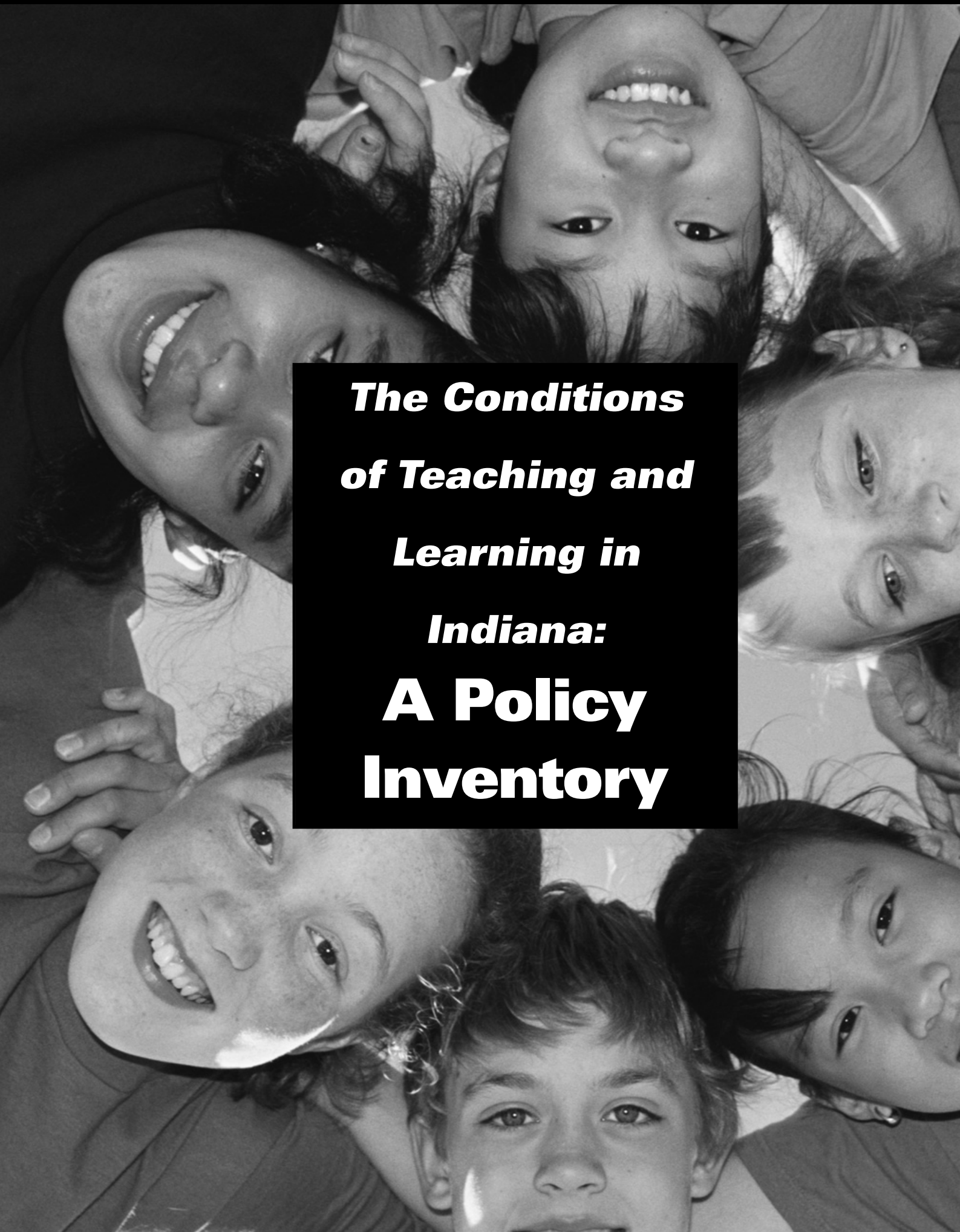
June 1999



The Conditions of Teaching and Learning in Indiana:

A Policy Inventory

Prepared by the North Central Regional Educational Laboratory
in collaboration with the Indiana Professional Standards Board
for the Indiana Advisory Council on Teaching and America's Future

Indiana Professional Standards Board
251 East Ohio Street, Suite 201
Indianapolis, Indiana 46204-2133
(317) 232-9010
www.state.in.us/psb

Indiana Advisory Council on Teaching & America's Future

John Moore
Advisory Council Chair
President
Indiana State University

Betty Ayers
President, Indiana Association of Teacher Educators
Schooltown of Munster

Kevin Brinegar
Indiana Chamber of Commerce

Deborah Butler
Indiana Association of Colleges of Teacher Education
Wabash College

Victoria Soto-Candelaria
Indiana Federation of Teachers

William Christopher
State Student Assistance Commission of Indiana

Larry Grau
Office of the Governor

Marilyn Haring
School of Education
Purdue University
Indiana Professional Standards Board

Steve Heck
Indiana Association of School Principals

Joyce Johnstone
Institute for Education Initiatives
Notre Dame University

Gail Huffman-Joley
School of Education
Indiana State University

Stan Jones
Indiana Commission for Higher Education

Rep. Sheila Klinker
Indiana General Assembly

Lynn Lehman
Noblesville Community Schools

Sen. Teresa Lubbers
Indiana General Assembly

Elaine Lucas
Ameritech

Darlene Maloney
Indiana Congress of Parents and Teachers

Jose Mejia
School City of East Chicago

Philip Metcalf
Wawasee Community School Corporation
Ball State University
Indiana Professional Standards Board

Nelson Miller
Indiana School Boards Association

Anne Moudy
Marion Community Schools

Peggy O'Malley
Indiana Department of Workforce Development

Pat O'Rourke
Northwest Indiana Forum

T.K. Olson
Independent Colleges of Indiana

June Owen
Merrillville Community Schools

Suellen Reed
State Superintendent
Indiana Department of Education

TBA State Representative
Indiana General Assembly

Alba Robertson
Ball State University

Kathy Smith
Office of State Relations
Indiana University

Glenn Tebbe
Indiana Non-Public Education Association

Rep. Tom Weatherwax
Indiana General Assembly

David Young
Indiana State Teachers Association

Andrea Ziemba
School City of Hammond
National Board for Professional Teaching Standards Certified Teacher

Acknowledgments

Several individuals and institutions were instrumental in collecting and reporting data for this report. We would especially like to thank Dwayne James at the Indiana Department of Education and Jeff Weber at the Indiana Commission for Higher Education for their assistance with the often tedious and always time-consuming task of retrieving data and making it accessible. The Indiana Professional Standards Board, especially Marilyn Scannell, T. J. Oakes, and Kathy Wall, provided guidance on the content, production, and dissemination of the report. Dale Scannell, Regional Associate for the National Commission on Teaching and America's Future, also provided ongoing support and direction. NCREL research and policy staff included Sabrina Laine, Angela Rudolph, and Margaret Tinzmann.

Content

Introduction 1
Overview of the Report 3

I. Getting Serious About Standards for Students, Teachers, Administrators, and School Services Personnel 4
What Do We Know? 4
What Have We Accomplished in Indiana? 5
Targeted Areas for Improvement 7

II. Reinventing Teacher Preparation 8
What Do We Know? 8
What Have We Accomplished in Indiana? 10
Targeted Areas for Improvement 15

III. Overhauling Teacher Recruitment and Putting Qualified Teachers in Every Classroom 15
What Do We Know? 16
What Have We Accomplished in Indiana? 20
Targeted Areas for Improvement 24

IV. Encourage and Reward Knowledge and Skill 25
What Do We Know? 25
What Have We Accomplished in Indiana? 27
Targeted Areas for Improvement 27

V. Creating Schools Organized for Teacher and Student Success 28
What Do We Know? 28
What Have We Accomplished in Indiana? 29
Targeted Areas for Improvement 35

Acronym Glossary 35

References 36

List of Tables and Figures

Table 1 ISTEP+ Results 1996-98 5

Table 2 Performance-Based Standards Adopted by IPSB, 1998 6

Table 3 Ohio Instructional Subsidy, 1997 10

Table 4 Average Base Salaries of Full-Time Instructional Faculty and Staff in Institutions of Higher Education, 1992-93 10

Table 5 Status of Accreditation for Indiana's Teacher Preparation Institutions, 1998-99 11

Table 6 Average GPA for Undergraduate Enrollment in Indiana Postsecondary Education (Based on 4.0 GPA)....12

Table 7 Education Enrollment and Degrees in Indiana Postsecondary Education....12

Table 8 Professional Development Schools in Indiana, 1997-98....14

Table 9 Licensed Teachers in Indiana by Degree and Licensing Field, 1993-97 16

Table 10 Percentage of U.S. Secondary Students Taught by Teachers Who Did Not Major in Their Class Subject 17

Table 11 Indiana Student and Teacher National Racial Composition,1998....18

Table 12 Average U.S. Teacher Salaries Selected Years, 1960-97 18

Table 13 Teacher Recruitment Initiatives....19

Table 14 Average Indiana Teacher Profile 20

Table 15 Local Indiana School Corporations Salary Schedule, 1998-99....20

Table 16 Number of Limited Licenses Issued in Indiana, 1993-98 23

Table 17 Top Five Limited License Areas in Indiana 23

Table 18 District Percentages of Substitute Teacher Minimum Education Requirements, 1996-97 24

Table 19 Number of National Board Certified Teachers by State, 1993-98 25

Table 20 State Action Support National Board Certification in the Midwest 26

Table 21 International Comparison of Instructional and Other Staff, by Country....29

Table 22 Total K-12 Expenditures 30

Table 23 Adequacy of Resources 31

Table 24 Percentage of Public School Teachers Who Participated in Various Professional Development Activities Since the End of the Last School Year, by State (1993-94) 32

Table 25 Percentage of Teachers Who Participated in an Inservice or Professional Development Program That Focused on Various Topics Since the End of the Last School Year, by State (1993-1994) 32

Table 26 Local Contract Provisions for Professional Development Days in Indiana 33

Table 27 Percentage of Public School Teachers Who Reported Receiving Various Types of Support for Inservice Education or Professional Development in Their Main Teaching Field During the Current School Year, by State (1993-94) 34

Figure 1 Teacher Quality Impact Continuum 1

Figure 2 Average Proportion of Variance in Student Test Scores (Grades 1-7) Explained by: 9

