditure in the 10th-percentile corporation ($2,799) was 76.4% of the per-pupil expenditure in the 90th-percentile corporation ($3,666). By 1991-92, this figure had risen to 78.2%.

TABLE 8.2
INDIANA PER-PUPIL EXPENDITURES

	Lowest Spending Corp.	10th-Percentile Corp.	Overall State Median	Overall State Mean	90th-Percentile Corp.	Highest Spending Corp.
1989-90	$2,313	$2,799	$3,046	$3,265	$3,666	$5,388
1990-91	2,673	3,045	3,278	3,486	3,892	5,412
1991-92	2,889	3,225	3,460	3,711	4,125	5,358

SOURCE: Indiana Department of Education, 1991, 1992, and 1993.

In 1987 the Lake Central School Corporation challenged the state's education financing system in court, claiming that wide spending disparities violated the Indiana constitution's provision requiring a "general and uniform system" of public education. By 1990, some 50 additional Indiana school corporations had joined the original plaintiff in the suit.

In 1992, after Governor Bayh promised to support changes in the funding formula, the plaintiffs agreed to put the lawsuit on hold pending the outcome of the 1993 legislative session.

Modified Formula

Indiana's new "reward for effort" education funding formula promises that by 1999 per-pupil spending will not vary among corporations with the same property tax rate.

In 1993, the General Assembly enacted a new base tuition formula to take effect in 1994. Characterized during the legislative debate as a "reward for effort" plan, the new formula promises to make the school funding system more equitable over the next six years by guaranteeing that school corporations with the same property tax rate will be able to spend the same amount of money per student regardless of the corporations' wealth. In general, the new formula:

- establishes an annual floor for education expenditures per student to be reached by all corporations by 1999 (although a local choice to set property tax rates below target levels may mean that some corporations may not reach the designated floor and consequently may lose state support);
- establishes a uniform level of property tax rates for similar-spending corporations to be achieved by 1999 (although, if a 15-cent per $100 of assessed valuation annual limit on the change in property taxes in 1994 and 1995 is continued, some corporations may take longer to meet the targets);
- establishes ceilings on property tax rates and on expenditure levels per student;
- provides a larger share of state support for lower-spending corporations with less property wealth than it does for higher-spending or property-rich corporations;
- includes at-risk funding within the base tuition support formula but continues to fund special education and vocational education outside that formula;

- after 1994, requires the State Board of Tax Commissioners to establish an annual ratio for each school corporation to correct local property tax rates for disparities in assessed valuations.

Comparing the Formulas

A comparison between the old and new formulas is provided in Table 8.3. The table is not intended to explain the precise method of calculation for tuition support but instead to provide a rough approximation of how the formulas work and to highlight changes that were made.

Blank spaces in the table indicate what might be called *structural changes* in the formula. Some of these structural changes simply move elements into or out of the state base tuition formula. For example, at-risk funding in 1993 was treated as a categorical program; in 1994, at-risk funding for the previous year is included in the state base tuition formula. Similarly, the ceiling on expenditures in 1993 was enforced through a reduction in the state categorical program and base tuition support; in 1994, that ceiling is enforced through a reduction in the local property tax levy.

Other structural changes include the addition or elimination of particular elements in the formula. For instance, the 1994 formula includes an additional amount of at-risk funding only for those school corporations that have especially high-risk populations. And the 1993 formula included extra funding for corporations that had experienced enrollment increases in the past two years; this element has been eliminated from the 1994 formula. It should be noted that this change will not necessarily disadvantage growing school corporations since the new formula, unlike the old one, calculates base tuition support using current year enrollments.

The new formula indexes local property tax rates to local expenditures per pupil.

Other changes have been made in the way that various elements of the formula are calculated. These might be called *definitional changes* in the formula. Four of these are worth noting:

- *Local Tuition Support* In 1993 the starting place for calculating local tuition support was the money actually raised in 1992 through the tuition property tax levy. In 1994, however, the starting place for local tuition support is the amount of money that will be raised in 1994 by means of a property tax levy indexed to the per-pupil expenditures in 1993. This new definition requires corporations to change their tax rate by specified amounts so that by 1999 corporations that spend the same amount of money per student will levy the same tax rate. Because of this, the new formula is described as providing taxpayer equity in that similar levels of per-pupil expenditures will eventually require similar levels of local tax effort.

