



What **Indiana's** Education Schools
Aren't Teaching

about Reading

Executive Summary
March 2009



NATIONAL COUNCIL ON TEACHER QUALITY

The full study of *What Indiana's Education Schools Aren't Teaching about Reading* is available online at www.nctq.org.

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EXECUTIVE SUMMARY

IN MAY 2006 THE NATIONAL COUNCIL ON TEACHER QUALITY (NCTQ) RELEASED A GROUNDBREAKING STUDY, *WHAT EDUCATION SCHOOLS AREN'T TEACHING ABOUT READING – AND WHAT ELEMENTARY TEACHERS AREN'T LEARNING*. THE PRIMARY FINDINGS WERE DISHEARTENING: IN A REPRESENTATIVE SAMPLING OF EDUCATION SCHOOLS IN 35 STATES, NO MORE THAN 15 PERCENT OF SCHOOLS APPEARED TO PROVIDE PROSPECTIVE ELEMENTARY TEACHERS WITH THE MOST BASIC KNOWLEDGE OF EFFECTIVE READING INSTRUCTION.

After the release of the national study, Indiana became the first state to commission NCTQ to use its methodology to look at how well the state's own 45 education schools¹ were preparing Indiana's future teachers to teach children how to read. Since reading achievement in Indiana remains flat despite the dedication of considerable state resources, it was decided to examine the quality of the state's teacher preparation programs – a quite natural place to start. Accordingly, NCTQ was asked to examine both general and special education teacher preparation programs in Indiana. NCTQ's efforts were greatly assisted by Indiana's Governor, the Superintendent of Public Instruction and the Commissioner for Higher Education, among other state leaders, who worked together to enlist the cooperation of Indiana's teacher preparation programs.

Fourth Grade Reading Achievement on the National Assessment of Educational Progress NAEP

	Indiana	National
Students Reading Below Proficient Level	67%	67%
Students Reading Below Basic Level	32%	33%
Free and Reduced Lunch Eligible Students Reading Below Proficient Level	81%	80%
Free and Reduced Lunch Eligible Students Reading Below Basic Level	46%	50%

¹ Although there are 45 education schools in the state, the study only includes 41 schools. Three institutions (Ancilla College, Earlham College, and Wabash College) do not offer training to elementary teachers and were therefore excluded. Vincennes University only offers a two-year program and was similarly excluded.

EFFECTIVE READING INSTRUCTION

A substantial body of scientific evidence on reading proficiency, collected over the last six decades, indicates that with the right instruction in place, reading difficulties may be dramatically reduced, if not altogether eradicated. To achieve this dramatic reduction, elementary classrooms must incorporate certain research-based practices, including:

- Early identification of children at risk of reading failure;
- Daily training in linguistic and oral skills to build awareness of speech sounds or *phonemes*;
- Explicit instruction in letter sounds, syllables, and words accompanied by explicit instruction in spelling;
- Teaching phonics, the understanding of the relationship between sounds and the letters that represent those sounds, in the sequence that research has found leads to the least amount of confusion, rather than teaching it in a scattered fashion and only when children encounter difficulty;
- Practicing skills to the point of “automaticity” so that children do not have to think about decoding a word when they need to focus on meaning;
- Concurrently with all of the above building comprehension skills and vocabulary knowledge;
- Frequent assessment and instructional adjustments to make sure children are progressing.

About 40 percent of all kindergartners require this explicit, systematic approach in order to learn how to read. Importantly, research has shown that academic success, as defined by high school graduation, can be accurately predicted by reading skills possessed as early as at the end of the third grade. It is thus of paramount importance that effective reading instruction be delivered at an early stage of the student’s academic development.

Confirming the above findings are the results of the National Reading Panel’s landmark study, *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction (2000)*. Commissioned by the U.S. Congress, the study reviewed decades’ worth of reading research, holding it to high scientific standards, and concluded that effective reading instruction must include the following five key components:

- explicit, systematic teaching of **phonemic awareness and phonics**;
- guided oral reading to improve **fluency**;

- direct and indirect **vocabulary** building;
- exposure to a variety of **comprehension** strategies.