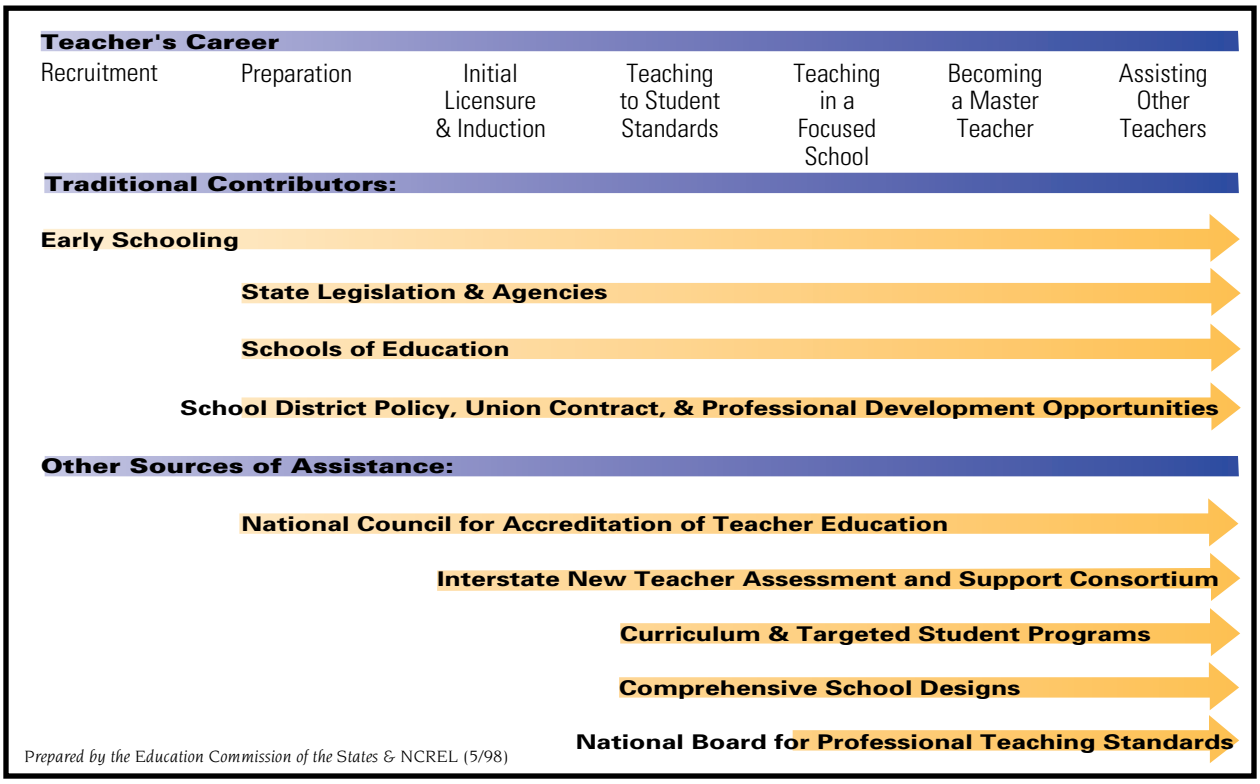
Figure 3 Beginning Teacher Internship Program Participants 22

Introduction

The 1998-99 *Conditions of Teaching and Learning in Indiana Report: A Policy Inventory* is about teacher quality. More specifically, it is about the preparation of prospective teachers, the institutional support for new teachers, and the opportunities for ongoing training and development of the teaching force in Hoosier schools.

Teacher quality has gained considerable attention in the last few years as conversations on education reform have moved from standards, assessment, and accountability to the implementation of systemic changes at the school and classroom level. Like so many issues in education reform, the issue of teacher quality has several components. In fact, teacher quality refers to the entire spectrum of a teacher's career from early preparation to the ongoing education of Indiana's veteran teachers. Furthermore, improving teacher quality involves more than just the individual teacher; various state, local, private, and public organizations contribute to every component of a teacher's career. Figure 1 illustrates the many stages of a teacher's career and the variety of organizations that influence a teacher's knowledge and skills along the career continuum.

Figure 1: Teacher Quality Impact Continuum



National organizations, such as the National Council for Accreditation of Teacher Education (NCATE), the Interstate New Teacher Assessment and Support Consortium (INTASC), and the National Board for Professional Teaching Standards (NBPTS), have also entered the discourse on this topic and created new options for states to identify quality teachers. These circumstances and their partnerships with NCATE, INTASC, and NBPTS have emboldened many states to demand more from their teachers.

The ambitious 1996 report, *What Matters Most: Teaching for America's Future*, by the National Commission on Teaching & America's Future (NCTAF), identifies a number of barriers to achieving a quality teaching force:

- Low expectations for student performance
- Unenforced standards for teachers
- Teacher preparation programs that do not reflect research and best practice
- Insufficient strategies for teacher recruitment
- Inadequate induction for beginning teachers
- Lack of comprehensive plans for professional development and rewards for knowledge and skill
- Schools with structures that impede success

The NCTAF report also identifies five key areas to focus reform around the recruitment, preparation, and retention of quality teachers. These five areas constitute the organizational framework for the data presented in this report.

NCTAF Recommendations

1. Set professional standards for teachers linked to student standards.
2. Ensure high-quality teacher preparation and professional development.
3. Improve teacher recruitment and hiring practices.
4. Reward teacher knowledge and skill.
5. Design schools that are organized for student and teacher success.

Indiana is one of 13 states working with NCTAF toward the implementation of a teacher quality agenda. In fact, the work of the Indiana Professional Standards Board (IPSB) is consistent with NCTAF's five recommendations. IPSB addresses issues of standards for teachers, as well as teacher preparation and professional development. Enacted in legislation in 1992, IPSB oversees teacher licensure and testing, the beginning teacher internship program, and continuing education. IPSB consists of 19 members: the state superintendent of public instruction and 18 others appointed by the governor. Of the 18 appointed members, 13 must hold a teacher's license and be actively employed by a school corporation. Members are selected to represent expertise in content areas, different school functions, and grade levels. The five remaining members represent teacher preparation units within Indiana public and private institutions, a local school board, and business.

Indiana is a model to other states thinking through how teachers should be educated, monitored, licensed, and nurtured over their careers (Bradley, 1997). In its report, NCTAF recommended that every state follow the example set by Indiana in establishing an autonomous professional standards board. NCTAF argues that standards boards "create a fire wall between the political system and the standard-setting process, allowing higher standards that are linked to student learning and are more connected to the professional knowledge base to be set and maintained" (Bradley, 1997).

As a partner state, Indiana is required to convene a cross section of constituent groups critical to the implementation of the NCTAF recommendations in Indiana. The members of these groups, who meet together as the Indiana Advisory Council for Teaching and America's Future, include parents, legislators, members of higher education, school and district administrators, the business community, and other state government representatives. The Council is a central point for the dissemination of information, a link to NCTAF and IPSB, and a source of advice on a strategic plan and policy inventory as it relates to the NCTAF recommendations.

Overview of the Report

The 1998-99 *Conditions of Teaching and Learning in Indiana Report* is the result of ongoing collaboration between the Indiana Professional Standards Board, the National Commission on Teaching & America's Future, and the North Central Regional Educational Laboratory (NCREL). These organizations represent state, national, and regional interests, respectively, but all have at their center a strong desire to support and strengthen the quality of the teaching force and the opportunities provided teachers in their preparation, licensure, and continuing education.

The goal of this study is to report on what is known about the condition of teaching and learning in Indiana. Illustrative examples from Indiana and other states will help set the context for the discussion. An important part of that discussion will be an emphasis on Indiana's recent accomplishments in promoting quality teaching for all Hoosier students and some suggestions on where Indiana needs to focus during the next few years.

What do we know? What have we accomplished? Where are we going? These questions guide the presentation of data in this report as they relate to the five goals set by the National Commission.

Finally, while Indiana continues to focus on every aspect of the teacher quality continuum, there also is a need to target specific areas for improvement that demand more immediate attention. Following three years of input from teachers and content specialists in Indiana, IPSB adopted a set of standards for what beginning teachers should know and be able to do in order to teach students in 17 areas. While setting standards is an important step in establishing high expectations for new teachers, it is only the first step. IPSB, therefore, is also redesigning teacher preparation program accountability requirements; designing an assessment to test new teachers' knowledge of content and classroom skills; and developing standards for supporting and measuring effective professional development.

I. Getting Serious About Standards for Students, Teachers, Administrators, and School Services Personnel

As accountability for student achievement increases, the call for assurances that teachers know and can meet high standards has become more prevalent. Professional teacher standards are being adopted by states to identify clearly the knowledge and skills a teacher must have to meet the learning needs of diverse students.

What Do We Know?

The standards-setting movement began in K-12 education more than a decade ago but received widespread attention at the 1989 Education Summit between the President and the nation's governors. Legislation that emanated from this summit encouraged state departments of education to implement standards-based reform. This implementation required states to develop documents that outline performance expectations for students in major subject areas across the elementary and secondary school curriculum, as well as assessments and accountability systems that measure student progress toward meeting those goals.

In the last decade, 49 of 50 states have engaged in some form of K-12 state-level standards-setting process, with one state opting for a strictly district-based approach. As a result, institutions that prepare teachers have begun to take notice of the changes in K-12 education and restructure their own programs to meet the new challenges facing K-12 students. Indiana, along with a number of other states, has moved to support the implementation of K-12 standards by working with the state's higher-education system and changing licensure requirements that ensure teacher education reflects the content in the state's K-12 standards.

Both content and performance standards in K-12 and teacher preparation in Indiana are tied to national standards, with connections across the curriculum and throughout the continuum of a teacher's career (see Figure 1). Professional standards addressing every aspect of a teacher's career are under development by a variety of national organizations. NCATE has developed standards for the accreditation of institutions that prepare teachers; INTASC has focused on articulating standards for a common core of teaching knowledge and skills essential to all beginning teachers; and NBPTS has developed standards that reflect the knowledge and skills of more experienced teachers.

Since 1970, 12 states have created autonomous boards directly accountable to state legislatures that set standards and oversee practice for education professionals (Scannell & Wain, 1996). Indiana joined this group in 1992 when the legislature created the Indiana Professional Standards Board. An important part of the board's mission is to establish and maintain standards for educators, beginning with preservice and continuing through their professional careers.

Beginning in 1994, IPSB voted to develop performance-based standards for the preparation and licensure of education professionals. As its first step in this process, IPSB adopted the model standards for initial licensing of teachers developed by INTASC. The INTASC standards describe what every beginning education professional should know and be able to do, including both knowledge and pedagogy. Knowledge refers to the content-based learning, while pedagogy describes the behaviors and skills valued in the teaching profession. These standards formed the basis of the development of Indiana's professional standards adopted

by IPSB in May 1998. The professional standards-setting process in Indiana has three primary goals (Scannell & Rayl, 1998):

1. To reflect the growing national consensus on the knowledge, skills, and dispositions needed to provide a high quality of instruction
2. To provide a linkage to Indiana's standards for students in K-12 education
3. To focus on demonstrated ability to impart knowledge rather than considering only if an education professional has knowledge

What Have We Accomplished in Indiana?

Indiana has adopted K-12 content standards or "proficiencies" in all the core academic areas.

Indiana has core academic standards in reading/language arts, mathematics, science, social studies, physical education/ health, foreign language, music, and arts. In addition, the state has also developed proficiency guides that establish benchmarks by grade for math and social studies and by grade cluster for science and language arts. Student content knowledge in reading, writing, and mathematics in grades 3, 6, 8, and 10 is assessed every fall through the administration of the Indiana Statewide Testing for Educational Progress (ISTEP+). ISTEP+ results for the 1996-97 and 1997-98 school years are listed in Table 1.

In addition, parents, employers, and members of the higher-education community had been concerned that students were graduating from high school without having mastered the basic skills and content knowledge. The Indiana General Assembly responded to those concerns by implementing the High School Graduation Qualifying Exam (GQE) in 1995. The GQE measures students' command of essential skills and their applications in real-world situations. It is part of the total Grade 10 ISTEP+ Assessment. Starting in September 1997, secondary students needed to pass the GQE to receive a high school diploma.

Table 1: ISTEP+ Results, 1996-98

Indicator	1996-97	1997-98
Percent proficient in grade 3	53%	57%
Percent proficient in grade 6	53%	50%
Percent proficient in grade 8	58%	60%
Percent proficient in grade 10	55%	54%

The Indiana Professional Standards Board approved 17 sets of performance-based standards for Indiana educators in August 1998.

