To collect baseline data about how K-12 standards were being implemented in North Dakota, a standards implementation survey was sent electronically to all school plants and to curriculum leaders across the state in the spring of 2002. Responses were received from 253 teachers, administrators, and curriculum coordinators representing approximately 110 school districts. In general, the survey found that standards implementation was being done on a partial level. A simple majority of schools used curriculum and instruction designed around standards, but understanding and use varied. A greater percentage of schools was using assessments aligned with standards periodically to inform practice. (Author/SLD)
K-12 Standards Implementation in North Dakota

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North Dakota Education Standards and Practices Board
Abstract

To collect baseline data in determining how K-12 standards were being implemented in North Dakota, a standards implementation survey was sent electronically to all school plants and to curriculum leaders across the state in the spring of 2002. Two hundred fifty-three usable responses were received from a sample comprised of teachers, administrators, and curriculum coordinators. In general, the survey found that standards implementation was being done on a partial level. A simple majority of schools were using curriculum and instruction designed around standards, but understanding and use varied. A greater percentage of schools were using assessments aligned with standards periodically to inform practice.
K-12 Standards Implementation in North Dakota

The standards-based reform movement has remained popular nationwide (Betts & Costrell, 2001) with many successful ventures resulting in higher academic achievement for students. However, there have been failures at implementation too (Finn & Kanstoroom, 2001). A recent study found the potential benefits of standards will not be realized if the instruction that students receive has been inadequate (Fox, 2001).

States have made various amounts of progress in the arduous implementation of standards (Grissmer & Flanagan, 2001). Washington State was one of the first states to implement the standards reform movement in the 1990s. Several years of experience have resulted in the documentation of some common characteristics and strategies for success. Among others, Hill and Lake (2002) found that whether or not a school improved was dependent upon the response by the educators to the standards. Specifically, “a coherent and coordinated effort on the part of the entire school instead of isolated responses of individual teachers” was required (p. 229). Moreover, Hill and Lake (2002) strongly advised that:

schools that did not improve were passive and fragmented. Teachers often tried to improve instruction, but each went his or her own way. Schoolwide collaboration proved difficult and principals could not—or did not try to—overcome long-established patterns of teacher isolation. School leaders often took the attitude that someone else (that is, the district or the state) was responsible to show teachers how to improve and align instruction with the new standards and assessments. (p. 203)

North Dakota standards-based reform has lived in the context of a low-stakes, local-control environment in a state that has been large geographically and small in population. The K-12 student enrollment reported for the 2001-02 term at 513 K-12 school plants was 114,261.
including public, non-public, BIA, and state institution schools. These students were served by 10,561 licensed education personnel. Enrollment in K-12 schools had declined by approximately 5-6% over the past two years. Consequently, survival issues as well as quality issues created many dynamics for schools and policy makers (North Dakota Department of Public Instruction, 2001).

K-12 standards, school approval and accreditation, and student testing have fallen within the statutory authority of the North Dakota Department of Public Instruction (DPI). However, there has been no systemic reform agenda officially adopted by the state through legislation or collaborative effort of state agencies. There have been, instead, multiple approaches to educational improvement.

The State of North Dakota had curriculum guidelines for elementary and secondary education prior to the renewed emphasis on standards-based reform in the early 1990s, but the major work to change from suggested curriculum guidelines to performance-oriented standards, which framed the current documents, began in 1994 with the federal funding of a grant to develop standards and benchmarks in the area of English language arts.

When North Dakota began its standards work, many professional associations’ national standards had not yet been completed. As a result, the first sets of standards took considerably more effort and funds to complete than those developed later, after national models were available for review. As more national professional associations developed standards with performance indicators and rubrics, the state standards developers were able to benefit from reviewing that work.

