



Indiana Department of Education
SUPPORTING STUDENT SUCCESS

Indiana Developmental and Content Standards for Educators

Final Report

December 2010

Prepared for:
Indiana Department of Education
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Developed and Produced by
Evaluation Systems
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Section I: Introduction

The state of Indiana, under the leadership of the Indiana Department of Education (IDOE), is engaged in a systematic reform of its education system. The IDOE's vision is to create an educational system that produces graduates who are able to compete successfully with students from across the nation and around the world. Attaining this vision involves reforms to all facets of Indiana's educational system, including educator preparation and licensing.

One part of the reform effort has involved educator licensing requirements. The Rules for Educator Preparation and Accountability (REPA), enacted in 2010, revised Indiana's educator licensing structure to emphasize content knowledge as follows:

- Elementary teachers (K to 6) must earn a baccalaureate degree consisting of an education major with a content-area minor OR a content area-major with an education major.
- Secondary teachers (5 to 12) must receive a baccalaureate degree consisting of any applicable content-area major—as well as a minor in education.

In Spring 2010, the IDOE sought a contractor to develop high quality educator standards to support REPA and to provide guidance to educator preparation programs as they revise their programs to meet the state's new licensing requirements. The IDOE also stipulated that the standards would be grounded in scientifically-based research and aligned with Indiana Academic Standards and the Common Core State Standards developed jointly by the National Governors Association and the Council of Chief State School Officers (CCSSO).

The IDOE contracted with Pearson to develop the Indiana Developmental and Content Standards for Educators, which include educator standards in forty-six content and administrative areas and at five school setting developmental levels. The standards are grounded in scientifically based research and are aligned with the Rules for Educator Preparation and Accountability (REPA), Indiana Academic Standards, Indiana Core Standards, the Common Core State Standards for Mathematics and for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects, standards of the International Society for Technology in Education (ISTE), and other relevant standards of national professional organizations.

The Indiana educator standards are custom-designed for Indiana and articulate the IDOE's expectations regarding the content and pedagogical knowledge and skills that are important for Indiana educators. The primary focus of the 46 content-area standards is the subject-matter knowledge and skills needed to teach effectively in Indiana classrooms or to provide effective leadership in Indiana schools. The primary focus of the five school setting developmental standards is on the pedagogical knowledge and skills needed to teach in various school settings.

Pearson prepared educator standards for the following 46 content areas:

1. Adapted Physical Education
2. Business
3. Career and Technical Education—Agriculture
4. Career and Technical Education—Business and Information Technology
5. Career and Technical Education—Family and Consumer Sciences
6. Career and Technical Education—Health Careers Education
7. Career and Technical Education—Marketing
8. Career and Technical Education—Trade and Industrial Education
9. Communication Disorders
10. Computer Education
11. Driver and Traffic Safety
12. Early Childhood Generalist
13. Elementary Generalist
14. English Language Arts
15. English Learners (EL)
16. Engineering and Technology Education
17. Exceptional Needs—Blind/Low Vision
18. Exceptional Needs—Deaf/Hard of Hearing
19. Exceptional Needs—Intense
20. Exceptional Needs—Mild
21. Fine Arts—Dance
22. Fine Arts—Instrumental and General Music
23. Fine Arts—Theatre
24. Fine Arts—Visual Arts
25. Fine Arts—Vocal and General Music
26. Health Education
27. High Ability
28. Journalism
29. Mathematics
30. Physical Education
31. Reading
32. School Leader—Building Level
33. School Leader—District Level
34. School Librarian

35. Science—Chemistry
36. Science—Earth and Space Science
37. Science—Life Science
38. Science—Physical Science
39. Science—Physics
40. Social Studies—Economics
41. Social Studies—Geographical Perspectives
42. Social Studies—Government and Citizenship
43. Social Studies—Historical Perspectives
44. Social Studies—Psychology
45. Social Studies—Sociology
46. World Languages

Pearson also prepared educator standards for the following five school setting developmental levels:

1. School Setting Developmental Standards—Early Childhood Education
2. School Setting Developmental Standards—Elementary
3. School Setting Developmental Standards—Middle School
4. School Setting Developmental Standards—Secondary Education
5. School Setting Developmental Standards—P–12

This report documents major program activities and results for the development of Indiana’s educator standards. It describes the procedures used and outcomes of each stage of the standards development process.