Following a four-year process that involved more than 2,000 practicing K-12 teachers and representatives from higher education and the Indiana Department of Education, IPSB adopted teacher standards in 11 content areas, two other areas, and four different levels of child development. IPSB adopted the INTASC model principles in 1994. Following four

years of work, new Indiana teacher standards were recommended to the board by 16 advisory groups composed of teachers, college faculty, superintendents, principals, and a State Department of Education curriculum expert. The 17th set of standards for building administrators was developed by an IPSB standing external committee sponsored by the Indiana Association of School Principals. An 18th set of standards for district administrators is now in draft form in another IPSB standing external committee sponsored by the Indiana Association of Public School Superintendents. See Table 2 for a list of professional standards adopted by the IPSB.

Table 2: Performance-Based Standards Adopted by IPSB, 1998

Developmental Standards	Content Standards	Other Standards
Early Childhood	English/Language Arts	Building Level Administrators
Middle Childhood	English as a New Language	School Services
Early Adolescence	Exceptional Needs	
Adolescence and Young Adulthood	Fine Arts	
	Foreign Language	
	Library/Media	
	Mathematics	
	Physical Education/ Health	
	Science	
	Social Studies	
	Vocational Education	

Standards developed in each of the content and developmental areas are the same for the beginning educator, teacher intern, and experienced educator. However, similar to Indiana's K-12 standards, the level of proficiency expected is more comprehensive and more skillful at each successive stage of a teacher's career.

The Indiana Professional Standards Board approved recommendations for a new teacher assessment framework.

Similar to the reform movement in K-12 education, teacher standards are also accompanied by an assessment system. IPSB is proposing a framework of assessments recommended by its committees for teacher education, teacher induction, and continuing education. The assessments are performance based and tied to the standards. The assessment framework addresses preparation program accountability requirements, licensing assessments, and licensing renewal assessments. The assessment framework is intended to provide both potential and current educators with support and ongoing feedback in and throughout the duration of an individual's career. Highlights of the proposed system include the following:

Teacher Education. Institutions must demonstrate:

- ◆How candidates will be prepared to meet state performance-based standards.
- ◆How the institution monitors candidate progress and provides feedback.
- ◆Multiple points of review for candidates to determine whether or not they should continue in their current program.
- ◆How candidate assessments are used to provide feedback and continuous review of its teacher education programs.

Teacher Induction. Beginning teachers must:

- ◆Pass a performance-based assessment to qualify for their second license, a proficient practitioner license.
- ◆Compile a portfolio assessment for review by highly trained education professionals.

Continuing Education. There will be a system of staged licensure, beginning with the initial practitioner license, valid for two years, and continuing with the proficient practitioner license. Teachers have the option of renewing their license every five years or seeking the Accomplished Practitioner license that is valid for ten years. Teachers are also expected to develop a Professional Growth Plan (PGP) and a professional portfolio. A local professional growth team will review the PGP. An Accomplished Practitioner license may be earned either by completing a graduate program that meets the IPSB standards or by attaining certification from NBPTS. (Indiana Professional Standards Board, personal communication, 1998)

Development of new standards for district-level administrators is under way.

An IPSB external standing committee of 14 K-12 administrators and experts from higher education is deliberating what standards, licensing elements, and assessment protocols for school system central office personnel need to be in place in Indiana. Draft standards were presented to the board in November 1998. The committee, sponsored by the Indiana Association of Public School Superintendents, is working to address the following issues:

- ◆What jobs or positions need to be considered for formal licensing?
- ◆What skills and knowledge must leaders who occupy those positions possess?
- ◆What standards should be used to describe those skills and knowledge?
- ◆How should those standards be assessed?

Targeted Areas for Improvement

1. Assist teacher preparation institutions to integrate Indiana's K-12 student standards into their content programs and to assess teacher candidates' opportunity to learn K-12 standards
2. Provide opportunities for the existing teaching force and all education stakeholders to see more clearly the connections between the K-12 student standards and the new state professional teaching standards

3. Link the teacher assessment framework to K-12 student standards
4. Develop an accountability system to assess leadership and the implementation of standards for school and district administrators
5. Communicate and build on existing partnerships between higher education and the Indiana Department of Education to make any future revisions to K-12 standards
6. Study the cause and effect relationship between teacher preparation and K-12 student learning
7. Develop public documents and strategies to communicate the positive impact teacher preparation has on student learning

II. Reinventing Teacher Preparation

As more and more states move to articulate closer ties between their K-12 systems and higher education, reinventing teacher preparation has become an important issue. Indiana is no exception as it moves to open doors for more students to move from secondary to postsecondary education through curriculum alignment policies such as Core 40. Closely linked to issues of teacher recruitment and retention, reinventing teacher preparation focuses on both the content and pedagogy knowledge prospective teachers learn in schools of education in Indiana, as well as their opportunities to gain practical experience in the classroom before they receive their regular or standard teaching license. In addition, as more and more emphasis by parents, business, and state and local policymakers is placed on K-12 student achievement, accountability for teacher quality has also increased.

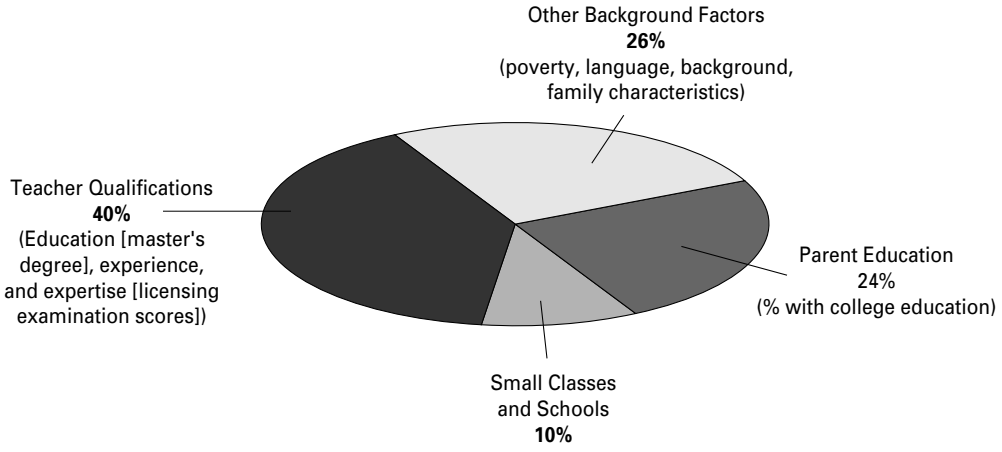
What Do We Know?

Teacher Quality and Student Achievement

The emphasis on reinventing teacher preparation has been strengthened recently by research that links teacher qualifications with student achievement. According to *What Matters Most: Teaching for America's Future* (National Commission on Teaching & America's Future [NCTAF], 1996), "What teachers know and can do is the most important influence on what students learn."

For example, a study comparing high- and low-achieving elementary schools with similar student characteristics found that differences in teacher qualifications accounted for more than 90 percent of the variation in student achievement in reading and math (Armour-Thomas, Clay, Domanico, Bruno, & Allen, 1989). Similarly, a study of more than 900 school districts shows that every additional dollar spent on more highly qualified teachers—as measured by scores on a licensing examination, master's degrees, and experience—brings greater improvements in student achievement than any other use of school resources (Ferguson, 1991). (See Figure 2.)

Figure 2: Average Proportion of Variance in Student Test Scores (Grades 1-7) Explained by:



Source: *Ferguson*, 1991.

According to the Ferguson study, teacher qualifications account for 40 percent of the average proportion of variance in student test scores in grades 1 through 7.

Teacher Preparation

A well-documented characteristic of teacher preparation programs across the country is that they tend to fall along the lower end of the appropriations scale in comparison with other degree areas. In Indiana, each public higher-education institution submits a budget to the Commission for Higher Education (CHE) to be negotiated during the state budget process on a biannual basis. These institutions, in turn, allocate their total yearly appropriation among the various schools and university departments. The average state appropriation per FTE enrolled student in Indiana in 1995-96 was $6,307. While information on levels of teacher education funding is not currently collected in Indiana, comparative data collected in other states is instructive. Similar to Indiana, state support for higher-education programs in Ohio is provided through a formula that relies primarily on student enrollment. Table 3 gives an overview of 1997 instructional subsidies per full-time equivalent in a variety of higher-education programs in public institutions in Ohio. Table 4 compares the average base salaries of full-time faculty and staff in teacher preparation programs with business and engineering degree programs.

As the stakes are raised for student achievement, so are the ones for identifying and preparing quality teachers. For example, the 1998 reauthorization of the Higher Education Act includes a number of provisions designed to increase student achievement by implementing comprehensive approaches to improving teacher quality. Much of this responsibility has traditionally been under the purview of teacher preparation institutions. The quality of these institutions and the preparation prospective teachers receive in them are important indicators of the quality of teachers in Indiana. The state of Indiana, through the stewardship of the IPSB, has begun to make some important strides in improving the preparation of teachers.

Table 3: Ohio Instructional Subsidy, 1997

Subsidy/FTE	Examples of Professional Programs
$3,430	Education, Business Administration, Mathematics, History and Social Studies
$4,793	Architecture, Social Work, and Journalism
$8,123	Nursing, Engineering, and Pharmacy

Source: *Ohio NCTAF Task Force, 1997, p. 19*

Table 4: Average Base Salaries of Full-Time Instructional Faculty and Staff in Institutions of Higher Education, 1992-93

	All Institutions	Total Public
Business	$45,243	$45,785
Education	$40,498	$42,517
Engineering	$52,213	$51,412

Source: *National Center for Education Statistics, 1996*

What Have We Accomplished in Indiana?

Oversight and accountability for the quality of teacher education programs are the responsibility of IPSB.

In Indiana, prospective teachers can choose from 36 public and private teacher preparation institutions in Indiana. Teacher preparation institutions can apply for national accreditation of their programs through the National Council for Accreditation of Teacher Education as well as through the IPSB state accreditation process. However, NCATE standards serve as the basis for both state (Indiana Code 20-1-1.4-7) and national accreditation. These standards address the following four categories:

1. The design of the teacher preparation curriculum
2. The qualifications of initial and advanced candidates for a teaching degree
3. The qualifications of the teacher education faculty
4. The governance and resources of the teacher education unit within the university and broader education community (NCATE, 1997)

Under the first NCATE category, for example, teacher preparation institutions must meet standards related to the quality of field experiences. According to Standard I.H.3, "a minimum of ten weeks of full-time student teaching or its equivalent" is expected (NCATE, 1997). In fact, in Indiana most institutions require more than ten weeks of student teaching and often include additional opportunities for practical experience in the field.

Table 5 lists institutions that prepare educators in Indiana, their status on national and state standards as of October 1998, and the year of their next review.

Table 5: Status of Accreditation for Indiana's Teacher Preparation Institutions, 1998-99

Institution	NCATE Status	IPSB Status	Next Review
Anderson	Accredited	Accredited	S2001
Ball State	Accredited	Accredited	S2002
Bethel	Accredited	Accredited	F2001
Butler	Accredited	Accredited	S1999
Calumet	Did not seek	Denied	S1999
DePauw	Accredited	Accredited	F2000
Franklin	Accredited	Accredited	F1998
Goshen	Accredited	Accredited	S2000
Grace	Did not seek	Accredited w/ stipulations	S2001
Hanover	Accredited	Accredited	F1998
Huntington	Accredited	Accredited	S2000
Indiana State	Accredited	Accredited	F1999
IU Bloomington & Indianapolis	Accredited	Accredited	F2002
IU East	Accredited	Accredited	S2000
IU Fort Wayne	Accredited	Accredited	S2003
IU Kokomo	Accredited	Accredited	F2002
IU Northwest	Accredited on probation	Accredited w/ stipulations	S2000
IU South Bend	Accredited	Accredited	F1998
IU Southeast	Accredited	Accredited	F1999
Indiana Wesleyan	Accredited (Initial) Denied (Advanced)	Accredited (Initial) Accred. w/stipulations (Adv.)	F2002 (Initial) S2000 (Advanced)
Manchester	Accredited	Accredited	S1999
Marian	Accredited	Accredited	F2000
Oakland City	Accredited	Accredited	S2003
Purdue	Accredited	Accredited	F1999
Purdue Calumet	Accredited	Accredited	S1999
Saint Francis	Accredited	Accredited	F2002
Saint Joseph's	Accredited	Accredited	F1999
Saint Mary's	Accredited	Accredited	F2002
Saint Mary of the Woods	Accredited	Accredited	F2001
Taylor	Accredited	Accredited	F2000
Tri-State	Did not seek	Accredited	F2000
University of Evansville	Accredited	Accredited	S2001
University of Indianapolis	Accredited	Accredited	F1998
University of Southern Indiana	Accredited	Accredited	F2001
Valparaiso	Accredited	Accredited	F1999
Wabash	Did not seek	Accredited	S2000

S = *Spring*; F = *Fall*

Last year, Indiana licensed approximately 5,000 prospective teachers.