Practitioners from P-12 and higher education, professional associations, the DPI, the North Dakota Curriculum Council (now the North Dakota Curriculum Initiative, NDCI), and the
MidContinent Regional Education Laboratory (McREL) worked together from 1994-2002 to develop the following K-12 standards:

Content Standards: Arts, English Language Arts, Foreign Language, Health, Mathematics, Library/Technology Literacy, Physical Education, Science, and Social Studies; Achievement Standards: Dance, Drama, English Language Arts, Mathematics in grade 4, 8, and 12, Music, Physical Education, Social Studies, and Visual Arts; State Assessments: English Language Arts and Mathematics (North Dakota Department of Public Instruction, 2002)

The North Dakota Century Code has articulated graduation requirements for students in terms of courses or units required in subjects areas only. Although most of the larger schools have administered tests to gather student data required for their school accreditation or federal programs, the first real mandate for statewide student testing was passed by the North Dakota Legislature in 2001. The 2001 law (NDCC 15.1-21-08 through 15.1-21-11) required testing in reading and mathematics in at least one grade level per year within grade spans 3-5, 6-9 and 10-12. The test had to be aligned to the state standards for reading and mathematics, and the results compiled, disaggregated, and published by the DPI (North Dakota Department of Public Instruction, 2001).

In summary, activity in the state of North Dakota in the past several years, with regard to K-12 standards-based curriculum, has been on an individual, isolated level. It has appeared that each group, council or school district has been working alone on activities and goals to enable all students to achieve challenging standards. This has subsequently produced a number of independent pockets of curricular activity that has been disjointed and lacks unity, strength, and mutual support. The problem has been a lack of a unified system. Some of the larger school
districts in the state and smaller schools with strong leadership teams have made great strides in mapping and aligning their curriculum. They have had current projects emphasizing content standards and benchmarks for each appropriate grade level. Others had yet to take any steps toward the same. Thus the prevailing question was, how are K-12 standards being implemented in North Dakota?

In the spring of 2002, a collaborative venture was made to answer this question. The NDCI and the Education Standards and Practices Board (ESPB) conducted an on-line survey. The NDCI was established in the fall of 2000 to bring together the various groups and individuals associated with curriculum in North Dakota to focus on curricular issues, best practices, and research; to promote collaboration; and to provide equitable access by all to sustained, intensive high-quality professional development that is aligned to challenging state content and achievement standards. The ESPB was created as an independent professional board in 1995 for state teacher licensing.

The purpose of the survey was to gather information regarding the use of the North Dakota standards and benchmarks documents and national professional association standards (e.g., NCTM, NCSS, NCTE, etc.) in North Dakota schools. The research questions were the following:

1. Are North Dakota schools using the North Dakota standards and benchmarks documents in curriculum development?
2. Are North Dakota schools using the North Dakota standards and benchmarks documents in instruction?
3. Are North Dakota schools using the North Dakota standards and benchmarks documents in assessment?
As the survey was the first of its kind in terms of content and scope, the results provided baseline data for how North Dakota schools were implementing the North Dakota standards. The information was compiled to inform grant writing, assess professional development needs, and advise on state technical assistance needs.

Method

The survey was created in an electronic format and placed on-line at a specific web address that was linked to the NDCI website. In order to break up the length of the survey, make it more user-friendly, and reduce the amount of necessary scrolling, the survey was split into three parts. Part one contained questions on curriculum alignment with standards, part two included questions on instructional alignment with standards, and part three had questions on assessment alignment with standards. After each part was completed, participants were prompted to submit that part's information. After clicking the submit button, participants were then presented with the next part of the survey. Each participant who completed the survey was automatically provided a computer-generated, random number (pass code) on the first page to remember to use in case of a computer crash or power failure. Participants who experienced a connection disruption were able to input the pass code to be able to complete the remaining parts of the survey. After participants clicked the submit button, another web page appeared to thank them for their participation.

Electronic distribution lists of educators (e.g., teachers and administrators) in public K-12 schools in North Dakota were compiled from the North Dakota Education Association, the state network of Teacher Centers, the DPI, the NDCI, and the North Dakota Council of Educational Leaders.
An initial email cover letter was sent inviting participation in the survey and providing a hyperlink to the survey web page. After two weeks, an electronic reminder was sent again inviting participation. Quantitative and qualitative data submitted by the participants completing the on-line survey were automatically downloaded to a server file, which was then converted into a Microsoft Excel database file and a Microsoft Word text file, appropriate to the type of data received. After one month, the data were cleaned and a total of 253 responses were usable. Participants included 86 administrators, 4 counselors, 26 coordinators/directors, and 84 teachers. There were 53 individuals who elected not to identify their role or job title. This sample of participants represented approximately 110 school districts, including four parochial school districts. The sample of quantitative data was analyzed with assistance from Statistical Consulting at North Dakota State University using descriptive statistics.