Section II: Program Planning and Ongoing Communication

Pearson first met with representatives of the IDOE in Indianapolis on July 1, 2010. Pearson prepared necessary materials for the initial planning meeting.

At the initial planning meeting, Pearson and the IDOE discussed the parameters of the project, including the following:

- background and context for the project
- purpose and future uses of the standards
- list of content and developmental standards to be developed
- criteria to be used in developing the standards
- common structure for the standards

- resources for each set of standards (e.g., Indiana Academic Standards, Common Core State Standards, standards of national professional organizations)
- review process to be employed
- plan for standards correlation study
- milestone dates and overall timeline for completing the project.

Following the initial planning meeting, Pearson documented the outcomes of the meeting in a Management Planning Document that was provided to the IDOE.

Pearson and the IDOE also participated in weekly conference calls. The purpose of the conference calls was to share information, provide updates on the development of the standards, and monitor overall program progress. Pearson provided agendas prior to the calls and documented the outcomes of the calls in a summary document. In addition to the planning meeting and weekly conference calls, the IDOE and Pearson communicated as needed via telephone and e-mail to determine and clarify program needs, share information, and respond to IDOE requests.

Section III: Define Standards Structure and Guidelines

Define Standards Structure. Pearson and the IDOE jointly determined a common structure for the Indiana educator standards. A common structure provides coherence and clarity for the program. It also provides clear and consistent information to educator preparation programs, teacher candidates, and other interested parties regarding the state's expectations for educator preparation. Each set of standards consists of the following four or five components:

- **Standard Statements.** The first section of each standards document includes broad, comprehensive standard statements that define the depth and breadth of knowledge needed by Indiana educators in that field or at that school setting developmental level. The standard statements are rigorous and significant. Taken as a whole, they provide a coherent and unified vision of the knowledge and skills needed by Indiana educators in that field or at that school setting developmental level.
- **Links to Indiana Academic Standards¹.** For most of the content standards, electronic links to Indiana Academic Standards are provided. These links demonstrate how the knowledge and skills included in the standards will be applied in Indiana classrooms.
- **Articulation of Standard Statements into Essential Elements of Knowledge.** Each standard statement is further articulated into the essential elements of knowledge or skill needed by Indiana educators to meet that standard. The number of essential elements per standard statement varies according to the needs of the field.

¹ Links to Indiana Academic Standards are not provided for Communication Disorders, Driver and Traffic Safety, the Exceptional Needs fields, and the School Setting Developmental Standards, for which Academic Standards do not exist.

- **Selected Bibliography.** A selected bibliography of state and national standards, as well as relevant research related to the field, is included in each set of standards to provide a sample of the materials used in the development of the standards and contemporary studies that support the standards.
- **Correlation Table.** A correlation table is provided to demonstrate the alignment of the standards with appropriate Indiana and national standards.

Define Standards Guidelines. In addition to determining a common structure that would be applied across all standards areas, the IDOE and Pearson collaborated to define the guidelines that would be used to prepare the standards. Standards development specialists used the guidelines as they drafted materials for review by Indiana educators as well as when they incorporated comments and suggestions made by Indiana educators. The following guidelines were used to prepare the Indiana educator standards.

Indiana Developmental and Content Standards Guidelines	
Guideline	Description
Rigorous	The standards support the assessment and application of high-level cognitive demands, including reasoning, justification, synthesis, analysis, and problem solving.
Authentic/Essential	The standards describe Indiana teaching practice in real, job-related terms. They are grounded in scientifically based research.
Indiana specific	The standards make direct reference to Indiana laws, policies, and contexts, where applicable.
Diversity	The standards account for diversity in school populations, staffing patterns, home settings, geographic areas, and inclusion of students with special needs.
Freedom from bias	The standards are free of bias or unfairness against any group of candidates on the basis of irrelevant background characteristics.
Aligned	The standards align with relevant Indiana and national policy documents, including Indiana Academic Standards, Common Core State Standards, and standards of national professional organizations.
Significant	The standards include only highly significant teacher activities, responsibilities, and understandings.
Clear and Specific	The standards provide guidance and clarity for candidates and educator preparation programs.
Richness of teaching	The standards depict the complexity, depth, and richness of the teacher's role and responsibilities.
Measurable	The standards describe knowledge and skills that can be assessed using practical and psychometrically suitable methods.
Coherent	The standards provide a coherent and unified vision of the knowledge and skills needed by teachers.