There is no significant difference between the average GPA of all undergraduates in Indiana and undergraduate education majors. In fact, in comparison with undergraduates in business administration and engineering, education majors perform as well academically as engineering majors and better than business majors. In addition, the number of students enrolled in education programs and graduating with an education degree has remained relatively stable in Indiana over the past five years. The data in the following two tables was collected by the Indiana Commission for Higher Education (CHE) and is based on the degree area classification code for education majors established by the National Center for Education Statistics (NCES).

Table 6: Average GPA for Undergraduate Enrollment in Indiana Postsecondary Education (Based on 4.0 GPA)

	Total Enrolled with Valid GPAs	1993-94	1994-95	1995-96	1996-97
Business Majors	46,293				2.68
Engineering Majors	10,809				2.86
Education Majors	24,437	2.86	2.87	2.89	2.87
All Undergraduates	289,435	2.87	2.84	2.87	2.86

Source: *Commission for Higher Education, 1998. NOTE: Enrollment figures represent academic year 1996-97. These numbers do not include prospective teachers who majored outside of Education*

Table 7: Education Enrollment and Degrees in Indiana Postsecondary Education

	1993-94	1994-95	1995-96	1996-97
Number of students seeking an education degree	25,271	23,910	24,513	25,528
Number of students graduating with an education degree	3,733	3,571	3,661	3,541
Education enrollment as percentage of total undergraduate enrollment	7.7%	7.5%	7.7%	7.9%

Source: ***Commission for Higher Education, 1998***

The tables show that GPAs of education majors are comparable to other academic fields, and that education graduates almost 8 percent of students enrolled in higher education. During the 1996 legislative session, the General Assembly approved a proposal by CHE that would provide additional monetary incentives to universities for the number of students they graduate, as opposed to enroll, each year. Data on the impact of this program is not yet available.

The number of professional development schools (PDSs), or school-university partnerships for preparing teachers, is increasing in Indiana.

School-university partnerships are premised upon a belief that "any teacher education program created or conducted without the collaboration of surrounding schools is defective" (Goodlad, 1991). According to the principles developed by the Holmes Partnership in 1990, (Origins of The Homes Partnership, 1998) the successful preparation of educators should be the joint responsibility of the public schools that employ them and the universities that prepare them. School-university partnerships are needed to support the continuous improvement of both K-12 schools/faculties and university-based education programs/faculties. According to NCATE, school-university partnerships have four attributes: (1) to help prepare new teachers, (2) to provide learning experiences for veteran classroom teachers and higher-education faculty, (3) to support research on improving teaching, and (4) to focus on improving the entire school program (Bradley, 1998). Today, there are an estimated 600 such collaboratives in the United States. In Indiana alone, we identified nine universities with more than 90 local school partners (see Table 8).

Despite growing support for professional development schools in the education community, many universities and K-12 schools have been slow to make changes to accommodate the PDS structure. For example, when it comes to tenure and promotion, universities traditionally reward research first, then teaching, and finally service. What constitutes "work" in PDSs is often problematic in the university reward structure. Gail Pluta, field representative for the Indiana Federation of Teachers (IFT), indicated that teachers generally are interested in and supportive of the work of PDSs, but are concerned about time (Sandoval, 1996). Teacher preparation, professional development, action research, and related PDS activities often are added on to an already full schedule of preparing classes and examining student work. Furthermore, the cost of running a PDS program is higher than the traditional field-based experiences teacher preparation institutions provide students. In addition to the extra time necessary at both the university and K-12 sites, PDS training is more student centered and requires additional faculty and administrative staff to help run the program.

Based on evaluative feedback from some PDS university partners (Sandoval, 1996; IUPUI School of Education, personal communication, 1998), university students are generally happy with their PDS experiences. However, there is little data on the effectiveness of the PDS program compared with traditional teacher preparation methods. In one sample, the difference in grade point averages for PDS and non-PDS students was not statistically significant. In another sample, PDS students' National Teacher Exam (NTE) scores were compared with qualifying scores and mean scores for the state of Indiana; again, there was little difference between the two test groups. More information on the success of PDS graduates in securing a teaching job and their evaluations following the first few years in the classroom would help shed more light on the growing role of PDSs in preparing teachers.

Since 1995, Indiana has made a commitment to implementing a performance-based process for approving teacher preparation programs.

Understanding that changes in licensing processes in Indiana require changes in how educators are prepared, the Indiana Association of Colleges for Teacher Education (IACTE) responded to an invitation from the IPSB to form three task forces in 1995 to work on vari-

Table 8: Professional Development Schools in Indiana, 1997-98

University Partner	# of PDS Sites	District Partners
Ball State University	17 schools	Anderson Community Schools, Carmel-Clay Community Schools, Castleton Methodist Day Nursery, Cowan Community Schools, Indianapolis Public Schools, Minnetrista Education Center and Oak Hurst Gardens, Muncie Community Schools, Harrison-Washington Community Schools
Butler University	10 schools	Pike Township, Lawrence Township, Warren Township, Wayne Township, and Indianapolis Public Schools
Indiana State University	16 schools	Indianapolis Public Schools, Clay Community Schools, South Vermillion School Corporation, Southwest Park Community Schools, Vigo County School Corporation
Indiana University-Purdue University at Indianapolis	8 schools	Indianapolis Public Schools, Washington Township
Indiana University-Northwest	5 schools	School City of East Chicago, School City of Hammond, Gary Community School Corporation
Purdue University	5 schools	Lafayette School Corporation, Tippecanoe School Corporation, Pine Village Elementary
Purdue University-Calumet	22 schools	Gary Community Schools, School City of Hammond, School Town of Highland, School City of Hobart, Lake Central Schools, Merrillville Community Schools, School Town of Munster
University of Evansville	2 schools	Evansville-Vanderburgh School Corporation
University of Indianapolis	5 schools	Decatur Township

ous issues necessary to strengthen teacher preparation. One of these task forces, the Task Force on Performance-based Teacher Preparation and Licensure, recommended that the responsibility for documenting that a candidate has met the standards for licensure be shifted from the state to teacher preparation institutions. Individual institutions would be held accountable to provide reliable evidence that their candidates meet the state's standards (Ingersoll & Scannell, 1998).

As a result of these recommendations, IPSB established a Teacher Education Committee to guide the process of setting new guidelines for teacher preparation programs and establishing the criteria against which these programs would be evaluated. It was agreed that the transition to a performance-based process for approving teacher preparation programs would take five or six years to complete. All institutions are required to submit plans for approval by 2002. Teacher preparation institutions in Indiana are working to illustrate how IPSB professional standards are being incorporated into their programs. In addition, they will show how their programs teach to the standards by implementing a performance-based assessment system.

Targeted Areas for Improvement

1. Improve reward structures in schools, colleges, and departments of education to reflect quality of teacher education programs
   - **a.** Improve status of, and funding for, teacher education programs
   - **b.** Seek legislative support for programs that increase teacher education budgets and promote accountability
2. Provide state funding for increasing comprehensive K-16 partnerships in Indiana, and measuring outcomes for K-12 and higher education
   - **a.** Improve the collection of evaluative data on new models of teacher education such as Professional Development Schools.

III. Overhauling Teacher Recruitment and Putting Qualified Teachers in Every Classroom

In the past four years, teacher quality has become an increasingly common subject of discussion. To understand this issue, we must look at the teacher pool and ask whether or not children are being served by a teaching force that addresses their specific needs and learning styles. This concern has challenged many states to recruit teachers who are prepared to perform in classrooms that represent the face of the 21st century.

The question being asked now is How do we ensure that those who enter teaching are of the intellectual caliber necessary to meet higher standards of excellence? While the standards for entering teaching have been raised in recent years in many states, there is still some doubt as to whether the traditional standards measure all of the important qualities of teachers. Haberman (1996) claims that the nature of admissions criteria has not changed much in 20 years, focusing on completion of specific courses, GPAs, references, written statements, basic skills tests, and desire to work with children.

Preparation and Placement

One-third of the nation's teachers have 20 years of experience and two-thirds are at the mid-point of their careers. The U.S. annually produces more teachers than its schools can hire, yet schools across the nation report difficulty in filling available positions (Berry, Darling-Hammond, Haselkorn, 1998). A study by the American Association for Employment in Education (1996) found teacher surpluses in elementary education, social studies, and physical education. By contrast, there is a dire need for more math, science, and special education teachers. Indiana's teacher pool mirrors these findings. From 1993-97, Indiana issued an average of 1,169 elementary licenses, 1,608 secondary licenses, and 333 special education licenses per year (see Table 9).

Table 9: Licensed Teachers in Indiana by Degree and Licensing Field, 1993-97

Field	Year	Basic*	Advanced**
Early Childhood	1993-1994	114	10
	1994-1995	169	10
	1995-1996	158	8
	1996-1997	149	11
Elementary	1993-1994	2196	219
	1994-1995	1955	351
	1995-1996	2349	208
	1996-1997	2262	431
Junior High/Middle School	1993-1994	341	9
	1994-1995	439	9
	1995-1996	367	9
	1996-1997	441	9
Secondary	1993-1994	1765	163
	1994-1995	1358	262
	1995-1996	1481	178
	1996-1997	1830	333
Special Education	1993-1994	279	63
	1994-1995	282	135
	1995-1996	366	124
	1996-1997	406	164

*Includes bachelor and post-baccalaureate degrees

**Includes master's, specialist, and doctoral degrees

Source: Indiana Professional Standards Board, *personal communication*, 1998

There is a lack of alignment between the number of elementary, secondary, and special education teachers prepared in Indiana and the number of teachers needed in schools. Too many teachers are prepared for elementary education, social studies, and physical education; too few for math, science, and special education. While the general education population is estimated to grow nationally over 10 percent in the next ten years, the special education

population has already outpaced those expectations (Parrish, O'Reilly, Dueñas, & Wolman, 1997). This growth is evidenced by the shift of federal monies to special education expenditures as opposed to general education expenditures. In the FY99 Omnibus Appropriations bill, $5.124 billion was appropriated for special education (House Res. 4328, 105th Cong. 2nd Sess., 144 Cong. Rec. 11402). Of that total, $88.9 million will be allocated to Indiana. As Indiana's appropriation was flat funded from the previous year, this is a $16.3 million increase from the FY97 appropriation (U.S. Department of Education, 1998).

In their search for teachers, school principals are sometimes forced to fill open positions with any available body and not the most qualified or even properly licensed candidate. The National Center for Education Statistics' 1998 Condition of Education report (U.S. Department of Education, National Center for Education Statistics, 1998) shows that across the nation a significant number of teachers have not majored or minored in the subject area they teach (see Table 10). This statistic is especially prevalent in the core subject areas for secondary students.