The Basic Components of Effective Reading Instruction

Phonemic Awareness	The ability to hear, identify and manipulate the individual sounds, or phonemes, in spoken words.
Phonics	The understanding that there is a predictable relationship between phonemes, the sounds of spoken language, and graphemes, the letters and spelling that represent those sounds in written language.
Fluency	The ability to read text accurately and quickly.
Vocabulary	Development of stored information about the meanings and pronunciation of words necessary for communication. There are four types of vocabulary: <ol style="list-style-type: none">listening vocabulary – the words needed to understand what is heardspeaking vocabulary – the words used when speakingreading vocabulary – the words needed to understand what is readwriting vocabulary – the words used in writing
Comprehension Strategies	Strategies for understanding, remembering and communicating with others about what has been read.

The National Reading Panel also noted that *explicit* teacher preparation in reading instruction “for both new and established teachers” had been shown to produce higher student achievement.

METHODOLOGY

NCTQ examined Indiana's 41 elementary teacher preparation programs, 29 of which also provided a preparation program for special education teachers. A total of 169 required reading courses were reviewed. Out of these courses, 53 were required only by general education programs, 7 only by special education programs, and 109 by both types of programs. The courses were analyzed to assess the degree to which the five components of effective reading instruction, as identified by the National Reading Panel, were taught. Each course was rated based on three factors:

1. The quality of the required texts for teaching the basic components of effective reading instruction;
2. The lecture time devoted to teaching the five components;
3. Any kind of assignment that was given to students in which they would demonstrate their knowledge of reading instruction: including writing assignments; tests, quizzes or exams; and exhibitions of acquired skills.

The methodology used for this study takes into account the fact that a syllabus is only a limited representation of the content of a course. Ideally, course content would be assessed by observing each lecture. But given that auditing each lecture of more than one hundred courses is simply impractical, the study is careful to err on the side of caution, granting institutions the benefit of the doubt regarding content delivery. If a course listed a topic in the syllabus, provided a high quality text to address it, and tested students' knowledge of it, the course passed the bar set by this study. Courses were not required to provide evidence of exemplary lecture-content delivery in order to score well.

FINDING No. 1:**MOST EDUCATION SCHOOLS IN INDIANA ARE NOT TEACHING THE SCIENCE OF READING.**

In the 41 schools examined, only 11 out of the 70 programs (17 percent) were found to teach all the components of the science of reading, including only six out of 41 general education programs (15 percent) and five out of 29 special education programs (17 percent). An overall score for each elementary program was computed based on how much exposure to the five components of effective reading instruction its required reading courses gave to teacher candidates. Education schools that provided exposure to all five components received a score of 100 percent, with schools that taught only one out of five components receiving a score of 20 percent. Schools that taught none of the five components received a zero.

Only six of the 41 institutions in Indiana (15 percent) ensured *all* elementary teacher candidates – whether in their general education or special education programs – have adequate exposure to the science of reading. These institutions were Franklin College, Indiana University-South Bend, Indiana University-Purdue University-Indianapolis, Purdue University, Purdue University-Calumet, and Purdue University-North Central.

Close to a staggering *40 percent* of institutions in Indiana failed to address *any* of the five components.

FINDING No. 2:**INSTITUTIONAL CHARACTERISTICS DO NOT MAKE SOME PROGRAMS MORE LIKELY THAN OTHERS TO TEACH THE SCIENCE OF READING.**

The study considered the institutional characteristics of Indiana’s education schools in order to determine whether these characteristics make certain programs more likely than others to teach the science of reading. Accreditation status, the number of teachers produced each year, admissions selectivity, public/private status, and minority enrollment were all evaluated. There is little to suggest that institutional characteristics are influential in this regard; none of the above characteristics – not even the size of the program or its accreditation status — appeared to affect the likelihood that a program teaches the science of reading.

