

**Testimony**  
**INTERIM EDUCATION COMMITTEE**  
**By Greg Gallagher, Assessment Director**  
**Department of Public Instruction**  
**September 21, 2015**

Mr. Chairman and Members of the Interim Education Committee:

I am Greg Gallagher, Assessment Director within the Department of Public Instruction. I have been asked to present an overview of the history of content standards in North Dakota and the current standards development process. I provide this written testimony for the public record. My presentation will be largely extemporaneous.

***State Standards within State Law***

Article VIII of the North Dakota State Constitution specifies that it is the responsibility of the legislative assembly to provide for a uniform system of free public schools throughout the state, beginning with the primary and extending through all grades up to and including schools of higher education. The Constitution states that the legislative assembly shall take such other steps as may be necessary to prevent illiteracy, secure a reasonable degree of uniformity in the course of study, and promote industrial, scientific, and agricultural improvement.

In the course of meeting its constitutional mandate, the Legislative Assembly has enacted certain statutes to secure a reasonable degree of uniformity in the course of study, including (1) declaring the state superintendent responsible for supervising the development of course content standards and the assessment of students (N.D.C.C. 15.1-02-04.3-4); (2) requiring that all approved schools meet curricular requirements set forth in state law (N.D.C.C. 15-1-06-06); (3) requiring each instructional unit in approved high schools to meet or exceed the state content standards (N.D.C.C. 15.1-21-02); and (4) requiring the annual administration of state assessments in prescribed subjects and grades that are aligned to the state's content standards (N.D.C.C. 15.1-21-08).

State law effectively identifies state course content standards as a foundational assurance for securing a reasonable degree of uniformity in the course of study statewide. Mindful of its role to secure uniformity of quality and content coverage for each course of study, the Department of Public Instruction, under the supervision of the state superintendent, has established uniform procedures that direct the development, review, and adoption of state academic content standards within defined courses of study.

### ***A Summary History of State Standards***

The current standing of state academic content standards as a critical component of educational support to schools has emerged over the course of the past thirty years. In response to perceived problems within the nation's education system, T.H. Bell, Education Secretary within the Reagan Administration, established the National Commission on Excellence in Education, which issued its seminal report, *A Nation at Risk: The Imperative for Educational Reform*, in April 1983. This report identified, among other measures, the need for states to strengthen graduation requirements, adopt more rigorous and measurable standards, enhance the length and quality of instructional time, improve teacher preparation, and establish accountability measures for achieving reforms. *A Nation at Risk* became a benchmark document, driving standards-based reform within state and federal education initiatives. But establishing traction and making progress on the report's recommendations proved difficult.

Following a period of national and state-level discussions but relatively ineffectual progress, President George H.W. Bush joined the collective membership of the National Governor's Association in Charlottesville, VA, in September 1989, to forge a commitment to establish broad national educational goals. In what President Bush later established in his America 2000 initiative, broad national education goals achieved a policy status, including assurances that by the year 2000 (1) every child starts school ready to learn; (2) graduation rates rise to 90%; (3) students demonstrate core competence leaving grades 4, 8, and 12; (4) students achieve world-class leadership in math and science achievement; (5) every American adult is literate and can compete in a global economy; and (6) schools are free of drugs and violence to secure learning. Learning competencies were now clearly specified as a national interest and voluntary state standards and assessment efforts were encouraged.

In 1994, adopting substantial elements of the America 2000 initiative, President Clinton and Congress reauthorized the *Elementary and Secondary Education Act of 1965*, under the title, the *Improving America's Schools Act (IASA)*. The IASA established a broad requirement for states to develop their own academic content standards in English language arts and mathematics, and to establish state-level assessments, within select grade spans, aligned to the state's academic content standards. To support states, the Clinton Administration and Congress funded voluntary, state-developed school improvement grant activities to help develop, in part, state-defined content standards and assessments. By the year 2000, most states, including North Dakota, had developed their own academic content standards and had made substantial progress in aligning tests to these standards.