Table 10: Percentage of U.S. Secondary Students Taught by Teachers Who Did Not Major in Their Class Subject

Subject	Did not major in class subject	Did not major or minor in class subject	No graduate degree in class subject	Not certified in class subject
English	24.4%	16.3%	75.6%	9.6%
Social Sciences	14.6%	8.2%	70.2%	11.2%
Mathematics	31.7%	21.7%	80.2%	14.2%
Science	18.9%	9.7%	71.6%	8.9%

Source: U.S. *Department of Education, National Center for Education Statistics,* 1998

Recruitment

The recruitment of new teachers is often greatly affected by school location. Suburban schools often have long waiting lists and hire teachers only after they have worked at the school or in the district as a substitute teacher. They rarely hire underqualified teachers. Urban and rural school districts, on the other hand, are often forced to hire nonlicensed teachers and use long-term substitute teachers.

A survey by Recruiting New Teachers, Inc. (1996) shows school officials are concerned about the makeup of the teacher pool. Ninety-six percent of those polled were concerned about the low number of minority teachers in their districts. Eighty-six percent of school administrators believe there is a shortage of male teachers, and 71 percent indicated that their districts have a bilingual teacher shortage.

The racial composition of the nation's schoolteachers is 86 percent white. The discrepancy between the number of U.S. students of Latino descent (12%) and Latino teachers (3%) points out an obvious need to step up recruitment in this community. Indiana's racial disparities lie in its African-American teacher population: 11.2 percent of the K-12 student population and only 4.4 percent of its teacher population are African-American (see Table 11). In fact, 94.4 percent of Indiana's teacher force is white.

Table 11: Indiana Student and Teacher Racial Composition, 1998

	K-12 Student Enrollment	Teachers	Teacher Education*
African-American	11.2%	4.4%	3.45%
Asian	.83%	.16%	.66%
Latino	2.6%	.55%	1.29%
White	84.4%	94.4%	93.25%

*Does not include the state-only institutions.

Source: *Indiana Department of Education, personal communication*, 1998

Many districts are searching for new ways to recruit for these shortages while still keeping their standards high. Salary has been listed as one way to recruit new and second-career individuals to the teaching field, but there is disagreement as to whether or not increasing salaries is the answer. The 1983 report A Nation at Risk revealed the quality of teaching in the country is poor, with teachers who had been poor students and who were not prepared to teach the subjects they had been assigned. In response to this report, state legislators, local school districts, and education reform groups made various recommendations on how to attract more capable people. All agreed that salaries needed to be raised. In the 1980s teacher salaries rose only 20 percent in every state but five (Ballou & Podgursky, 1997). However, across the country, teacher salaries have made significant strides over the past 20 years (see Table 12).

Table 12: Average U.S. Teacher Salaries Selected Years, 1960-97

School year ending	All teachers*	Elementary teachers*	Secondary teachers*	Beginning teachers*
1960	$27,303	26,319	$28, 839	**
1970	36,675	35,765	37,802	**
1980	33,039	32,209	34,051	20,771
1990	39,675	38,999	40,438	25,356
1997	38,921	38,375	39,731	25,462

* Average salaries in 1997 constant dollars, selected years

** Data not available

Source: U.S. *Department or Education, National Center for Educational Statistics*, 1998

Berry, et al. (1998) argue that state and district policies can hinder the recruitment of quality teachers. For example, salary caps limit the mobility of experienced teachers who might want to move to a new district. The lack of reciprocity across states causes teachers to leave the profession if they move to another state. And finally, many districts place beginning teachers in the most difficult schools with little or no professional support. All of these practices are counterproductive and shrink the available pool of quality teachers.

In response to the recruitment needs of their schools, a number of states have sought to encourage the best to enter the profession by reaching out to middle school and high school students, special groups, and mid-career entrants. Table 13 gives an overview of teacher recruitment initiatives in three states: Colorado, Ohio, and South Carolina.

Table 13: Teacher Recruitment Initiatives

A number of states have sought to encourage the best to enter the teaching profession by targeting their recruitment efforts to middle school and high school students, special groups, and mid-career entrants. The following is an overview of teacher recruitment initiatives in three states: Colorado, Ohio, and South Carolina.

State	Program Title	Program Description
Colorado*	Project Promise	Program seeks to entice college graduates from other careers to switch to teaching. Candidates are eligible for limited scholarship assistance, either through a university or through private and foundation donations. The program distributed $34,000 during the 1996-97 school year. The program lasts ten and a half months, and candidates are enrolled in specific student teacher placements (rural, urban, middle school, high school). The student teacher period is 22 weeks.
Ohio**	Project for a Diversified Teaching Force	Program is designed to encourage middle-school students from underrepresented groups to choose a career in teaching. The project has three components: Saturday Skills Enhancement, Summer Enrichment, and Parental Support. The program has a grant amount of $47,162.
South Carolina*	Teacher Cadet Corps	Program was developed by the South Carolina Center for Teacher Recruitment (established by the governor and state legislature in 1986 to ensure a qualified teaching force). At 148 high schools, teachers volunteer to conduct a year-long course for interested students with a high grade-point average. Class content includes history of education, principles of learning, child development, and current issues in education. Students have opportunities to write lesson plans, tutor younger students, and practice teaching.

Source: *U.S. *Department of Education*, 1998
**Ohio *Department of Education*, 1997

What Have We Accomplished in Indiana?

Indiana offers 333 areas for teacher licensing, ranging from aerospace education to geography, reading, and industrial technology. From 1993-98, Indiana licensed approximately 6,800 new teachers per year. The average Indiana teacher has 17 years of experience, is 43 years old, and will retire at age 60 (see Table 14). Thus, in the next 20-25 years, Indiana will need to replenish its ranks (Indiana Department of Education, personal communication, 1998).

Table 14: Average Indiana Teacher Profile

Average age	43
Average years of experience	17
Average retirement age	60
1997 average salary	$38,876
1997 average beginning teacher salary	$24,172
1997 average Midwestern states teacher salary	$39,811
1997 average Midwestern states beginning teacher salary	$24,607

Source: Indiana Department of Education, personal communication,1998

Table 15: Local Indiana School Corporations Salary Schedule, 1998-99

School Corporation	**Beginning Teacher***	**Mid-Career* 12 Yrs. Exp.**	**Master's Degree & 17+ Yrs. Exp.***
MSD Washington Township	27,838	43,427	55,676[4]
Indianapolis Public Schools	26,878	41,441	53,645[1]
Hammond Schools	28,162	37,890	48,771[1]
New Albany-Floyd Co. Community Schools	25,317	33,418	46,583[3]
Oak Hill United School District	23,650	32,164	43,516[2]

**Salaries do not include the district's 3 percent retirement fund contribution.*
[1]25 years experience, [2]20 years experience, [3]18 years experience, [4]17 years experience
Source: *Indiana State Teachers Association, personal communication, 1998*

As illustrated in Table 15, teacher salaries vary widely across school corporations and demographic areas within the state. Beginning teacher salaries in the five selected school corporations range from $23,650 to $28,162. An even larger disparity is seen when comparing mid-career (12 years experience) teacher salaries. Salaries in Oak Hill United Schools and the Metropolitan School District of Washington Township range from $32,164 to $43, 427, a difference of over $11, 000.

In 1988, the Indiana General Assembly adopted the Minority Teacher Scholarship program.

To help recruit underrepresented groups to the field of education, the Indiana General Assembly created the Minority Teacher Scholarship. This scholarship is intended to encourage Hispanic and African-American students to become teachers. Applicants must (1) be African American or Hispanic, (2) attend or plan to attend an Indiana college or university, (3) enroll or plan to be enrolled as a full-time student, and (4) be pursuing or plan to pursue a course of study that enables them to teach in an accredited Indiana elementary or secondary school. In addition, students who are already enrolled in college must have a minimum GPA of 2.0 on a 4.0 scale. Awards may be equal to the balance of the total cost of attendance or $1,000 per academic year (whichever is less) and are renewable for up to four years for a total award of $4,000.

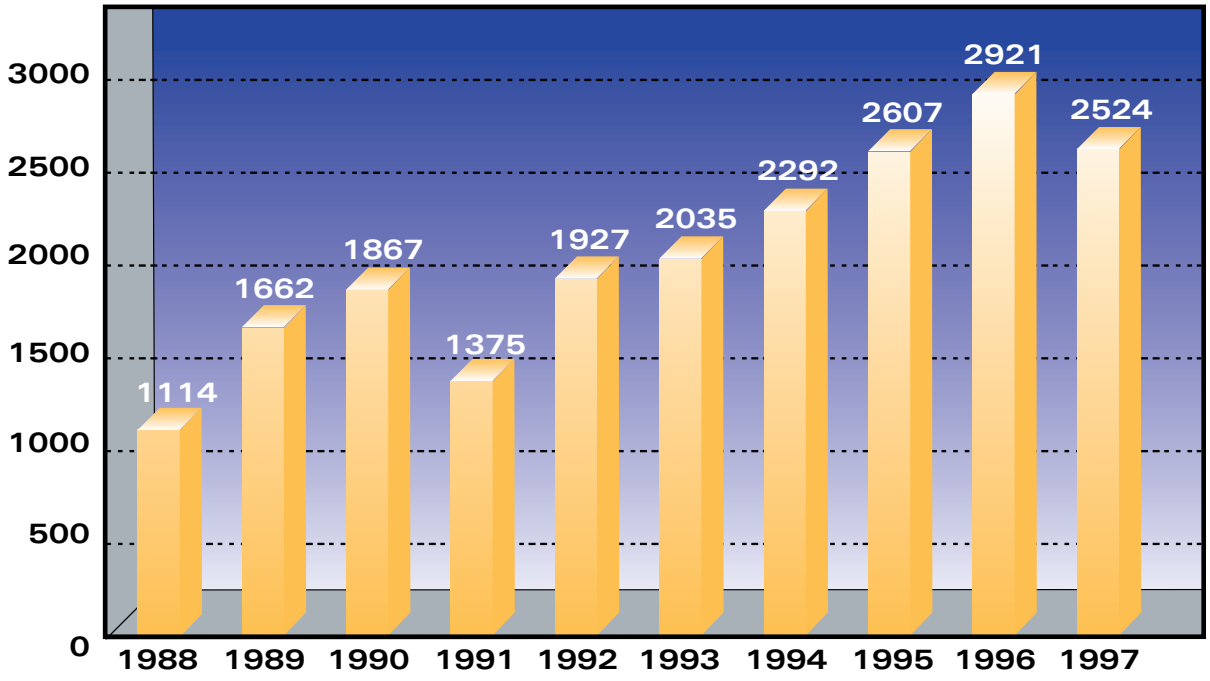
Between 1988 and 1996, the Beginning Teacher Internship Program served 17,800 new teachers in Indiana.

The Beginning Teacher Internship Program was established by the legislature in 1987 to produce better teachers and reduce teacher attrition rates. According to the Beginning Teacher Internship Manual, teachers should be assigned a mentor who has a least five years of teaching experience, teaches at a similar grade and subject level, and has outstanding teaching skills. Mentors are paid a $600 stipend. During the internship, the beginning teacher must demonstrate minimum competence as determined by the building principal in the following areas:

- Managing instructional time
- Managing student behavior
- Using effective instructional strategies and activities
- Monitoring student performance
- Providing effective instructional feedback
- Facilitating instruction
- Exhibiting effective human relations skills within the educational environment
- Performing noninstructional activities

The Beginning Teacher Internship program has accepted 17,800 new teachers into its ranks (Indiana Professional Standards Board, 1997). See Figure 3 for an annual trend in the number of internship participants. The successful completion of the program enables the teacher to continue to practice in an accredited Indiana school. Since the teacher already has a regular/standard license, the program does not result in a licensing action.