TABLE 8.3
COMPARISON OF OLD AND NEW FORMULAS FOR STATE AND LOCAL TUITION SUPPORT

	Old Formula	New Formula
STATE BASE TUITION SUPPORT	Previous Year Adjusted State Tuition Support + Reimbursement for Previous Year Social Security Costs + State Adjustment for Enrollment Growth + Spending Equalization Support for Low-Spending Corporations + Current Year State Supplemental Tuition Support – Adjustment for Excess Local Tuition Support + Current Year Flat Grant	Previous Year Adjusted State + Local Tuition Support per Pupil x Current Year Average Daily Membership – Current Year Local Tuition Support + Reimbursement for Previous Year Social Security Costs + Previous Year State At-Risk Support + Additional Current Year State Support for High At-Risk Corporations + Spending Equalization Support for Low-Spending Corporations + Previous Year State Supplemental Tuition Support + Current Year Minimum Spending Increase Guarantee
STATE CATEGORICAL PROGRAM SUPPORT	Current Year Special Education Support + Current Year Vocational Education Support + Current Year At-Risk Support – Adjustment for Excess Local Tuition Support	Current Year Special Education Support + Current Year Vocational Education Support
OTHER STATE SUPPORT	Other State Grants (Prime Time, ISTEP Remediation, etc.)	Other State Grants (Prime Time, ISTEP Remediation, etc.)
LOCAL TUITION SUPPORT	Previous Year Maximum Tuition Levy + Adjustment to levy to cover loss of federal impact aid, state approval of excess levy for operating a new facility, or voter approval of excess tuition levy + Other Local School Funds	Current Year Maximum Tuition Levy (indexed to previous year per-pupil spending level) + Adjustment to levy to cover loss of federal impact aid, state approval of excess levy for operating a new facility, or voter approval of excess tuition levy – Adjustment to Levy for Excess Local Tuition Support + Other Local School Funds

SOURCES: *Indiana Code Annotated*, 1992; Indiana Fiscal Policy Institute, 1992; Senate Enrolled Act 1(ss), 1993.

The new formula makes each corporation's revenue proportional to current enrollments.

- *State Tuition Support:* In 1993 the starting place for state base tuition was the actual state adjusted tuition support provided in 1992. In 1994 the starting place is the state adjusted and local tuition support per pupil in 1993 multiplied by the 1994 enrollment less the 1994 local tuition support. This definitional change has two important consequences. First, as already noted, the new formula takes into account actual enrollment changes. Second, the state will provide more state tuition funding to corporations with less property wealth per student, because those property-poor corporations will raise less local funding for schools than will more property-rich corporations with a similar tax rate and per-pupil expenditure level. In essence, this variation in the state share of tuition support is what will, by 1999, enable school corporations with different levels of property wealth to impose the same property tax rates and yet spend the same amount on the education of each student.
- *Spending Equalization:* In 1994 the spending equalization support for low-spending corporations is calculated differently than in 1993. In 1993 the state guaranteed that all corporations would have from state and local sources a minimum amount of base tuition support per pupil, $3,070. In 1994 the state permits low-spending corporations to increase their spending by one sixth (or in some cases two sixths) of the difference between their previous spending levels per pupil and a higher figure, $3,525. This target spending floor will be higher in 1995, and low-spending corporations will be allowed to raise their spending by one fifth (or in some cases two fifths) of the difference. If this pattern is followed in subsequent sessions of the General Assembly, it will bring all corporations up to the target floor by 1999 unless a corporation chooses to levy less than the maximum allowed rate for property tax.

By establishing a spending floor that all corporations are to reach by 1999, the new formula attempts to equalize per-pupil spending.