North Dakota released its first English language arts content standards in 1995 and its first mathematics content standards in 1997. Each standards document was developed entirely by North Dakota educators and reflected achievement expectations from communities statewide. To provide advisory input from statewide education stakeholders, the North Dakota Department of Public Instruction in 1997 established an advisory committee, the *Standards, Assessment, Learning, and Teaching (SALT) Committee*, which recommended procedures to develop, implement, and evaluate state academic content standards and state assessments. These procedures were adopted by the state superintendent and remain largely in effect. Under the terms of these development procedures, the state proceeded to develop academic content standards in English language arts, mathematics, science, social studies, arts, foreign languages, library and technology literacy, health, and physical education.

In 2002, President George W. Bush and Congress reauthorized the *Elementary and Secondary Education Act of 1965*, under the title *No Child Left Behind Act (NCLBA)*. The NCLBA advanced further the requirement for states to establish and maintain high-quality academic content standards in English language arts, mathematics, and science, and to expand the quality requirements and grades included within a state's aligned assessments. The state accountability measures first introduced within the IASA were continued and further prescribed certain benchmark achievement goals. During this time period, the Department of Public Instruction proceeded to revisit and revise each academic content standards document, according to established procedures, to accommodate emergent trends and to meet the needs of local school districts.

In 2009, the Obama Administration provided to states the opportunity to apply for certain voluntary grant funding to support the advancement of certain education improvement initiatives, based on specified criteria, including the adoption of college and career readiness standards. Although North Dakota elected to not participate in these voluntary grants, a state-level advisory committee, convened to study the grant application, did support the state's consideration of advancing college and career readiness as a commendable initiative.

In 2009, the Council of Chief State School Officers and the National Governors' Association collaboratively pursued the voluntary engagement of participating states in the development, review, and adoption of a new generation of academic content standards in English language arts and mathematics, titled the *Common Core State Standards (CCSS)*. Under this initiative the CCSS provided a means for states to voluntarily address the perceived disparity among the states' various academic content standards and to articulate meaningful, shared college and career readiness expectations. North Dakota voluntarily participated in the

review of the development of the CCSS. In June 2010, the Department of Public Instruction convened two statewide content standards revision committees, one for English language arts and one for mathematics, to review the CCSS, along with other states' standards, to possibly amend the CCSS or draft entirely new standards apart from the CCSS. The committees conducted their work independently over a ten-month period and recommended to the state superintendent that the state adopt the CCSS as the state's official state standards, including the amended commentaries provided by the committees. In June 2011, the state superintendent announced the adoption of the state's newly revised academic content standards, based on the CCSS.

The Department of Public Instruction continues to periodically review and revise each set of academic content standards according to established procedures to ensure the currency of each document.

### ***The Purpose and Design of the State's Academic Content Standards***

The state's academic content standards are concise, declarative statements of what students are expected to know and be able to do within a content subject and at specified grade levels. Content standards declare educational learning objectives at benchmark stages in a student's development, leading to graduation expectations. Content standards establish guidelines for the later development of local curricula; however, content standards are not a curriculum and do not define or prescribe instructional practice. The *state* establishes state content standards. *Local school districts* determine local curriculum and instructional practices.

Federal law (ESEA, Section 1111(b)) protects the right of each state to set its own academic content standards and seeks assurances from the state that its self-determined standards are challenging and apply to all students, specify what children are expected to know and be able to do, contain coherent and rigorous content, and encourage the teaching of advanced skills.

As such, academic content standards are designed to be appropriately concise, specific, sequentially articulated and interrelated across grade spans, progressively challenging, and manageable. Content standards progress from skills of recognition, to identification, to use, to application across disciplines, to analysis, to evaluation, or to other higher-ordered, critical thinking activities appropriate for the subject matter. Content standards sometimes require the acquisition of knowledge or the demonstration of logical reasoning, critical thinking, or multi-step problem solving. Content standards may involve oral or written communication, constructive and detailed reading, procedural skill and fluency, quantitative analysis, measurement, artistic

expression, language acquisition, physical training, health skills, and more, all based on the content subject.