Figure 3: Beginning Teacher Internship Program Participants



In 1998, Indiana approved the adoption of a two-year teacher induction program and portfolio assessment for beginning teachers.

The new teacher induction program and portfolio assessment is being piloted in Indiana. The program will be used for licensing; as a feedback mechanism for teacher preparation program approval; and for professional development for interns, mentors, scorers, and trainers. Beginning teachers enter the induction program for up to two years. At the end of the program, teachers must submit a portfolio outlining their teaching within a given content and developmental area. The beginning teacher's performance assessment portfolio must include:

1. One to two weeks of consecutive lessons that track a theme or topic from the student's conceptual understanding to complex integration and real-world application.
2. Work samples from three students of three different levels of learner performance.
3. A 20- to 30-minute video of two classroom lessons.
4. A report discussing the context of the teaching environment, instructional goals of the lesson, the selection/implementation of the tasks, an assessment of the lesson and its impact on the students, and an identification of improvements to the lesson to maximize student learning. (Scannell & Rayl, 1998)

Successful completion of the assessment results in a proficient practitioner license that is subject to renewal every five years.

Indiana continues to enhance the requirements necessary to fill areas of teacher shortage with limited license holders or substitute teachers.

Limited Licenses. Due to teacher shortages, school corporations may seek to employ individuals who are not licensed in subject areas that have been difficult to fill with licensed teachers. In these instances, limited licenses can be requested by a corporation for nonlicensed applicants, thereby allowing them to teach (see Table 16). The number of limited license holders with an additional instructional license has outdistanced the number of individuals who only hold a limited license. However, in the past two years, the number of individuals with a limited license has steadily increased.

Table 16: Number of Limited Licenses Issued in Indiana, 1993-98

Years	Total Number Issued	Limited License Holders With Standard License
1993-94	773	336
1994-95	830	416
1995-96	970	545
1996-97	1111	848
1997-98	1149	836

Source: Indiana Professional Standards Board, 1997

In addition, by looking at the top five limited license subject areas, it is clear that there is also a dire need for licensed special education teachers in Indiana (see Table 17).

Table 17: Top Five Limited License Areas in Indiana

1996-97 Ranking	1997-98 Ranking	Subject Area	1996-97 Total	1997-98 Total	Percentage of Limiteds (97-98)	Percentage Increase 96-97 to 97-98
1	1	Seriously Emotionally Handicapped	373	360	31.3%	-3.5%
2	2	Learning Disabled	193	186	16.2%	-3.6%
4	3	Mild Disabilities	125	136	11.8%	8.8%
3	4	Mildly Mentally Handicapped	146	130	11.3%	-11%
5	5	Severe Disabilities	104	125	10.8%	20%

Source: Indiana Professional Standards Board, personal communication, 1998

The use of limited licenses within the state has helped school officials fill open positions. But the initial use of the limited license was to provide temporary assistance for staffing problems. The continued use of the limited license by school officials masks the real needs of the school and, in some cases, substitutes expediency for quality.

Substitute Teacher Pilot Program. In 1996 the IPSB approved a rule waiver and began a pilot program for licensing substitute teachers in the state. This new rule allowed school corporations to develop their own plans for substitute certificates. Each district must file a written plan with the Division of Teacher Licensing at the IPSB, outlining the district's education requirements, inservice/pretraining design, screening process, assessment process of potential substitutes, and the substitutes' positive work experience with children. The pilot program was extended to at least September 1, 2000, or until new licensing rules are approved. An evaluation of the 1996-97 substitute licensure plans shows that 11.4 percent of the school corporations require substitutes to hold a minimum of a high school diploma; 8.9 percent have a minimum requirement of 15 to 59 college semester hours; 40.8 percent have a minimum of 60 college semester hours; and 38.9 percent have a minimum requirement of a bachelor's degree (see Table 18).

Table 18: District Percentages of Substitute Teacher Minimum Education Requirements, 1996-97

Education Requirements	Percentage of districts reporting use of minimum education requirement
High School Diploma	11.4%
15 to 59 College Semester Hours	8.9%
60 College Semester Hours	40.8%
Bachelor's Degree	38.9%

Source: Indiana Professional Standards Board, personal communication, 1998

Targeted Areas for Improvement

1. Improve teacher/administrator recruitment in Indiana especially in high need areas such as mathematics, science, special education, and bilingual education
2. Provide incentives for undergraduates to teach in licensing areas that have the greatest need for a specific time after college graduation
3. Provide incentives to schools and districts to eliminate hiring limited-license teachers and assigning teachers out of their licensing areas
4. Establish incentives for teacher preparation programs to create and continue to offer alternative preparation programs for nontraditional or mid-career entrants to the teaching field and provide mid-career candidates with access to financial aid
5. Provide greater compensation equity across school corporations
6. Fully fund new two-year teacher induction programs and performance assessments
7. Design and implement a strong role for higher education in the teacher induction process through K-16 partnerships

IV. Encourage and Reward Knowledge and Skill

To improve student learning and transform American schools, teaching must be effective, productive, and rewarding. While much emphasis is being placed on the preparation of teachers, NCTAF Recommendation IV suggests public policies need to pay close attention to how veteran teachers are encouraged to pursue additional education and how they are rewarded for excellent service. Traditionally, teaching has been viewed as an occupation rather than a profession. To some degree, the low status of teaching has prevailed because it is largely viewed as women's work. In addition, important decisions affecting classrooms usually are not made by teachers but by administrators and policymakers. As a result, the reward for good teaching is often a promotion to an administrative position. However, as more evidence links improvements in student achievement to teacher knowledge and skill, the more critical it becomes to keep quality teachers in the classroom.

What Do We Know?

The formation of the National Board for Professional Teaching Standards has played an instrumental role in raising teacher standards and providing a system of advanced certification for teachers. Teachers who seek National Board certification develop a portfolio, including student work samples, videotapes of lessons, and commentary on their progress and problems in helping students to learn. Teachers are also required to attend a one-day examination at an assessment center, where they are tested on content knowledge and pedagogy. In 1996-97, there were 912 National Board Certified Teachers in the country. Table 19 compares the number of National Board Certified Teachers in Indiana with other states in the north central region.

Table 19: Number of National Board Certified Teachers by State, 1993-98

	1993-94	1994-95	1995-96	1996-97	1997-98
Illinois	4	3	2	7	20
Indiana	5	0	7	0	9
Iowa	9	1	4	0	0
Michigan	22	31	4	1	12
Minnesota	1	12	18	28	31
Ohio	5	1	45	99	187
Wisconsin	0	1	0	0	1

Source: *National Board for Professional Teaching Standards*, 1998*a*

A number of states now encourage teachers to obtain National Board certification by providing financial support for the certification fee ($2,000), salary increases for those who successfully complete the process, and "professional leave" days for candidates to work on their portfolio submissions (National Board for Professional Teaching Standards, 1997). See Table 20 for descriptions of state actions to support teachers seeking National Board certification.

Table 20: State Action Supporting National Board Certification in the Midwest

A number of other states now encourage teachers to obtain National Board certification by providing financial support for the certification fee ($2,000), "professional leave" days for candidates to work on their portfolio submissions, and salary increases for those who successfully complete the process (National Board for Professional Teaching Standards, 1998a/b).

State	State Action
Illinois	◆ 84 candidates are supported by the Illinois State Board of Education at 50 percent of the certification fee. Candidates are identified through a state application process. ◆ Candidates are granted three days' release time to prepare for certification.**
Iowa	◆ 24 candidates are supported by the Iowa Department of Education at 50 percent of the certification fee. Applicants are identified through the state application process, and funds are given out via a lottery selection that is proportional to the 15 area education agencies in the state. ◆ Teachers who achieve National Board certification receive $10,000 per year for five years, ten Iowa continuing education credits, and reimbursement of a portion of the certification fee.
Michigan	◆ 61 candidates are supported by the Michigan Department of Education at 50 percent of the certification fee through NBPTS candidate subsidy funds. ◆ Beginning in 1997-98, additional state funds provide half the certification fee of up to 20 teachers per year.
Minnesota	◆ The Minnesota Department of Children, Families, & Learning subsidizes candidates with stipends of $500 or $1,000. Candidates are eligible to apply for additional monies from the NBPTS Candidate Subsidy Program. ◆ The Education Excellence Omnibus Education Act provides 100 $1000 grants to pay for 50 percent of the certification fee. ◆ $1000 grants are awarded to all Minnesota Board Certified teachers, which are to be specifically used for educational purposes.
Ohio	◆ The certification fee of 450 public and chartered non-public school candidates is fully supported by the Ohio Department of Education. ◆ Any teacher who completes the National Board Certification process receives enough equivalent continuing education credits to have his/her license renewed and an additional $2,500 for the life of the certificate.
Wisconsin	◆ The Wisconsin Department of Public Instruction supports 40 candidates at 50 percent of the certification fee. ◆ Beginning in the 1999-2000 school year, the state will reimburse the $2,000 fee to any state-licensed teacher who is successfully certified by the National Board. ◆ Beginning in the 2000-01 school year, the state will reimburse the certification fee and provide an additional $500 upon certification.

*Source: National Board for Professional Teaching Standards, 1998a/b***

What Have We Accomplished in Indiana?

In the summer of 1998, the Indiana Professional Standards Board formed a partnership with the Indiana Alliance for National Board Certification, Northwest Indiana Business Forum, Indiana Federation of Teachers, Indiana State Teachers Association, Indiana Department of Education, and Region 8 Service Center to institute the Candidate Subsidy Program. In 1997-98, 42 candidates were supported by this consortium at 50 percent of the certification fee. At the local level, the following school districts and/or organizations provided support for candidates seeking National Board certification:

- **Indiana** currently waives relicensure requirements for teachers completing the NBPTS process and issues a ten-year professional license to teachers who are NBPTS certified.
- **Anderson Federation of Teachers and the Anderson County School District.** Since 1995 the Anderson County School District and the Anderson Federation of Teachers have each provided half the certification fee for teachers seeking and/or obtaining National Board certification. The Anderson County School District reimburses teachers $1,000 upon successful certification; and the Anderson Federation of Teachers reimburses $1,000 to all Anderson teachers who apply for certification. In 1997, the Anderson Federation of Teachers signed a contract that grants teachers five release days to prepare for certification.
- **Hammond Teachers Federation and the School City of Hammond.** In 1997 the Hammond Teachers Federation signed a contract allowing teachers who obtain National Board certification to become eligible for placement at the doctoral level of the salary schedule or to receive additional compensation in an amount $2,000 greater than the salary they would be entitled to if they were not certified.
- **Region 8 Service Agency (Markle, IN).** Via a 1997 grant from Educate Indiana, the Region 8 Service Center provided a yearlong, precandidacy program for 17 teachers to prepare for National Board certification. In 1998 the grant was continued and funding is now being provided for the 1997 precandidacy teachers who have entered the candidacy stage for National Board certification.