Results

To answer the three research questions of this study, three specific questions were designed as self-ranking rubrics and incorporated in the survey. Question #8 from the survey was on the use of standards in curriculum, question #13 concerned the use of standards in instruction, and question #27 was about the use of standards in assessment.

The first research question of this study was, Are North Dakota schools using the North Dakota standards and benchmarks documents in curriculum development? The responses from participants to question #8 from the survey provided answers to the research question.

Question #8 from the survey asked, Which description given below best reflects the use of standards in curriculum at your district or school? A set of four options, or levels, was provided from which the participant selected. The descriptions of each level for question #8 were (4) Our curriculum is designed around specified state or professional association standards.
Teacher and parents understand that students will be expected to meet standards at an acceptable level; (3) Our curriculum is designed around specified state or professional association standards. Teachers and parents understand that student performance is compared to and measured against a range of levels of performance to inform practice; (2) Our curriculum is designed around specified standards, but understanding and use of the standards by classroom teachers varies; and (1) Our curriculum was not specifically designed to align with standards.

Table 1 summarizes the responses from participants answering question #8 from the survey.

Table 1

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<tr>
<th>Selected Rubric Level</th>
<th>Frequency</th>
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<tr>
<td>4</td>
<td>41</td>
<td>17.01</td>
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<tr>
<td>3</td>
<td>25</td>
<td>10.37</td>
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<tr>
<td>2</td>
<td>142</td>
<td>58.92</td>
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<tr>
<td>1</td>
<td>33</td>
<td>13.69</td>
</tr>
</tbody>
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A majority (58.92%) of the respondents placed themselves on the second level of the rubric. This indicates that a simple majority of North Dakota schools have aligned North Dakota standards and benchmarks to curriculum, yet understanding and use by classroom teachers varies. Furthermore, 17.01% reported themselves on the highest level of the rubric, level 4. This level meant that the curriculum has been aligned to standards and that there was understanding and use of that curriculum by teachers and parents.
The second research question was, Are North Dakota schools using the North Dakota standards and benchmarks documents in instruction? The responses from participants to question #13 from the survey provided answers to this research question.

Question #13 from the survey asked, Which description given below best reflects the use of standards in instructional practices at your district or school? A set of four options, or levels, was provided from which the participant selected. The descriptions of each level for question #13 were (4) Instruction is designed to directly address and enhance concepts in our standards and is varied to assist all students in meeting standards at an acceptable level; (3) Instruction is designed to address and enhance concepts in our standards and student performance is compared to and measured against a range of levels of performance to inform and refine instructional practices; (2) Some educators design instruction to address concepts in our standards, but understanding and use of instructional strategies to enhance learning of specific standards concepts varies; and (1) Methods and strategies of instruction are not thought of as directly related to concepts in standards. Table 2 summarizes the responses from participants answering question #13 from the survey.

Table 2

<table>
<thead>
<tr>
<th>Use of Standards in Instructional Practices</th>
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<td>Selected Rubric Level</td>
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<td>4</td>
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Again, a simple majority of respondents (63.27%) reported themselves to be on the second level of the rubric, and 14.69% selected the top level 4. Most schools in North Dakota have some educators who design instruction according to standards, but their understanding and use of instruction to assist students in achieving standards varies.

The third research question was, Are North Dakota schools using the North Dakota standards and benchmarks documents in assessment? The responses from participants to question #27 from the survey provided answers to this last research question.