Content standards are simple statements, oftentimes consisting of an assumed subject (i.e., the student); an active verb denoting the learning activity sought; any qualifying language clarifying the intent of the activity; and a list of specific skills or content to be mastered. Refer to the Appendix for a listing of actual content standards statements excerpted from various, current North Dakota content standards documents. All state content standards documents are available at the following web address: <https://www.nd.gov/dpi/Administrators/assessment/unit/>.

Content standards provide a common reference or checklist for learning that ensures that all students will be provided a comparable opportunity to be exposed to and ultimately master content essential for the advancement of their education. Content standards provide a means to ensure instructional efficiency, accountability and overall school improvement. State content standards become the basis for securing a uniform system of education for all students, across all schools, within all communities in North Dakota.

### ***Content Standards Development Procedures***

For the past two decades, the North Dakota Department of Public Instruction has proceeded to develop and revise state academic content standards, through a clearly articulated process, predicated on the principle that education stakeholders need to actively engage in determining appropriately rigorous learning expectations for all students at all levels of education, leading to meaningful college or career readiness.

The North Dakota state academic content standards offer guidance in core content areas while, at the same time, allowing, indeed *encouraging*, a dynamic and living curriculum created at the local school district level. To assure educational relevance, the Department of Public Instruction seeks to develop academic content standards that integrate the best elements of historical state content standards and practices, standards documents developed nationally by professional education associations and other states, and other independent studies. The Department of Public Instruction seeks to periodically revise content standards as suggested by classroom and community experiences and expectations, and through the guidance of state and national education policymakers.

#### ***A. Governance Control***

General governing authority for the supervision and management of the state's academic content standards are specified in state law and supported further by various

provisions of federal law. North Dakota Century Code (NDCC 15.1-02-04(3-4)) specifies that, among other duties, the State Superintendent of Public Instruction shall supervise the development of course content standards and supervise the assessment of students. The *Elementary and Secondary Education Act of 1965*, as reauthorized under the title *No Child Left Behind Act of 2001*, Section 1111(b), specifies that each State shall demonstrate that it has adopted challenging academic content standards. The Department's standards development procedures provide for the proper management of both state- and federally defined activities.

The State Superintendent supervises all aspects of the state's academic content standards development process. This supervision includes establishing broad content design and process procedures, the administrative management of all academic content standards development projects, the approval and dissemination of all content standards documents, the evaluation of all elements of the content standards development process, and other related matters.

The Department of Public Instruction manages all academic content standards development activities, including the solicitation and selection of any required external professional consultants for the purposes of providing independent facilitation and research, the solicitation and appointment of content area standards committee membership, the design and conduct of external research surveys, the sponsorship of statewide solicitation of public comments, and the control of all contracting to support the objectives of the various content program efforts. The Department budgets sufficient funds and time to ensure a comparable effort across all academic content areas.

The State Superintendent establishes and maintains a statewide committee of representative education stakeholders, whose duty is to advise the Department of Public Instruction regarding all aspects of the design, development, implementation, and evaluation of the state's various content standards development projects and documents.

The responsibilities of the advisory committee include, but are not limited to, providing advice to the Department of Public Instruction regarding the following activities:

1. Designing, developing, implementing, and evaluating academic content standards for all specified content areas and corresponding academic achievement assessments;
2. Planning for the design, development, implementation, and evaluation of certain state assessments, aligned to the state's challenging academic content standards in English language arts, mathematics, and science;
3. Developing processes to support the implementation of the state's academic content standards and achievement assessments at the local district level;

4. Developing evaluation strategies and consequential validation studies to assess the impact of the state's academic content standards and achievement assessments on student and school outcomes;
5. Coordinating communication efforts to educators, policymakers, and the public regarding the development of the state's academic content standards, achievement assessments, and other related activities; and
6. Proposing initiatives that might enhance the long-term stability and improvement of the state's academic content standards development efforts.

The Department is currently reconfiguring the design and membership of the statewide advisory committee to meet future development and management needs.