Targeted Areas for Improvement

1. Increase the number of National Board certified teachers in Indiana
2. Encourage and support districts to provide financial compensation for those teachers who successfully obtain the accomplished teacher license
3. Fund candidate support networks through higher education and other mechanisms
4. Increase the recognition of accomplished practitioners in Indiana via various state and local media

V. Creating Schools Organized for Teacher and Student Success

Today, not only educators, but parents, administrators, and employers are concerned that too few schools across the nation are structured in ways that enhance teaching, respect learning, and teach for understanding. *What Matters Most: Teaching for America's Future* goes so far as to argue that the nation's schools are organized for failure rather than success. Nonproductive uses of time, staff, money, and new resources for learning and professional development, such as information technology, are some major contributors to this failure. In contrast, three conditions lead to success: "(a) teacher expertise, including opportunities for ongoing learning; (b) common, challenging curriculum requirements; and (c) small school units and classes that are organized to allow teachers to know their students well over time." (NCTAF, 1996, p. 45)

One resource at Indiana's disposal is time. Changes may be made in daily class schedules so students have sustained time to pursue complex learning that takes longer than the traditional 45-minute class period. More creative and effective use of time can also free teachers to work and plan together on behalf of students and to engage in ongoing professional development. It may also entail changes across school years so teachers can work with the same group of students for two or more years. Some schools have extended their school year to offer students more sustained learning and to provide flexibility in scheduling that permits increased professional development for teachers. Indiana understands the importance of using time effectively across the school day and year.

What Do We Know?

Educators have come to appreciate the value of ongoing professional development that is tied to improving student learning and related outcomes. Indiana has published several excellent guides for professional development (Bull, Buechler, Didley, & Krehbiel, 1994; Bull & Buechler, 1996). Included in these guides are principles and guidelines for professional development, descriptions of the conditions necessary to achieve effective professional development, and examples of schools engaged in effective professional development. The documents provide suggestions of ways to use time wisely for these efforts. NCTAF recommends that teachers have at least ten hours a week for learning and working together and at least ten additional days during the year for professional development.

Computer-based technologies offer new tools and resources for both students and teachers. Communication technologies, in particular, are being developed that can provide teachers with expanded opportunities to enhance instruction and receive professional development. These technologies include the Internet, e-mail, news groups, listservs, multi-user structures, network videoconferencing, conferencing software, and electronic bulletin boards. Combinations of these technologies are included in distance education, such as online courses for teachers and large professional development projects in which teachers collaborate at a distance to address pedagogical issues.

Better use of staff can increase the ratio of classroom teachers to students and, at the same time, reduce class size. Table 21 compares use of different categories of staff in educational institutions in selected countries. The second column indicates the percentage of individuals out of the total staff whose job is to teach students. As the table shows, the U.S. percentage is lower than all other countries. On average, U.S. schools have more nonteaching

staff than do other nations. As shown in Table 21, most countries invest more resources in high-quality teaching staff who perform a variety of nonteaching functions that in the U.S. are covered by noninstructional staff.

Table 21: International Comparison of Instructional and Other Staff, by Country

	Teachers	Instructional staff (incl. principals)	Other admin. and support staff	Ratio of teachers teachers to instructional staff	Ratio of teachers and principals to other staff
Belgium	80.0%	10.0%	10.0%		4.00 : 1
Japan	77.4%	—	22.6%		3.40 : 1
Italy	76.4%	7.3%	14.5%		3.50 : 1
Australia	69.1%	7.1%	28.6%		1.90 : 1
Finland	60.8%	39.2%	—		1.55 : 1
France	60.0%	40.0%			1.50 : 1
Denmark	57.9%	28.1%	15.8%		1.30 : 1
U.S.	43.6%	24.2%	33.9%		0.75 : 1

Source: *Organization for Economic Cooperation and Development* (OECD), 1995

Across the states, school staffing patterns indicate a bureaucracy that focuses on management rather than services to students. What services are available are fragmented. Rather than having their needs met within the classroom, many students must leave in order to receive special services, suggesting that few staff know students as "whole" people. In addition to more effective use of staff, school leadership is critical for promoting better teaching and learning. Principals of restructured schools in which teachers and community members share in decision making need different approaches to leadership than those they learned years ago. A NCTAF recommendion is to "select, prepare, and retain principals who understand teaching and learning and who can lead high-performing schools" (NCTAF, 1996, p. 110).

What Have We Accomplished in Indiana?

As of 1998, 1,078 principals have graduated from the Indiana Principal Leadership Academy.

The urgent call for a different kind of leadership from principals (and other administrators) to meet the demands of restructured schools requires that principals engage in professional development. To meet this need, Indiana offers a leadership academy for principals. This academy is intended to support principals as they promote more effective learning environments in their schools. About 300 principals have signed up for the academy in 1999. Regional roundtables for principals have also been held and are planned for the future. Approximately 250 administrators attended the roundtables last fall and 250 more are expected to attend in the spring of 1999.

New standards for building-level administrators were adopted in 1998.

New standards for school administrators were developed by an IPSB External Standing Committee sponsored by the Indiana Association of School Principals. These performance-based standards set new benchmarks for the preparation and licensing of school principals in Indiana. The committee is also developing a performance-based assessment process based on these standards and a staged licensing system similar to that proposed for teachers.

Indiana has an aggressive policy to keep elementary classes small

The state recognizes that smaller classes permit teachers to meet the needs of their students more effectively. Indiana policy has set maximum class size for the primary grade classes but not for intermediate, middle, or secondary levels. Prime Time is a voluntary program designed to reduce class size in kindergarten through third grade in Indiana public schools. The goal of the program's funding formula is an average of 18 students per FTE (full-time equivalent) teacher in second and third grade. School corporations can be financially penalized for increasing the pupil-teacher ratio in the fourth, fifth, and sixth grades with a corresponding decrease in the teaching staff. This penalty discourages school corporations from moving teachers from the higher elementary grades, where funding is not generated, to the funded lower elementary grades.

In 1995-96, Indiana ranked 16th in the nation in total public school expenditures.

Total expenditures for the biennial budget include expenses for facilities acquisition, capital outlay, food service, textbooks, debt retirement, community service, and other nonprogrammed charges. Total expenditures and per pupil expenditures across three recent fiscal years are shown in Table 22.

Table 22: Total K-12 Expenditures (Three-Year Average)

Fiscal Year	Total	Per Student
1990-92	$4,963,000,000	$5,164
1994-96	$6,170,000,000	$6,318
1995-97	$6,491,000,000	$6,594

Source: *Indiana Department of Education, School Corporation Biannual Financial Report, 1997*

Use of fiscal resources can also be expressed as spending-per-student. Table 23 shows 1997 per-student spending for Indiana and the other Midwestern states along with adjustments for inflation (1987–97) and percentage of total taxable resources spent on education (1996). Also included are figures for all 50 states. Indiana is among the top three states in the Midwest in spending, following only Michigan and Wisconsin. It also received a respectable grade for adequacy of its funding resources.

Table 23: Adequacy of Resources

State	Grade for adequacy of resources	Education spending per student, adjusted for regional cost differences (1997)	Percent change in inflation-adjusted education spending per student (1987-97)	Percent of taxable resources spent on education (1996)
Indiana	88 B+	$6,264	28	3.9
Illinois	72 C-	$5,553	13	3.3
Iowa	81 B-	$6,504	13	4.0
Michigan	90 A-	$6,689	18	4.7
Minnesota	78 C+	$6,112	6	4.3
Ohio	85 B	$5,916	20	3.8
Wisconsin	91 A-	$7,097	18	4.5
United States	—	$5,906	12	4.0

Source: *Jerald, C. D., Curran, B. K., & Boser, U, 1999*

Professional development policies and opportunities in Indiana

In Indiana, professional development includes the full range of activities that enhance the professional performance of teachers both in and out of the classroom. Examples of these activities are reflection, research, analysis of student needs, peer observation, collaborative planning and problem solving, involvement in decision making, and participation in school improvement processes, along with more traditional training and knowledge growth.

Most Indiana teachers have been teaching for more than 15 years. Table 24 shows percentages of teachers who have participated in different categories of professional development. Indiana and other states in the Midwest are featured in order to offer some comparisons across these similar states. The table also provides averages across all 50 states.

Note that Indiana is lowest in three types of professional development; however, they fall in the middle of the seven Midwestern states in school-sponsored workshops and professional organization activities. These data suggest that the low rank in the district category may be linked to a greater focus on school-level activities, which reflects an NCTAF recommendation that professional development be school based.

An important point is that the *quality* of school-based workshops and other trainings cannot be determined from these figures and, thus, may range from a high-quality activity all the way down to the "sit-and-get" lecture. Nor does this information help us examine the impact on students. Indeed, the difficulty of demonstrating professional development's effectiveness is a problem faced by schools across the nation. However, some efforts, such as that in Connecticut with its BEST (Beginning Educator Support and Training) program, initiated in 1986, have been able to show relationships between professional development programs and student achievement.

IPSB has been instrumental in piloting a two-year induction and portfolio assessment program. Modeled after Connecticut's BEST program, Indiana's portfolio assessment program for teachers will be used as ongoing professional development for interns, mentors, portfolio scorers, and trainers in addition to its use in teacher induction. IPSB has also approved a

Table 24: Percentage of Public School Teachers Who Participated in Various Professional Development Activities Since the End of the Last School Year, by State (1993-94)

	District-sponsored workshop/ inservice training	School-sponsored workshop/ inservice training	University extension/ Adult-education course	College course in their subject	Professional growth activities sponsored by professional organizations
Indiana	**76.2**	**80.2**	**17.7**	**18.8**	**54.7**
Illinois	85.5	80.3	26.5	24.6	48.4
Iowa	94.2	84.2	35.4	37.4	53.1
Michigan	88.2	79.5	19.5	19.4	55.2
Minnesota	93.3	86.4	35.2	36.2	58.0
Ohio	87.0	72.8	30.4	30.5	49.5
Wisconsin	91.7	77.1	34.1	35.6	55.8
U.S. Total	87.5	81.3	25.2	25.4	51.4

Source: *U.S. Department of Education, National Center for Education Statistics, 1996*

performance-based licensing system. When fully operative, there will be three stages of licensure: initial, proficient, and accomplished. Key components of the licensing process are a Professional Growth Plan and teacher portfolio, which is reviewed by a Professional Growth Team. This team is formed at the district level.

Also of interest is the content of professional development activities in Indiana and the other states in the Midwest. Such information is currently only available for professional development following the school year 1993-94, as shown in Table 25.

Table 25: Percentage of Teachers Who Participated for Eight or More Hours in an Inservice or Professional Development Program That Focused on Various Topics Since the End of the Last School Year, by State (1993-94)

State	Uses of educational technology for instruction	Methods of teaching in their field	In-depth study in their subject	Student assessment	Cooperative learning in the classroom
Indiana	52.2	55.6	22.5	38.5	45.8
Illinois	42.1	53.2	23.2	56.6	42.8
Iowa	57.0	57.2	27.8	55.6	42.3
Michigan	43.7	61.4	25.4	51.2	47.9
Minnesota	53.5	63.4	32.4	49.9	43.8
Ohio	39.2	59.8	28.9	44.7	48.4
Wisconsin	50.0	57.6	29.3	45.6	35.8

Source: *Choy & Chen, 1998*

Effective professional development requires time. School calendars can be structured to dedicate time to professional development, or professional development can be offered during evenings, on weekends, or during the summer. The number of hours teachers spend on professional development is important. As shown in Table 25, nearly 56 percent of teachers in Indiana in 1993-94 spent eight or more hours in professional development activities related to methods of teaching. The use of technology was a close second, with approximately 52 percent of teachers spending eight or more hours on this topic.

Indiana acknowledges the importance of leadership, resource and policy support, norms of collegiality and experimentation, and adequate time for professional development.

In general, each school corporation determines the amount of investment to make in professional development. Usually, the decision is negotiated with the local teacher union. A study completed in 1987 found that 1.8 percent of state education funds go for professional development programs. Teachers contribute $.60 in uncompensated time for every dollar spent. While most funding sources for professional development are local, the state and federal government do provide some money.