- *Funding Increases:* In 1993 an increased level of state base tuition support was achieved by increasing the state supplemental tuition support. In 1994 a tuition support increase is achieved by the greater of either a flat per-pupil increase in state tuition support over 1993 levels (plus any spending equalization increases permitted) or an overall minimum percentage increase in total funding (state base tuition + state categorical + local tuition support) over 1993 levels that is greater for lower-spending corporations and less for higher-spending corporations. For some corporations, this spending-sensitive percentage increase could provide an alternative source of funding equalization.

Use of Funds

Data on how corporations and schools spend education funds are difficult to obtain and interpret. Different budgeting procedures can yield widely disparate results regarding the proportion of funds spent on instruction, administration, and so forth. The best available data, from the National Center for Education Statistics, suggest that Indiana is right at the national average in terms of the proportion of money spent on instruction, and ahead of neighboring states (see Table 8.4).

The portion of education funds Indiana allocates to instruction matches the national average and is higher than that of neighboring states.

TABLE 8.4
CURRENT EDUCATION EXPENDITURES BY FUNCTION, SCHOOL YEAR 1989-90

	Percentage of Expenditures by Function			
	Instruction	Support Services	Non-Instruction	Direct Support*
U.S.	**58.2%**	**33.8%**	**4.5%**	**3.6%**
IL	56.4%	35.4%	3.7%	4.5%
IN	**58.0%**	**31.8%**	**4.7%**	**5.6%**
KY	51.6%	30.9%	4.6%	12.9%
MI	51.8%	36.5%	3.0%	8.7%
OH	56.6%	38.2%	5.2%	0.0%

*State payments to support local activities, predominantly through employee benefits.

SOURCE: National Center for Education Statistics, 1992.

Higher Education

As mentioned earlier, higher education has accounted for between 17% and 20% of Indiana's General Fund appropriations each year during the past decade, compared to between 46% and 50% for K-12 education. However, higher education financing differs from K-12 in one key aspect: Almost all K-12 revenue comes from state appropriations, while institutions of higher education receive a significant proportion of their revenue from students.

Indiana students provide a larger proportion of public higher education revenue than students across the U.S.

Student Contributions

As Table 8.5 shows (see next page), Indiana public institutions of higher education rely less on state appropriations and more on student contributions than the national average. Student contributions (tuition, fees, room and board, etc.) account for over one third of total current-fund Indiana public higher education revenue, compared to one quarter nationwide. (Current-fund revenue includes not only state General Fund revenue but also federal contributions, endowment income, and other sources).

TABLE 8.5
PERCENTAGE OF TOTAL CURRENT-FUND REVENUE BY SOURCE OF FUNDS FOR PUBLIC INSTITUTIONS OF HIGHER EDUCATION, 1989-90

	U.S.	Indiana
Federal Appropriations, Grants, and Contracts	10.3%	7.4%
State Appropriations, Grants, and Contracts	41.7%	38.8%
Local Appropriations, Grants, and Contracts	3.7%	0.1%
Student Contributions (tuition, fees, room and board, etc.)	25.0%	33.5%
Hospitals	9.5%	10.9%
Private Gifts	3.8%	3.9%
Endowment Income	0.5%	0.4%
Other	5.5%	5.2%

SOURCE: National Center for Education Statistics, 1992.

Indiana students are also paying a larger share of higher education costs today than they have at any time over the past decade. In 1982-83, student fees accounted for 37.7% of state General Fund revenue for public higher education. The student share dropped to 32.8% in 1986-87 but has been rising steadily ever since. In 1992-93, student fees accounted for 38.4% of state General Fund revenue for public higher education.

State Contributions

Except in 1992-93, state contributions to the cost of higher education have risen steadily over the past decade in Indiana.

Even as student fees have been increasing, state appropriations also have been rising. Table 8.6 reports state tax fund appropriations for the operating expenses of public higher education over the past decade. In addition to listing funds used for general education purposes, the table includes (under the category of Other) program initiatives such as the Indiana College Placement and Assessment Center (ICPAC). Therefore, the numbers are different from the General Fund appropriations listed in Table 8.1.