ELEMENTARY GENERAL EDUCATION PROGRAMS

100%

Passed, adequately treated all five of the components

Franklin College
Indiana University – South Bend
Indiana University/Purdue University – Indianapolis
Purdue University
Purdue University – Calumet
Purdue University – North Central

80%

Failed to treat adequately 1 of the 5 components

Valparaiso University

60%

Failed to treat adequately 2 of the 5 components

Anderson University
Bethel College
DePauw University
Indiana State University
Indiana University - East
University of Indianapolis

40%

Failed to treat adequately 3 of the 5 components

Indiana Wesleyan University
Saint Mary's College

20%

Failed to treat adequately 4 of the 5 components

Calumet College of St. Joseph
Goshen College
Grace College and Theological Seminary
Huntington College
Indiana University – Bloomington
Indiana University – Kokomo
Indiana University/ Purdue University – Fort Wayne
Marian College
Saint Mary-of-the-Woods College
Taylor University
University of Saint Francis

0%

Failed to treat adequately any of the 5 components

Ball State University
Butler University
Hanover College
Indiana University – Northwest
Indiana University – Southeast
Indiana University/Purdue University – Columbus
Manchester College
Martin University
Oakland City University
Saint Joseph's College
Taylor University – Fort Wayne
University of Evansville
University of Notre Dame
University of Southern Indiana

Unclear
Tri-State University

ELEMENTARY SPECIAL EDUCATION PROGRAMS

100%

Passed, adequately treated all five of the components

- Huntington College
- Indiana State University
- Indiana University – South Bend
- Indiana University/Purdue University – Indianapolis*
- Purdue University*

80%

Failed to treat adequately 1 of the 5 components

- Valparaiso University*

60%

Failed to treat adequately 2 of the 5 components

- Anderson University*
- University of Indianapolis*

40%

Failed to treat adequately 3 of the 5 components

- Indiana Wesleyan University

20%

Failed to treat adequately 4 of the 5 components

- Goshen College*
- Grace College and Theoretical Seminary*
- Indiana University – Bloomington*
- Indiana University/Purdue University – Fort Wayne
- Marian College
- Saint Mary's College
- Saint Mary-of-the-Woods College*
- Taylor University*
- University of Saint Francis

0%

Failed to treat adequately any of the 5 components

- Ball State University*
- Butler University*
- Indiana University – Northwest*
- Indiana University – Southeast*
- Indiana University/
- Purdue University – Columbus*
- Manchester College*
- Martin University
- Oakland City University*
- Taylor University – Fort Wayne*
- University of Evansville
- University of Southern Indiana*

*Denotes a program in which the general education and special education requirements are identical.

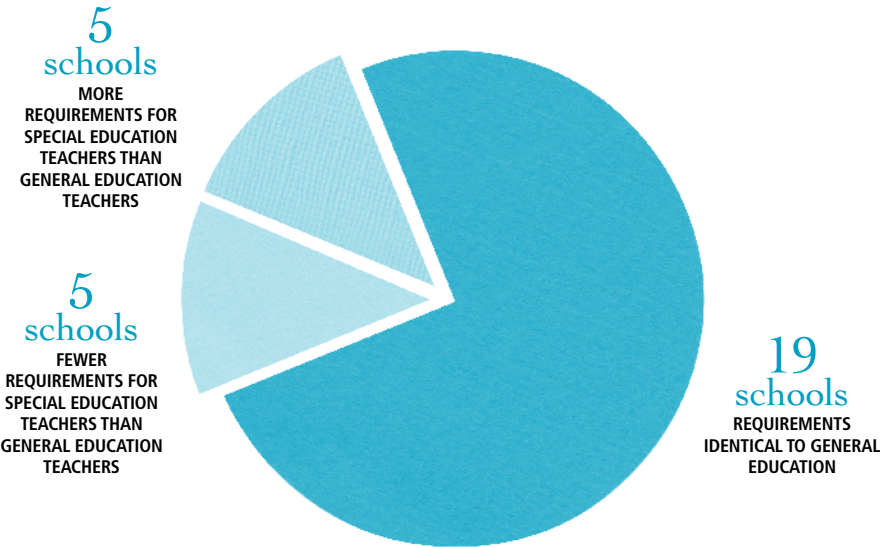
FINDING No. 3:

THERE ARE FEW DIFFERENCES BETWEEN THE PREPARATION THAT IS REQUIRED FOR GENERAL EDUCATION TEACHERS AND WHAT IS REQUIRED FOR SPECIAL EDUCATION TEACHERS. REQUIREMENTS ARE IN SOME CASES FEWER FOR SPECIAL EDUCATION TEACHERS.