In 1987 the state legislature mandated that all 180 school days be used for classroom instruction. Thus, the state does not provide for teacher professional development time in the state-defined school year. Schools can release students in order to conduct professional development. But to do this, the school must have a base of 105 percent of required instructional time before they can use any accumulated time. Banked time can be used in time periods of no less than 30 minutes and not more than two and one half hours on any one day. Thus, schools can bank enough time for six half-days of professional development. Banking time does not provide extra funding.

Table 26 gives a picture of how Indiana school corporations that have contracts with the Indiana State Teachers Association (ISTA) allot time for professional development. Of the total 292 school corporations, 270 have ISTA contracts.

Table 26: Local Contract Provisions for Professional Development Days in Indiana

	Inservice days	Conference days	Inservice days, conference days, or both	Orientation days	Inservice, conference, or orientation days or any combination
No. of school corporations providing	149	50	181	251	275
Average no. of days	1.37 days	1.63 days	1.53 days	1.09 days	2.04 days
Range of days	0.5–5 days	0.5–2 days	0.5–5 days	0.5–2 days	0.5–7 days
Average for all school corporations	0.71 days	0.28 days	0.99 days	0.95 days	1.94 days

Source: Indiana State Teachers Association, personal communication, 1998

Related to the question of time for professional development is the more general question of what other kinds of support teachers have for their professional development. As shown in Table 27, it can come in many forms. These figures were obtained through teacher questionnaires. Although the actual percentages vary, in every case the most support is provided through "release time from teaching." The second most common, again with variations in the actual values of the percentages, is "time built into schedule," with the exception of Minnesota, which apparently provides more support through professional growth credits than do the other states.

Table 27: Percentage of Public School Teachers Who Reported Receiving Various Types of Support for Inservice Education or Professional Development in Their Main Teaching Field During the Current School Year, by State (1993-94)

	Release time from teaching	Time built into schedule	Travel expense	Tuition or fees	Professional growth credits	None of these
Indiana	**57.9**	**30.9**	**27.1**	**20.0**	**9.9**	**26.6**
Illinois	52.7	35.7	27.2	26.9	20.6	23.0
Iowa	52.9	43.5	35.2	27.0	25.1	19.6
Michigan	54.7	34.6	23.0	23.2	12.7	28.2
Minnesota	56.0	38.6	27.7	24.4	46.5	17.3
Ohio	45.1	31.2	22.1	24.0	29.9	30.5
Wisconsin	51.1	31.6	32.0	22.6	26.2	23.3
U.S. Total	48.2	40.0	23.6	22.8	32.4	22.3

Source: U.S. *Department of Education, National Center for Education Statistics*, 1996

Five school districts are participating in a two-year pilot program to help implement new local professional development programs to support relicensure.

Five school districts made a commitment to participate in a two-year profesisonal development pilot program. The pilot districts are making recommendations on the relicensure process, including issues such as helping to determine who will be on the Professional Growth Team, how the team will be selected, and who will sign the Professional Growth Plan. Each of the five pilot districts selected at least five teachers to participate in the pilot. The districts, selected from among 15 applicants and chosen to reflect different geographic locations and district size, are Fort Wayne Community Schools, Vigo County Community Schools, North Judson-San Pierre United School District, MSD of Decatur Township, and Greater Clark County Community Schools.

In November 1998, representatives from these schools shared their experiences in developing the new relicensure process. Issues viewed as the most important revolved around the actual process of implementing a new professional development system and the desired outcomes of the process. Along these lines, participants recommended a system that links teachers to student achievement and their ongoing professional development. To help achieve these goals, participants suggested partnering schools with other school districts,

universities, and service centers. They also suggested that the National Board for Professional Teaching Standards be used as a model for a new professional development system.

Targeted Areas for Improvement

1. Introduce state policies that tie professional development days to improvement planning or local professional growth plans
2. Set state standards for what constitutes quality professional development activities and require providers of professional development to meet those standards
3. Promote policy incentives that support the reallocation of local resources to enhance teaching:
   a. Create a data source to track LEA allocations to show the percentage allocated to support teaching
   b. Provide schools and districts with incentives to make time for collaborative planning among teachers
4. Collect case studies of restructured schools with innovative and effective professional development initiatives

Acronym Glossary

CHE	Commission for Higher Education
FTE	Full-Time Equivalent
GQE	Indiana High School Graduation Qualifying Exam
IFT	Indiana Federation of Teachers
IACTE	Indiana Association of Colleges for Teacher Education
INTASC	Interstate New Teacher Assessment and Support Consortium
IPSB	Indiana Professional Standards Board
ISTA	Indiana State Teacher Association
ISTEP+	Indiana Statewide Testing for Educational Progress
NBPTS	National Board for Professional Teaching Standards
NCATE	National Council for Accreditation of Teacher Education
NCTAF	National Commission on Teaching & America's Future
NCES	National Center for Education Statistics
NTE	National Teacher Exam
PDS	Professional Development Schools
PGP	Professional Growth Plan

References

American Association for Employment in Education. (1996). *Teacher supply and demand in the United States*: 1996 *Report*. Evanston, IL: Author.

Armour-Thomas, E., Clay, C., Domanico, R., Bruno, K., & Allen, B. (1989). *An outline study of elementary and middle schools in New York City*: *Final Report*. New York: New York City Board of Education.

Ballou, D., & Podgursky, M. (1997). *Teacher pay and teacher quality*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Berry, B. Darling-Hammond, L., & Haselkorn, D. (in press). *Teacher recruitment, selection, and induction*: *Strategies for transforming the teaching profession*.

Bradley, A. (1997, March 26). Standards Board touted for elevating teaching profession. *Education Week*, 6.

Bradley, A. (1998, March 4). NCATE gets $1.5 million grant to test standards. *Education Week*, 17.

Bull, B., Buechler, M., Didley, S., & Krehbiel, L. (1994, November). *Professional development and teacher time*: *Principles, guidelines, and policy options for Indiana*. Bloomington, IN: Indiana Education Policy Center, School of Education Office, Indiana University.

Bull, B., & Buechler, M. (1996, September). Learning togethe: *Professional development for better schools*. Bloomington, IN: Indiana Education Policy Center, School of Education Office, Indiana University.

Choy, S. P., & Chen, X. (1998). *Toward better teaching*: *Professional development in* 1993-94 (p. 54). Washington, DC: U.S. Department of Education, National Center for Education Statistics. (NCES 98-230)

Education Week on the Web. (1999). *Special Report*: *Quality Counts* '99. [Online]. Available: www.edweek.org/sreports/qc99/states/grades/rc-map.htm.

Ferguson, R. (1991, Summer). Paying for public education: New evidence on how and why money matters. *Harvard Journal on Legislation*, 465-98.

Goodlad, J. (1991). Why we need a complete redesign of teacher education. *Educational Leadership*, 49(3) 4-10.

Haberman, M. (1996). Selecting and preparing culturally competent teachers for urban schools. In J. Sikula, T. Buttery, & E. Guyton (Eds.), *The handbook of research on teacher education*. New York: MacMillan.

Indiana Department of Education. (1997). Data compiled form EIS state databasees. All data is subject to correction as schools continually send in reports. All data is current as of September 1997.

Indiana Professional Standards Board. (1997). *Indiana Professional Standards Board Annual Report*, 1996-97. Indianapolis, IN: Author.

Indiana Professional Standards Board. (1998, Winter). *Indiana Professional Standards Board Bulletin Board*, 3(1).

Ingersoll, G. & Scannell, D. (1998, Spring). Performance-based teacher preparation and licensure. *Quality Teaching*, 7(2), 6-8. (Washington, DC: National Council for Accreditation of Teacher Education).

Jerald, C. D., Curran, B. K., & Boser, U. (1999). Quality counts. *Education Week*, 18(17).

Kirshstein, R.J. st al. (1996). *Institutional policies and practices regarding faculty in higher education. 1993 national study of postsecondary faculty*. (NCES #97080). Washington, DC: U.S. Department of Education, National Center for Educational Statistics.

A nation at risk: The imperative for educational reform. (1983, April). Washington, DC: The National Commission on Excellence in Education.

National Board for Professional Teaching Standards. (1997, October). *Leading the way: Ten years of progress*, 1987-1997 [Brochure]. Southfield, MI: Author.

National Board for Professional Teaching Standards. (1998). NBPTS *candidate subsidies: State-by-state program information*.[Online]. Available: www.nbpts.org/nbpts/where.

National Board for Professional Teaching Standards. (1998, May). *State and local action supporting National Board Certification*. Southfield, MI: Author.

National Commission on Teaching & America's Future. (1996). *What matters most: Teaching for America's future. Report of the National Commission on Teaching & America's Future*. New York: Author.

National Council for Accreditation of Teacher Education. (1997). *Standards, procedures, and policies for the accreditation of professional education units*. Washington, DC: Author.

Ohio Department of Education. (1997). *Efforts toward a diversified teaching force*. Columbus, OH: Author.

Ohio NCTAF Task Force. (1997, November). *The best teachers for Ohio's Children. A report to the public about the status of teaching in Ohio in partnership with the National Commission on Teaching & America's Future*. Columbus, OH: Ohio Department of Eduation.

Organization for Economic Cooperation and Development. (1995). Education at a glance: OECD indicators . In *Using what we have to get the schools we need: A productivity focus for American education. A report from the Consortium on Productivity in the Schools* (p. 44). New York: Columbia University, Institute on Education and the Economy.

Origins of The Holmes Partnership. (1998). [Online]. Available: www.udel.edu/holmes/origins.html

Parrish, T.B., O'Reilly, F., Dueñas, I.E., & Wolman, J. (1997). *State special education finance systems*, 1994-95. Palo Alto, CA: Center for Special Education Finance.

Recruiting New Teachers, Inc. (1996). *The urban teacher challenge: A report on teacher recruitment and demand in selected Great City Schools*. Belmont, MA: Author.

Robertson, S., Keith, T., & Page, E. (1983). Now who aspires to teach? *Educational Researcher*, 12(3), 13-21.

Sandoval, P. (1996). *Urban teacher education program: Final report to the Lilly Endowment on program evaluation*. Indianapolis: Lilly Endowment, Inc.

Scannell, M., & Rayl, S. (1998). Redesign of preparation, licensure, induction, and relicensure for education professionals. IN *Focus*, 27, 18-24.

Scannell, M., & Wain, J. (1996). New models for state licensing of professional educators. *Phi Delta Kappan*, 78(3), 211-14.

Schlechty, P., & Vance, V. (1983). Recruitment, selection, and retention: The shape of the teaching force. *Elementary School Journal*, 83, 469-487.

U.S. Department of Education. (1998a). Promising practices: N*ew ways to improve teacher quality*. Washington, DC: Author.

U.S. Department of Education. (1998b). FY99 request—S*pecial education grants to states table*. [Posted on the World Wide Web] Washington, DC: Author. Retrieved November 11, 1998 from the World Wide Web: www.ed.gov/offices/ous/budgetnews/spedstgr.html

U.S. Department of Education, National Center for Education Statistics. (1996, July). S*chools and staffing in the* U.S.: A *statistical profile*, 1993–94. Washington, DC: Author. (NCES 961 24)

U.S. Department of Education, National Center for Education Statistics. (1997). A*merica's teachers*: P*rofile of a profession*, 1993-94 (NCES 97-460). Washington, DC: Author.

U.S. Department of Education, National Center for Education Statistics. (1998). T*he condition of education* 1998 (NCES 98-013). Washington, DC: Author.