#### *B. Content Standards Sequence*

The Department of Public Instruction manages all elements of the development of the state's academic content standards, including content area determination, grade level configurations, project development cycles, professional development and statewide consultation, budget controls, recommendations for approval, and project supervision.

The Department of Public Instruction reviews all proposals to develop content area standards and establishes a plan of action. The Department develops standards in the subject areas listed below:

1. The Arts, including dance, drama, music, and visual arts
2. English language arts;
3. World/Foreign languages;
4. Health;
5. Library and Technology;
6. Mathematics;
7. Physical Education;
8. Science;
9. Social Studies/Sciences, including history, economics, government, civics, geography, culture, and other areas as required;
10. English language learner proficiency;
11. Pre-kindergarten; and
12. Other subjects as determined appropriate.

Whenever external, national standards writing projects, representing specific content areas, publish prospective national standards documents or guidelines, these documents will be reviewed by the Department of Public Instruction for possible placement before an appropriate state content standards development committee, along with other appropriate state- or research-based proposals, for possible adoption, amendment, or rejection. If any content

standards committee were to recommend an external standards document for adoption, the document must be amended to meet certain format specifications, and include the title design for the North Dakota Department of Public Instruction, before it can ultimately receive the approval of the state superintendent.

All content standards development projects follow certain prescribed phases, including startup and draft preparation, approval and dissemination, and implementation and evaluation.

### *Startup and Draft Preparation*

Within the development and draft preparation phase, a content standards development committee is selected, members contracted, convened and trained. Committee members are nominated by local education leaders based on their teaching experience, content expertise, leadership background, and other related criteria. Training of committee members includes an overview of the state's development procedures, expectations of committee members, and instructions regarding the structure, format, and content of state academic content standards documents. Initial drafts are written, reviewed, revised, and distributed to education stakeholder groups, including schools and the public, for review and comment. Any subsequent drafts are revised and distributed to stakeholder groups, including the schools and the public, for review and comment. A preliminary final draft is prepared for approval and placed for dissemination on the Department's website.

### *Approval and Dissemination*

Within the approval and dissemination phase, the state superintendent approves the final standards document. A content standards document is posted on the Department's website for online dissemination, and public notice is forwarded to all school districts, libraries, universities, other education-related organizations, and the public. The Department offers technical assistance to school districts regarding the use of the standards document. Local school districts begin the process of drafting local curricula that are aligned to the state standards document.

### *Implementation and Evaluation*

Within the implementation and evaluation feedback phase, teachers and administrators use the standards document as the basis for standards-based curriculum development, instructional design, professional development, and evaluation. Teachers and administrators incorporate the standards documents into their school improvement planning. Teachers and

administrators submit recommendations to the Department regarding improvements for future standards document drafting. Continual feedback on the effectiveness of the standards document is provided through online reporting and training opportunities, regional and statewide education conferences, graduate programs, and long-term local curriculum mapping and development initiatives. The Department of Public Instruction compiles submitted recommendations for the improvement of standards documents to prepare for the next generation of content standards development activities.

### *C. Project Supervision and Budget*

The Department of Public Instruction monitors and manages the progress, focus, balance of effort, and budget of any content standards committee work. The statewide advisory committee may recommend procedural changes in project supports for consideration by the Department of Public Instruction. The Department assumes full responsibility for all writing projects.

The Department of Public Instruction appoints a project director to supervise all content standards project activities. The Department contracts with external content specialists or consulting organizations to assist the project director and content standards committee regarding content and formatting matters. The Department contracts with an external consultation organization to provide facilitation services throughout the revision project. The Department also contracts with an independent external evaluator to review the content and formatting of the standards document to assure subject-matter competence and adherence to state procedures.