Unlike NCTQ's national study, this study also looked at the preparation that prospective elementary special education teachers receive in reading. As important as it is for every elementary teacher to know the most effective strategies for teaching children to read, expertise in this area is of paramount importance for special education teachers, since reading disabilities account for about 80 percent of all learning disabilities. Even if the reading preparation for the general elementary education teacher were exemplary, special education teachers would still need more in terms of both knowledge and skills, such as learning to identify reading difficulties, implement corrective reading strategies and deliver related assessment adequately and appropriately.

Of the 29 institutions that offer elementary special education programs, 19 require the identical coursework in reading for special education candidates as for general education candidates. These institutions do not feel that special education teachers need any additional training in this area beyond what general education teachers receive. The situation with the remaining 10 institutions was no more encouraging. Five programs – Indiana Wesleyan University, Marian College, Martin University, Saint Mary's College, and the University of Evansville – actually required teachers preparing to teach elementary special education to take *less* coursework in reading than teachers preparing to teach general elementary education. The other five institutions did require additional coursework in reading for their special education teachers, but usually this coursework did not include exposure to the components of effective reading instruction.

INDIANA SPECIAL EDUCATION PROGRAM READING REQUIREMENTS



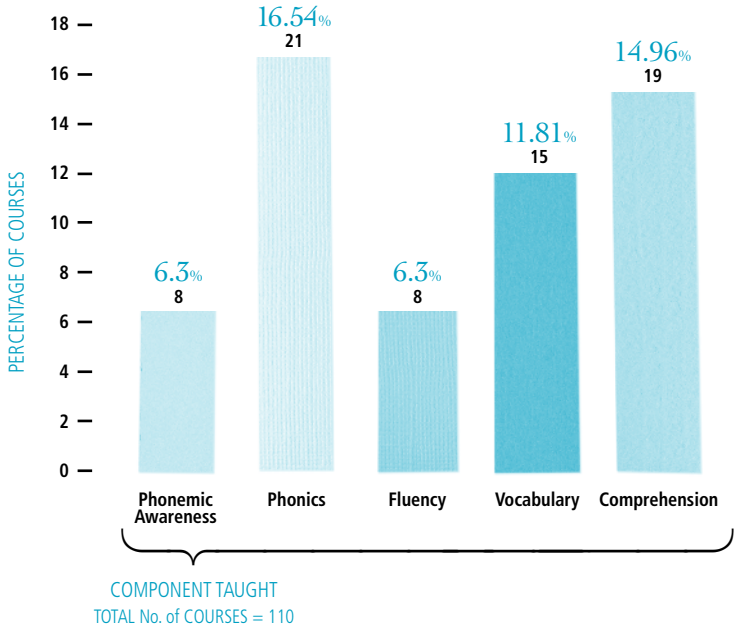
FINDING No. 4:

MOST PROGRAMS IGNORE THE SCIENCE OF READING, OR PRESENT IT AS AN APPROACH THAT IS NO MORE VALID THAN OTHERS.

Courses were analyzed to determine which individual components of effective reading instruction (phonemic awareness, phonics, fluency, vocabulary and comprehension) were taught with the most regularity. The component taught most frequently in Indiana’s reading courses was phonics, taught in 1 out of 4 courses, followed closely by comprehension, taught in slightly more than 1 out of 5 courses. This finding might be surprising to those who equate “phonics” with scientifically based reading instruction, and assume that phonics instruction is anathema to those philosophically opposed to the science of reading. It was clear from the analysis, however, that in many cases where phonics was addressed it was generally done so in a perfunctory manner – and/or as one of a set of strategies that teachers might use in reading instruction. This, combined with the fact that three out of four courses did not address phonics, suggests that philosophy is indeed still the primary explanation for why teacher educators are not teaching the science of reading.

Most required reading courses in Indiana’s education schools continue to expose teacher candidates to reading strategies that do not reflect the findings of the National Reading Panel report. When the reading science is included in courses, it is most commonly presented as a strategy that has no more validity than other approaches.

HOW OFTEN ARE THE COMPONENTS OF GOOD READING INSTRUCTION TAUGHT?