Section IV: Obtain and Analyze Program and Policy Materials

Pearson gathered the following materials to prepare Indiana's educator standards:

- Rules for Educator Preparation and Accountability (REPA)
- Indiana Academic Standards
- Indiana Core Standards
- Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects
- Common Core State Standards for Mathematics
- International Society for Technology in Education (ISTE) National Educational Technology Standards for Teachers and Administrators
- Standards of national professional organizations (e.g., National Council of Teachers of English, National Council of Teachers of Mathematics)

These materials provided background information for Pearson's standards development specialists as they prepared and revised the standards. The materials were also used as source documents to prepare the correlation table for each standards document.

Section V: Draft Standards

The Indiana Developmental and Content Standards for Educators were custom-developed to provide essential information about the state's expectations concerning the knowledge and skills required of Indiana educators. They are designed to be used by educator preparation institutions as they revise their programs to meet the licensure requirements included in REPA. The standards serve a wide audience, including the IDOE, education preparation institutions, educator candidates, the general public, other stakeholders, and test developers.

Standards Development Process. Preparing standards for each area involved the following steps:

1. **Prepare and orient the writing team.** Pearson assigned standards development specialists to draft and refine each set of standards based on their content expertise in the relevant standard area. Standards development specialists were oriented to the Indiana project and provided with necessary background materials (e.g., Indiana legislation and policy documents, Indiana Academic and Core Standards, Common Core State Standards, ISTE standards, national standards, and relevant national policy documents). The structure for the standards and the guidelines for preparing the standards were discussed. Pearson project management staff emphasized the importance of consistency across standards areas as well as the importance of preparing standards that were rigorous and clear, grounded in scientifically based research, and aligned with appropriate Indiana and national documents.

2. **Research.** Standards development specialists researched Indiana and national expectations for each standards area. They analyzed Indiana and national documents that were of particular importance to the standard area. Finally, they reviewed national sources that have utilized scientifically based research to obtain reliable evidence supporting the standards to be developed.
3. **Draft and review an outline.** Based on this research and on discussions with IDOE staff, standards development specialists prepared draft outlines of standards content, together with suggested topic areas for the essential elements of knowledge accompanying each standard. Project management staff reviewed the draft outline and made suggestions as needed to verify that the content was appropriate for the Indiana project.
4. **Expand the outlines into draft standards.** Standards development specialists then expanded each preliminary outline to address the full range of content to be included in the standards document, created a selected bibliography for each standards area, and prepared correlation tables documenting the alignment of each set of standards with relevant state and national documents.
5. **Internal review and editing of the standards.** Pearson staff conducted internal reviews of the draft standards for alignment and bias. The alignment review focused on confirming a link between the draft standards and knowledge and skills required of students in Indiana schools (the Indiana Academic Standards, Common Core State Standards). The alignment reviews promoted clarity, comprehensiveness, and coherence while preventing the introduction of irrelevant content and language into the standards.

Bias prevention and equity inclusion are essential components of Pearson procedures. Bias review involves excluding language and content that might disadvantage an individual on the basis of irrelevant background characteristics and including content that reflects the diversity of the Indiana population. Pearson reviewed the draft standards for fairness and sensitivity using the following Bias Review Criteria.