### *D. Content Standards Committee Membership*

The Department of Public Instruction solicits nominations of content and instructional specialists statewide from K-12 schools, the university system, and other education stakeholder associations, to form a content standards committee. The Department applies a balanced matrix of criteria to establish a committee's membership. The size of content standards committees should be sufficient to ensure approximately 6-8 individuals per grade level, or at levels determined appropriate to meet unique needs, generally approximating 30 members. General consideration is given for a balanced representation of interests, including:

- a. School size;
- b. Gender;
- c. Geographic representation;

- d. Public school/private school (K-12 and post-secondary);
- e. Special education representation;
- f. Cultural diversity;
- g. Economic disadvantaged representation;
- h. English language learner representation;
- i. Library/technology literacy;
- j. Higher education teacher preparation programs;
- k. Post-secondary content specialists; and
- l. Non-educator, field content practitioner.

The Department issues contracts to all members of a content standards committee. The project director supervises the committee members. All committee members are held accountable to the provisions of the contract and may be dismissed for failure to meet these provisions. The contract specifies expected activities, time demands, the level of participation, and any restrictions required of the content area committee member. All expenses of committee members incurred related to the work of the project, including substitute teacher costs, are reimbursed at State rates. Committee members are paid a professional fee. All committee members are required to meet stated expectations, including adherence to committee procedures, respect for committee members and the writing process, and honoring project director instructions.

#### *E. Professional Consultation and Research*

The Department of Public Instruction may contract with an external consulting organization to provide research support services throughout the content standards revision project. The extent of any contracting services will be determined by the availability of funding to support any research activity. The Department may provide special consideration to the state's appointed Regional Educational Laboratory or Comprehensive Center, to ensure an integrated research-driven approach to the project's consultation. Certain research activities may include a survey of prospective resources, a comparative gap analysis among identified source documents, process facilitation, and other matters as required.

#### *F. Content Standards Formatting*

To achieve uniformity of content and format within and among content standards documents, while accounting for unique presentations of certain content subjects, the Department of Public Instruction applies certain format presentation rules regarding the title of documents, authorship claims, revision dates, use of the state seal, copyright notifications, identification of project staff and committee members, publication availability, table of contents, the foreword, the introduction, the intended audience, definitions, the structure and format of

standards statements, standards numbering nomenclature, modification statements, summary statements, equity policy, and special features, among other items.

***Balancing Uniformity and Variance Among Content Standards Documents***

The Department of Public Instruction seeks to provide for a uniform manner of adopting academic content standards across all content areas. Providing such uniformity enhances the prospects that all content areas will be respected for their value within the wider curriculum and integrated within a coherent curricular structure for local school district adoption statewide.

No single method may ever allow for the unique challenges inherent within each content area. The Department of Public Instruction’s content standards development procedures allow for and encourage an appropriate level of individualization among the content areas to enhance an authentic expression of a content standard’s domain. The collaboration of content standards committees, statewide advisory committees, and the Department of Public Instruction, in addition to the contributions of public comments, support a dialogue that will produce the best academic content standards for our educators and students. To enhance the authenticity of each content standards writing process, the Department of Public Instruction adopts a spirit of accommodating variances, where appropriate, and allowing these procedures to evolve to meet the needs of our state’s educators and the public to develop the best content standards documents possible.

Mr. Chairman, this completes my testimony. I am available to address any questions from the committee. Thank you.