FINDING No. 5:

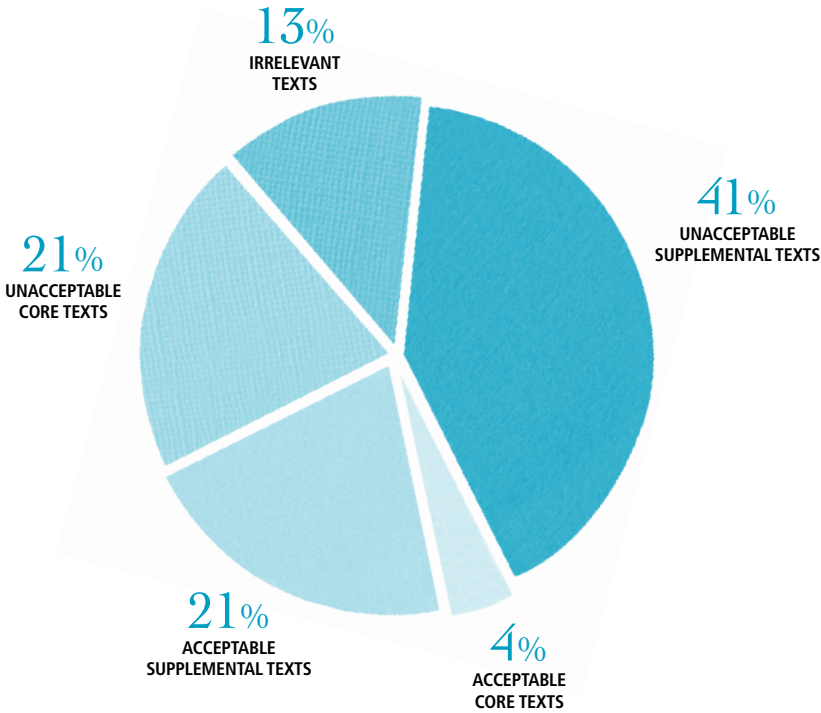
FEW REQUIRED TEXTS ADDRESS THE SCIENCE OF READING. MANY COURSES STILL RELY ON TEXTS THAT PREDATE THE NATIONAL READING PANEL REPORT.

This study reviewed every required reading for each required reading course. While the purpose of the course syllabus is to provide an outline of the course, the texts provide the essential detail. The study reviewed a total of 170 texts. The inordinately large number of textbooks in use in Indiana's education schools shows that the field is truly a free-for-all, with every instructor selecting texts according to his or her own personal criteria.

This might be of little concern if the texts in use were of sufficiently high quality. Unfortunately, the texts required by Indiana's education schools were, on the whole, of no better quality than the dismal texts reviewed in the national study. The quality of almost all of the reading texts required in Indiana was poor: Their content included little to none of the science of effective reading instruction, and in many cases, the content was inaccurate and misleading.

Of the 170 texts included in this study, literacy experts found only five (2.9 percent) that were acceptable as general, comprehensive textbooks for a reading course. Each of these texts was in use in only a single course. Another 27 texts were considered suitable for teaching one or more components of effective reading instruction. Most of the remaining texts were rated unacceptable, since they either failed to address the science of reading entirely or conveyed it inadequately.

THE RATINGS FOR TEXTS



FINDING No. 6:

COURSE REQUIREMENTS AND EXPECTATIONS ARE GENERALLY LOW: MOST COURSES DO NOT REQUIRE STUDENTS TO READ RESEARCH STUDIES OR TO PREPARE AN ACADEMIC PAPER THAT REQUIRES RESEARCH. RARELY DO COURSES REQUIRE PRACTICAL APPLICATION OF SKILLS AND KNOWLEDGE.

Although many reading courses claimed to be “research-based,” few required students to read directly from research studies or scholarly journals. Still fewer assigned students to write a research paper that would require them to organize, analyze and synthesize multiple perspectives. In fact, the study identified only eight courses (7%) that required any sort of research paper.

Instead of demanding rigorous research, most courses included assignments that call for students to present their own feelings and observations, with the most common assignment being a “literacy memoir,” in which students reflect on their own experiences of learning to read.

Courses included few assignments that required students to put their skills and knowledge of reading instruction into practice. In fact, teacher candidates seldom had to develop lesson plans and even less frequently were asked to simulate delivering instruction in a classroom setting. Many courses appeared to emphasize fun over learning, with few activities that would require the aspiring teacher to demonstrate an understanding of how children learn to read. In some instances, teacher candidates could receive additional points toward their course grade for such activities as giving blood or bringing treats to class.