Indiana Draft Standards Bias Review Criteria	
Topic	Consideration
Content	Does any element of the standards contain content that disadvantages a person because of her or his gender, race, nationality, national origin, ethnicity, religion, age, sexual orientation, disability, or because of her or his cultural, economic, or geographic background?
Language	Does the language used to describe any element of the standards disadvantage a person because of her or his gender, race, nationality, national origin, ethnicity, religion, age, sexual orientation, disability, or because of her or his cultural, economic, or geographic background?
Offense	Is any element of the standards presented in such a way as to offend a person because of her or his gender, race, nationality, national origin, ethnicity, religion, age, sexual orientation, disability, or because of her or his cultural, economic, or geographic background?
Stereotypes	Does any element of the standards contain language or content that reflects a stereotypical view of a group based on gender, race, nationality, national origin, ethnicity, religion, age, sexual orientation, disability, or based on cultural, economic, or geographic background?
Fairness	Taken as a whole, are the standards fair to individuals regardless of race, gender, cultural background, or other personal characteristics?
Diversity	Does the list of standards permit appropriate inclusion of content that reflects the diversity of Indiana's population?

Section VI: Review and Revision of Draft Standards

Overview of review and revision process. Following the internal reviews by Pearson, the standards documents were reviewed by more than 500 Indiana teachers, teacher educators, curriculum specialists and other stakeholders during an iterative series of reviews. The purpose of these reviews was to gather information about the appropriateness, accuracy, clarity, and rigor of the standards. The reviews provided a mechanism through which the standards were further refined and customized to meet Indiana's needs. The following reviews were conducted during standards development.

- preliminary reviews of draft standard statements and their essential elements of knowledge by Indiana teachers, teacher educators, and curriculum specialists
- expanded reviews of all standards documents by additional Indiana teachers, teacher educators, and curriculum specialists
- review of select standards documents by the National Council on Teacher Quality (NCTQ)
- review of select standards documents by the Indiana Association of Colleges for Teacher Education (IACTE)

- review of all standards documents by the Advisory Board of the Division of Professional Standards (ABDPS)

Preliminary review of draft standards. Pearson conducted a preliminary review of the draft standard statements and the articulation of the standard statements into their essential elements of knowledge. The goal of the preliminary review was to have each standards document reviewed by up to three Indiana educators, including one teacher and one teacher educator.

The IDOE provided Pearson with the names of 200 Indiana teachers, teacher educators, and curriculum specialists to participate in the preliminary review. Pearson invited these 200 individuals to review one or more sets of standards. At least three educators were invited to review each set of standards, and the majority of the standards documents were reviewed by three or more Indiana educators.

Pearson established a secure Web site for the preliminary review of the draft Indiana educator standards and supplied reviewers with detailed instructions for accessing the Web site and the standards document(s) s/he was asked to review. Reviewers were asked to examine the draft standards document(s) and complete a response form providing feedback on the following topics.

Indiana Reviewer Response Criteria	
Topic	Consideration
Complete	Do the standards fully address content that a beginning educator in this field should know? Should any draft standards be deleted? Should any additional standards be included?
Significance	Do the essential elements of knowledge for each standard effectively define important content within each standard that a beginning educator in the field should know? Are there any important elements of knowledge, not already listed, that should be included?
Clarity	Are the draft standards and essential elements of knowledge clear, measurable, and specific?
Rigorous	Are the standards at an appropriately rigorous level of knowledge for beginning educators in this field?
Job-related	Do the draft standards reflect current content and instruction in this field as practiced in Indiana public schools?
Free of Bias	Are the standards free of non-essential content that might disadvantage a person because of her or his gender, race, nationality, national origin, ethnicity, religion, age, sexual orientation, disability, or because of her or his cultural, economic, or geographic background?
Coherence	Do the draft standards provide a coherent and unified vision of the knowledge and skills needed by beginning educators in this field?

Individuals who participated in the preliminary review of the draft standards were asked to provide written feedback to Pearson. Pearson reviewed the comments received from each reviewer, looked for consistent themes within and across fields, and considered whether suggested revisions were consistent with the IDOE'S expectations for the standards. Pearson sought input and clarification from both the IDOE and individual reviewers when needed. Pearson then incorporated revisions that were consistent with the IDOE's expectations and goals.