## **APPENDIX**

### **Appendix A: Examples of Academic Content Standards Across Disciplines and Grade Levels**

### **Appendix B: Examples of Standards Gap Analysis**

## APPENDIX A

### Examples of Academic Content Standards Across Disciplines and Grade Levels

<b>Examples of English Language Arts/Literacy Content Standards (2011)</b>		
<b>Grade</b>	<b>Standard</b>	<b>ND Annotation</b>
1	<p>Reading - Phonics and Word Recognition</p> <p>RF.3 Know and apply grade-level phonics and word analysis skills in decoding words.</p> <ul style="list-style-type: none"> <li>a. Know the spelling-sound correspondences for common consonant digraphs.</li> <li>b. Decode regularly spelled one-syllable words.</li> <li>c. Know final -e and common vowel team conventions for representing long vowel sounds.</li> <li>d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.</li> <li>e. Decode two-syllable words following basic patterns by breaking the words into syllables.</li> <li>f. Read words with inflectional endings.</li> <li>g. Recognize and read grade-appropriate irregularly spelled words.</li> </ul>	RF.1.3.c: Common vowel teams include: ai, ay, ee, ea, oa.
6	<p><b>Literature - Craft and Structure</b></p> <p>RL.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.</p>	Figurative language may include simile, metaphor, hyperbole, personification; sounds include onomatopoeia, rhyme, rhythm, etc.
9-10	<p><b>Writing - Research to Build and Present Knowledge</b></p> <p>W.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.</p>	Access media (e.g., television, film, music, electronic databases, videos, DVDs, comics, visual and performing arts, newspapers, and periodicals) for a variety of purposes.

Examples of Mathematics Content Standards (2011)		
Grade	Standard	ND Annotation
3	<b>Geometry - Reason with shapes and their attributes</b> 3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	
8	<b>Creating Equations - Work with radicals and integer components</b> 8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$ , where $p$ is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.	Example: $x^2 = 25, \sqrt{x^2} = \sqrt{25}, x = \pm 5$ Example: $x^3 = 125, \sqrt[3]{x^3} = \sqrt[3]{125}, x=5$
HS	<b>Creating Equations - Create equations that describe numbers or relationships</b> HS.A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	Example: The cost to rent a car is \$50 plus \$0.25 per mile driven. Write and graph an equation to represent the situation. (ND)

Examples of Science Content Standards (2006)		
Grade	Standard	Benchmark Expectations
3	<b>Standard 2: Students use the process of science inquiry</b>	ABILITIES NECESSARY TO DO SCIENTIFIC INQUIRY 3.2.1. Select appropriate scientific tools (i.e., magnifiers, thermometers, rulers, balances) for investigations.
7	<b>Standard 1: Students understand the unifying concepts and processes of science</b>	SYSTEMS 7.1.2. Identify the components (e.g., tissues, organs, living and nonliving things) within a system (e.g., body systems, ecosystems).
9-10	<b>Standard 3: Students understand the basic concepts and principles of physical science</b>	PROPERTIES OF MATTER 9-10.3.1. Classify elements according to similar properties. (e.g., metal, nonmetal, solids, liquids, gases).

Examples of Health Content Standards (2008)		
Grade	Standard	Benchmark Expectations
4	<b>Standard 2: Students understand concepts related to the promotion of health and the prevention of disease</b>	4.2.2 Explain the relationship between food choices and personal health (e.g., unhealthy food choices contribute to high cholesterol, diabetes, heart disease, high risk of cancer, high blood pressure).
7-8	<b>Standard 6: Students demonstrate the ability to access, use, and evaluate health-related information, products, and services</b>	7-8.6.2 Analyze the validity of common health information, products, and services (e.g., brand-name versus generic medicine, health fads, weight loss fads, tanning booths).
9-12	<b>Standard 5: Students demonstrate the ability to use decision making and goal setting skills to enhance health</b>	9-12.5.6 Explain consequences regarding the use, misuse, and abuse of alcohol, tobacco, and other drugs (e.g., adverse consequences for individuals, families, and the community).

Examples of Library and Technology Content Standards (2012)		
Grade	Standard	Annotation
K-5	<b>Strand: Information and Inquiry</b> K-5.IAI.3 Recognize and use appropriate library print, digital, and other resources with adult guidance.	K-2 Example With assistance, use online maps, directories, web pages and globe models to locate businesses in the community. With assistance, use the library catalog to find and choose a book from the dinosaur section in the library.  3-5 Example Use print and digital resources, such as maps and globe models, search engines, encyclopedias, and almanacs, to learn about and trace the journeys of old world explorers.
6-8	<b>Strand: Personal Learning and Growth</b> 6-8.PLG.4 Demonstrate appreciation and self-motivation as a reader by seeking information for personal learning and enjoyment.	Example Identify a chosen hobby and find resources with information about it.