FINDING No. 7:

MANY SCHOOLS IDENTIFIED HIGHLY IRRELEVANT COURSES AS RELATED TO PREPARING ELEMENTARY TEACHERS TO TEACH READING. THESE SCHOOLS MAY NOT HAVE A CLEARLY ARTICULATED APPROACH TO ADDRESSING THIS CRITICAL AREA OF TEACHER PREPARATION.

The 41 Indiana institutions included in this study originally identified a total of 189 required reading courses. Yet the syllabus reviewers found that 59 of these courses did not contain any aspect of reading instruction. The reviewers found them to be altogether irrelevant to the topic of preparing prospective teachers to teach children how to read. Examples of such course titles included “Art across the Curriculum,” “Science Methods and Technology,” “Introduction to Literature” and “Media for Children.” These courses were found not to include any aspect of reading instruction. The perplexing number of irrelevant courses that were identified by the schools as required reading courses suggests that these institutions may not have a clear framework for how

they prepare teachers to teach reading, and they may not really know which courses are and are not addressing particular aspects of this essential area of teacher preparation. In addition, special education programs were even more likely than general education programs to identify irrelevant courses.

FINDING No. 8:

INDIANA'S OWN WEAK STANDARDS IN WHAT TEACHER CANDIDATES NEED TO KNOW ABOUT READING INSTRUCTION MAY HELP TO EXPLAIN WHY SO FEW INSTITUTIONS TEACH THE SCIENCE OF READING.

All teacher preparation programs are subject to the state's approval and oversight. Indiana does not mandate the professional education coursework that teacher candidates must take to qualify for licensure, but rather, identifies a set of standards that teacher preparation programs must meet. This standards-based approach has become increasingly popular in many states, as it is intended to give programs greater flexibility in how they deliver content. The syllabi reviewed for this study showed a keen awareness of Indiana's standards relating to reading instruction. In fact, the syllabi for 45 percent of courses included the specific standards as part of the syllabus itself.

Unfortunately, this awareness of the state's standards does not result in better teacher preparation in effective reading instruction because the standards do not address the science of reading. The standards are very broad and make no mention of scientifically based reading instruction. They fail to reflect the five components of effective reading instruction or the findings of the National Reading Panel.

RECOMMENDATIONS

Despite extensive scientific evidence on the most effective ways to teach young children to read, most education schools in the state of Indiana are not exposing elementary teacher candidates to this science. Fortunately, there are practical steps that can be taken to improve the condition of teacher preparation in reading in Indiana, and none of these are excessively costly or complicated.

THE STATE OF INDIANA

REVISE STANDARDS: The state of Indiana already has a set of standards whose purpose is to communicate the state's expectations of its teacher preparation programs. Yet since in the area of reading instruction these standards are too broad and neglect the science of reading, the state should revise them. New standards for reading instruction should be developed for both general and special education elementary teachers – standards that would specifically direct institutions to train teachers in the science of reading and the five components of effective reading instruction.

REQUIRE A RIGOROUS LICENSURE TEST: Even with specific standards firmly in place, a rigorous licensure test is the only practical way to ensure that the state's expectations are met. Although Indiana requires elementary teacher candidates to pass the Praxis II Reading Specialist Test prior to licensure, studies have shown that this test is inadequate for assessing knowledge of scientifically-based reading instruction. Instead of this ineffective assessment, the state should require a test that teachers cannot pass without sufficient knowledge of the science of reading. The reading instruction tests implemented in Massachusetts and Virginia stand out for their quality and could serve as effective models.

A rigorous, well-crafted test would both assure school districts that they are hiring new teachers who already possess the fundamental understanding of effective reading instruction and, moreover, show which education schools are successfully training teacher candidates in the science of reading.

STRENGTHEN PROGRAM APPROVAL PROCESS: Indiana should also ensure that adherence to state standards is factored into its process of approving education schools. A minimum pass rate on a rigorous test of the science of reading should be required for program approval. The state should consider failure to properly train teachers in the science of reading as grounds for withholding state approval.

COORDINATE EFFORTS: In addition to setting policy, the state is also in a unique position to help see that changes are enacted on a practical level. If the Indiana Department of Education, Commission for Higher Education, Governor's office, State Board of Education and Education Roundtable all work together and identify improving the quality of teacher preparation in reading as a statewide priority, much can be accomplished. Until that time, taxpayer and tuition dollars will continue to be spent poorly, and Indiana students will continue to lack well trained teachers.