As Table 8.6 indicates, overall appropriations for higher education nearly doubled over the past decade, and money designated for two-year institutions (Ivy Tech and Vincennes) nearly tripled. The rate of increase outpaced inflation every year from 1983-84 to 1990-91. Only during the past two years, after nearly a decade of rapid growth, did the increases slow down. In fact, there was a slight decline in state appropriations for higher education in 1992-93.

TABLE 8.6
INDIANA TAX FUND APPROPRIATIONS FOR OPERATING EXPENSES OF HIGHER EDUCATION
(in thousands of dollars)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Two-year Institutions	27,790	34,551	38,844	48,628	54,752	59,625	64,167	70,761	75,523	78,039	77,857
Four-year Institutions	387,793	449,377	482,878	528,825	571,641	604,128	645,203	695,663	744,298	765,868	757,181
Student Assistance Commission	21,151	22,576	24,301	27,802	31,956	35,166	38,789	42,868	48,650	51,870	53,166
Other	29,871	3,659	3,787	3,086	3,286	5,784	7,455	4,729	5,423	3,866	4,958
TOTAL	466,605	510,163	549,810	608,341	661,635	704,703	755,614	814,021	876,162	899,643	893,162

SOURCE: *Annual Grapevine Statistics*, 1993.

In terms of increases in state support, Indiana higher education has fared reasonably well compared to neighboring states.

Despite recently tightening budgets, Indiana appropriations for higher education compare favorably with those of neighboring states. Only Kentucky has had a greater increase in recent years, and only Ohio had a greater increase from 1981-82 to 1991-92 (see Table 8.7).

TABLE 8.7
RATE OF CHANGE
IN STATE APPROPRIATIONS
FOR HIGHER EDUCATION

	% Change 1990-91 to 1991-92	% Change 1989-90 to 1991-92	% Change 1981-82 to 1991-92
IL	0%	1%	68%
IN	**3%**	**11%**	**94%**
KY	5%	17%	89%
MI	3%	9%	81%
OH	-1%	2%	106%

SOURCE: *Annual Grapevine Statistics*, 1993.

Conclusion

Expenditures on public K-12 education have increased considerably throughout the nation since the early 1980s. National per-pupil expenditures from 1980 to 1989 jumped 33% after accounting for inflation. Indiana's per-pupil spending increased even faster over the same time period—by almost 48%. Despite these increases, however, Indiana per-pupil spending still lags somewhat behind the national average. Among neighboring states, Michigan and Ohio still spend considerably more per student than Indiana does.

Although Indiana's increase in education spending over the past decade has outpaced that of the U.S as a whole, the state's per-pupil expenditures still fall somewhat below the national average, and wide funding disparities still exist among corporations.

Inside the state, the highest-spending corporations continue to spend almost twice as much per pupil as the lowest-spending ones. Indiana has tried for years to reduce these disparities. In 1986, for example, the state added an equalization factor to the funding formula. The burden of funding has also shifted from local sources (primarily property taxes) to state sources. Still, wide disparities remain, and under pressure from a lawsuit brought by more than 50 Indiana corporations, Governor Bayh and the General Assembly agreed to modify the formula during the 1993 session to address the needs of lower-spending corporations. The result was a reward-for-effort formula that promises over the next six years to yield equal per-pupil expenditures in corporations with equal property tax rates.

Will the new formula live up to its promise? Full implementation and funding of the formula requires additional legislation during the next two biennial budget sessions of the General Assembly. Even if the necessary legislation is forthcoming, it remains to be seen whether the formula will reduce disparities as planned.

As yet, the 50+ school corporations have not reinstated their lawsuit challenging Indiana's funding system, but they along with many others will be closely watching the results of the new formula to see how effective it is in achieving funding equity within the state.

Like K-12 spending, spending for higher education in Indiana has increased considerably during the past decade. Nevertheless, Indiana students have contributed a higher proportion of higher education costs than students in the U.S. as a whole, a proportion that has increased steadily over the past five years. Whether this trend will continue remains to be seen.

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In addition to the published sources cited above, this chapter contains unpublished data from the following organizations and agencies:

- Indiana Commission for Higher Education
- Indiana Department of Education
- Indiana State Budget Agency

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(812) 855-1240

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