### Examples of Library and Technology Content Standards (2012)

Grade	Standard	Annotation
9-12	<b>Strand: Media and Technology Literacy</b> 9-12.MTL.1 Define and use grade-appropriate media and technology terminology in context.	Examples Create an English-to-Spanish technology dictionary for exchange students. Teach components of web design to peers. Select compatible movie file types. Use file format conversion tools.

### Examples of Arts Content Standards (2000)

Grade	Standard	Benchmark Expectations
5-8	<b>Dance Standard 4: Dance and Thinking Skills</b> Students apply critical and creative thinking skills in dance.	8.4.3 Know the possible aesthetic criteria for evaluating dance.
9-12	<b>Dance Standard 5: Dance, History and Culture</b> Students understand the historical development of dance and its relationship to various cultures	12.5.1 Know the similarities and differences among various contemporary theatrical forms of dance.
5-8	<b>Drama: Standard 1 – Dramatic Literature</b> Students comprehend a wide variety of dramatic literature.	8.1.3 Understand the construction elements of dialogue and action.
9-12	<b>Drama: Standard 2 – Acting</b> Students use fundamental acting skills	12.2.2 Know various classical and contemporary acting techniques and methods.
5-8	<b>Music: Standard 4 – Composition</b> Students compose and arrange music with specified guidelines.	8.4.2 Arrange simple pieces for voices or instruments other than those for which the pieces were written
9-12	<b>Music: Standard 7 – Evaluating Music</b> Student evaluate music and music performances.	12.7.2 Evaluate a given musical work in terms of its aesthetic qualities.
5-8	<b>Visual Arts: Standard 2 – Structure and Function</b> Students understand how works of art are structured and how visual art has a variety of functions.	8.2.1 Know the effects of visual art structures and functions.
9-12	<b>Visual Arts: Standard 4 – Visual Art History and Culture</b> Students understand the visual arts in relation to history and culture.	12.4.1 Understand works of art among a variety of historical and cultural contexts in terms of characteristics, functions, and purposes of visual art.

### Examples of Foreign Language Content Standards (2001)

Grade	Standard	Benchmark Expectations
End of grades K-8 or 7-12	<b>Standards Area 1 –Communication</b> Communicating in languages other than English. Standard 1.3- Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.	1.3.1 Write and present short messages in response to given situations (e.g., write post cards, personal notes, phone messages, directions, etc.)
End of grades K-8 or 7-12	<b>Standards Area 2 – Cultures: Gaining knowledge and understanding of other cultures.</b> Standard 2.2 – Students demonstrate an understanding of the relationship between the products and the perspective of the cultures studied.	2.2.5 Evaluate the contributions that the target language and culture make to our society and the world (e.g., medicine, technology, arts, and family traditions).

### Examples of Social Studies Content Standards (2007)

Grade	Standard	Benchmark Expectations
4	<b>Standard 2: Important Historical Events</b>	4.2.4 Use chronological order and sequence to describe the cause-and-effect relationships of historical events and periods in North Dakota (e.g., how the railroads led to settlements in the state).
7	<b>Standard 2: Important Historical Events</b>	7.2.1 Identify major historical events and issues (e.g., conflicts and resolutions, natural resources) within regions of the world and their impact.
9-12	<b>Standard 2: Important Historical Events</b>	9-12.2.2 Evaluate the impact of various factors that led to the transformation of the nations (e.g., imperialism, industrialization, immigration, political/social reforms, urbanization, mechanization of agriculture, changing business environment).
4	<b>Standard 4: Government and Citizenship</b>	4.4.1 Identify the roles, rights, and responsibilities of a citizen in North Dakota (e.g., obedience to the laws, the right to vote).
7	<b>Standard 4: Government and Citizenship</b>	7.4.1 Compare the rights and responsibilities of citizens from a variety of countries (e.g., United States, Indonesia, Iran, Australia, India, China, Germany, Poland, Brazil, Ghana).
9-12	<b>Standard 4: Government and Citizenship</b>	9-12.4.3 Analyze the content and context of documents, events, and organizations that influenced and established the United States (e.g., Magna Carta; English common law; Petition of Right, English Bill of Rights; 1st and 2nd Continental Congresses, Common Sense; Declaration of Independence, American Revolution Articles of Confederation, Constitutional Convention; Federalist Papers, Anti-Federalist Papers; U.S. Constitution, Bill of Rights).