Expanded review coordinated by the IDOE. Once Pearson had revised the draft standards based on the preliminary review by Indiana educators, the IDOE coordinated an additional review of the draft standards. Some of the same educators who participated in the preliminary review of the standards, as well as additional Indiana teachers, teacher educators, and curriculum specialists, were contacted by the IDOE and asked to review specific standards documents, including the selected bibliographies and correlation tables. The IDOE invited approximately 287 individuals to participate in this expanded review of one or more standards documents. Efforts were made to include teachers and teacher educators from across the state.

The secure Web site established for the preliminary review of the draft Indiana educator standards was available for the expanded review. Pearson provided the IDOE with detailed instructions for accessing the Web site and the standards document(s). The IDOE then provided this information to its reviewers.

Individuals who participated in the expanded review of the draft standards were asked to provide written feedback to Pearson. Pearson reviewed the comments received from each reviewer, looked for consistent themes within and across fields, and considered whether suggested revisions were consistent with IDOE'S expectations for the standards. Pearson sought input and clarification from both the IDOE and individual reviewers when needed. Pearson then incorporated revisions that were consistent with the IDOE's expectations and goals.

NCTQ Review. Pearson provided access to the draft standards to the National Council on Teacher Quality (NCTQ). Pearson shared the feedback received from NCTQ with the IDOE and revised the draft standards as directed by the IDOE.

IACTE Review. The IDOE provided paper copies of the School Setting Developmental Standards – Elementary and the Elementary Education content standards for review by the Indiana Association of Colleges for Teacher Education (IACTE) at its October 2010 meeting. Representatives of IACTE reviewed the standards and provided written feedback to the IDOE. Pearson incorporated recommendations from IACTE as approved by the IDOE.

ABDPS Review. Members of the Advisory Board were given an opportunity to review the draft standards. Board members were given access to the Indiana educator standards located on the secure Web site. They provided written comments to Pearson. Pearson incorporated recommendations from Board members as approved by the IDOE.

Section VII: Standards Correlation Study

Overview. To provide additional verification of the alignment of the educator standards to appropriate Indiana and national standards, Pearson conducted a Standards Correlation Study. The study documented the alignment of the educator standards with the appropriate Indiana Academic Standards, the Common Core State Standards, the standards of the International Society for Technology in Education, and appropriate national standards.

Method. For each field, an independent content expert who was not previously involved in the development of the standards was asked to review the correlation table included with each set of standards. To complete the review, each content expert was provided with the draft standards for the field and copies of the state and national standards referenced in the correlation table.

Each content expert was asked to determine whether the alignments indicated between each Indiana educator standard and the state and national documents to which it had been correlated were accurate or needed adjustment. Content experts were instructed that an indication of correlation meant that the standards developer believed that the Indiana Educator standards addressed – in whole or in part – that section of the state or national standards document. Content experts noted any standards for which adjustments in the correlations were needed.

Results. Pearson reviewed any standards for which content experts indicated that adjustments were needed in the correlation table. Pearson revised the correlation tables as needed.

Section VIII: Standards Approval by ABDPS

Final versions of the Indiana Developmental and Content Standards for Educators were provided to the Indiana Department of Education on December 16, 2010. The Advisory Board of the Division of Professional Studies approved the educator standards at its meeting on December 21, 2010.

Section IX: Summary

Pearson worked with the IDOE to custom-develop high quality educator standards in 46 content areas and at five school setting developmental levels. The 51 Indiana Developmental and Content Standards for Educators are grounded in scientifically based research and are aligned with Indiana Academic Standards, Common Core State Standards, standards of the International Society for Technology in Education (ISTE), and other relevant national standards. They provide guidance concerning the IDOE's expectations regarding Indiana educator preparation and licensure.

Pearson gathered and analyzed background information to prepare draft standards documents. The standards documents were reviewed multiple times by several hundred Indiana educators, and by staff at the National Council for Teacher Quality, and refined by Pearson based on comments received from Indiana educators, the NCTQ, and the IDOE. Pearson conducted a Standards Correlation Study to verify the alignment of the standards with appropriate Indiana and national documents. The Advisory Board of the Division of Professional Studies approved the educator standards on December 21, 2010.