Question #27 from the survey asked, Which description given below best reflects the alignment of standards and assessments at your district or school? A set of four options, or levels, was provided from which the participant selected. The descriptions of each option for question #27 were (4) Assessments used to benchmark student progress are aligned with standards and all students are expected to meet standards at an acceptable level; (3) Assessments used to benchmark student progress are aligned with standards and student performance is compared to and measured against a range of levels of performance to inform practice; (2) Assessments are aligned with standards, but are not used to benchmark student progress in a consistent manner; and (1) Assessments are not currently aligned with standards. Table 3 summarizes the responses from participants.
Table 3

*Use of Standards in Assessment*

<table>
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<th>Selected Rubric Level</th>
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<tbody>
<tr>
<td>4</td>
<td>28</td>
<td>11.67</td>
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<tr>
<td>3</td>
<td>49</td>
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<td>2</td>
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<td>33.75</td>
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<td>1</td>
<td>82</td>
<td>34.17</td>
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Respondents' reports were more evenly distributed over the first three levels of the rubric for this question than for the previous two questions. Here 20.42% selected level 3, 33.75% chose level 2, and 34.17 picked level 1. Level 4 was selected by 11.67% of the participants.

**Discussion**

The majority of schools rank themselves at level 2 on the 4-point rubrics for each of the three questions regarding the use of standards in curriculum, instruction, and assessment. But 16%, 14%, and 11%, respectively, rank themselves at level 4, the highest level. This indicates that there are pockets of activity where schools or school districts have taken significant strides in the implementation of standards. At least for a self-reporting survey, the administrators, teachers, and coordinator/directors have a very positive perspective on the standards-based educational reform work that has been achieved.

Nevertheless, while alignment of curriculum, instruction, and assessments with standards has taken place, there seems to be a significant lack of understanding and use of the standards-based curricular documents, instructional strategies, and assessment tools. It is possible that there is simply a lack of professional development around how to implement standards at the classroom level. Or it may be that there is not a definite and systematic way of monitoring
whether teachers are actually using standards in their classroom teaching. This latter possibility is a weaker argument due to the number of teachers who responded to the survey. As classroom teachers, their input is a vital account of the nature of the actual implementation of standards-based education.

It is also a significant point that the North Dakota legislature has not mandated the implementation of standards. Since North Dakota is a state with local control of curriculum, the state-developed standards and assessments are voluntary, used primarily in a standards-referenced mode to inform local curriculum efforts. The differences in individual survey responses can be accounted for in as much as there is almost no high stakes attached to assessments, resulting in a wide range of stages of implementation from school to school and subject area to subject area.

A statewide picture of how standards-based reform efforts have been impacting schools was not previously available since there has not been any direct state reporting mechanism for this information. While this survey relied on self-reporting and self-ranking, the information provides useful insight into the strengths and weaknesses in North Dakota’s current status of standards implementation and the necessary elements for future progress.

It is recommended that, based upon the findings of the research literature and the results of this study, North Dakota schools place their emphasis and resources into the professional development of teachers in the classroom to properly implement the standards and benchmarks in the areas of curriculum, instruction, and assessment. Lack of professional development for teachers to understand and gain skills in the implementation of standards at the classroom-level only spells doom for the standards reform movement in North Dakota. Lack of unity and a sporadic, isolated, fragmented, and individual activity concerning the implementation of
standards is a weak approach that will only confuse and frustrate students, parents, and educators themselves.

Furthermore, schools and school districts need to conduct their own surveys in a valid and reliable fashion to adequately assess their level of standards implementation according to the rubric used in this study. This will give them an initial reference point to work from as they strive to implement standards in their own classrooms, schools, and districts. It is our recommendation that North Dakota schools target the third level of the rubric.

Participants of this study noted a definite need for support through the change process. They need more time, professional development days, and funds to support the standards-alignment work. Moreover, teachers value and commit when they see the direct benefit for their students in hands-on ways in the classroom. It will take strong leadership at the legislative, state, district, school, and classroom levels to support the implementation of standards in order that every child achieve the challenging state content and achievement standards of North Dakota.
References


Title: K-12 Standards Implementation in North Dakota

Author(s): Justin J. Wageman, Deb Jensen

Corporate Source: North Dakota State University, School of Education

Publication Date: presented 10-11-02

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