### Examples of Physical Education Content Standards (2015)

Grade	Standard	Benchmark Expectations
4	<b>Standard 4:</b> Exhibits responsible personal and social behavior that respects self and others	<b>Rules &amp; etiquette</b> Exhibits etiquette and adherence to rules in a variety of physical activities. (S4.E5.4)
7	<b>Standard 3:</b> Demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness	<b>Fitness knowledge</b> Describes the overload principle (FITT formula) for different types of physical activity, the training principles on which the formula is based and how the formula and principles affect fitness. (S3.M11.7)
9-12	<b>Standard 2:</b> Applies knowledge of concepts, principles, strategies and tactics related to movement and performance	<b>Movement concepts, principles &amp; knowledge – Level 1</b> Applies movement concepts (e.g., describes the speed/accuracy trade-off in throwing and striking skills) and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a self-selected skill in lifetime activities, dance and rhythm, and fitness activities. (S2.H2.L1)

## APPENDIX B

### Examples of Standards Gap Analyses

<b>Examples of English Language Arts/Literacy Content Standards Gap Analysis</b>			
<b>Grade</b>	<b>Current Standard (2011)</b>	<b>Previous ND Standard (2005)</b>	<b>Comments</b>
1	Phonics and Word Recognition RF.3 Know and apply grade-level phonics and word analysis skills in decoding words.	1.2.8 Use knowledge of phonics to decode words.	Strong alignment between current and previous standard.
7	Reading Standard for Literature – Craft and Structure 7.RL.5 Analyze how a drama’s or poem’s form or structure (e.g., soliloquy, sonnet) contributes to its meaning.	9.2.2 Identify the organizational features of fiction, drama, and poetry i.e., stanza, act, scene, chapter, verse, and article.	Content is similar, with some difference in emphasis and phrasing. Current content is in grade 7. Previous content was in grade 9. Current standard is more rigorous because it requires students to analyze organizational features.
9-10	<b>Writing – Text Types and Purposes</b> 9-10.W.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	11.1.7. Evaluate the research process and develop strategies for improving it e.g., correct use of research format, accuracy of research, organization of information and use of sources.	Current content is in grades 9-10. Previous content was in grade 11.

Examples of Mathematics Content Standards Gap Analysis			
Grade	Current Standard (2011)	Previous ND Standard (2005)	Comments
3	<p><b>Geometry</b> - Reason with shapes and their attributes.</p> <p>3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	3.2.1 Compare physical attributes of two-dimensional shapes, i.e., square, triangle, rectangle, and parallelogram	Strong alignment between current and previous standard. Current standard is more rigorous.
		4.2.1 Analyze and describe the attributes of two- and three-dimensional shapes, ((i.e., circle, squares, trapezoid, rhombus)	Content is similar, with some difference in phrasing and emphasis. Current content is in grade 3. Previous content was in grade 4.
8	<p><b>Expressions and Equations</b></p> <p>8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form <math>x^2 = p</math> and <math>x^3 = p</math>, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that <math>\sqrt{2}</math> is irrational.</p>	8.1.3 Identify perfect squares 1 to 144 and approximate square roots	Strong alignment between current and previous standard.
HS	<p><b>Create equations that describe numbers or relationships.</b></p> <p>HS.A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</p>	<p>11-12.5.2 Generate graphs of a variety of functions (i.e., linear, quadratic, polynomial, absolute value, and exponential), using technology when appropriate.</p> <p>9-10.5.7 Develop algebraic expressions, equations, or inequalities involving one or two variables to represent relationships (e.g., given a verbal statement, write an equivalent algebraic expression or equation) found in various contexts (e.g., time and distance problems, mixture problems)</p>	<p>Strong alignment between current and previous standard.</p> <p>Current standard includes more than two variables.</p>