EDUCATION SCHOOLS

BUILD FACULTY EXPERTISE: It seems clear that Indiana's education schools need to rethink how they prepare prospective teachers to deliver effective reading instruction. The schools' first step should be to start building faculty expertise in the science of reading. Education schools need to acknowledge that right now they may not have the expertise available to deliver coursework that provides a strong grounding in the science of reading. To address this issue, they may need both to hire new faculty members and to provide current teacher educators with professional development.

RECONSIDER PROGRAM DESIGN: Deans and program directors must carefully consider whether the overall program is designed to provide proper coverage of reading instruction. Program design should ensure that there is a coordinated sequence to teacher training in reading. Too many programs have courses with repeating or overlapping content, while significant topics go unaddressed. And though there may not be a magic number of courses that elementary teachers need in reading, it seems clear that one is too few, and five or six is probably too many.

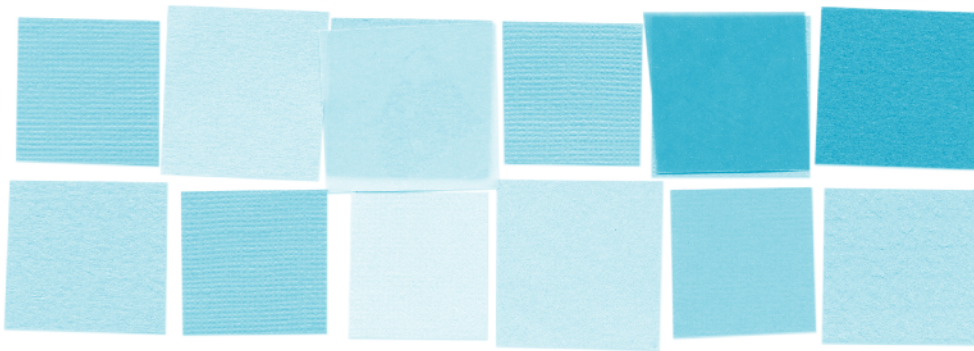
RECOMMEND STRONG TEXTS: While education schools are taking a critical look at their course of study in reading, they should also consider the preponderance of textbooks in use. Reading broadly and evaluating a variety of perspectives is certainly an important part of the academic pursuit; however, there is no evidence that suggests this is the reason for so many textbooks in use. Students are exposed to different but inaccurate, incomplete and often misleading accounts of reading instruction. Education schools may be reluctant to mandate which texts instructors should use in their courses, but they should at least provide guidance to help them make better selections among the vast number of available options.

STRENGTHEN SPECIAL EDUCATION PROGRAMS: Education schools also need to put particular focus on their special education programs. Schools that require even less training for special education teachers in reading than for general education teachers send a simply unacceptable message that reading is not a skill that special education teachers need to be prepared to teach. Programs that require identical requirements for special education and general education teachers also need urgent attention and restructuring to ensure that special education teachers are in fact well prepared to teach students with disabilities to read.

INVOLVE UNIVERSITY LEADERSHIP: College or university leadership must also be aware of the poor quality of reading instruction in their education schools or education departments. University presidents frequently take a hands-off approach to education school matters, but they must play a role in bringing about the necessary changes. Not only are they responsible for the quality of teachers their institutions currently produce, but their graduates' skills will directly impact the potential of subsequent generations to pursue higher education.

CONCLUSION

NAEP data conclusively demonstrate that Indiana – in line with the rest of the nation – has a severe reading problem: Only 33 percent of Indiana’s fourth graders are proficient readers, and 32 percent do not even read at a basic level. Fortunately, research has shown unequivocally that effective early reading instruction can all but eliminate reading failure and is the key to ensuring that all children learn how to read. By undertaking this study, the state of Indiana has already demonstrated its willingness to cast a critical and reflective eye on its elementary teacher preparation. Institutional changes coupled with licensure requirements that ensure that elementary teachers will not be certified without knowing the science of reading will help to ensure that all of Indiana’s students get the effective early reading instruction they need to prepare them for future academic success.



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The National Council on Teacher Quality advocates for reforms in a broad range of teacher policies at the federal, state, and local levels in order to increase the number of effective teachers.