MINNESOTA DEPARTMENT OF

Children, Families & Learning

Report on Graduation Standards

Report To the Legislature

as required by M.S. 120B.3502

Minn. Stat. 120B.02
Minn. Stat. 121.11 Subd. 7c

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DEPARTMENT OF

Children, Families & Learning

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Report on Graduation Standards

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Upon request, this report can be made available in alternative formats.

MINNESOTA STATE BOARD OF EDUCATION

Date: January 15, 1999

TO: Representative Harry Mares, Chair, House Education Committee
Representative Alice Seagren, Chair, House K-12 Education Finance Division
Senator Larry Pogemiller, Chair, Senate K-12 Education Committee

FROM: Susan Holderness, President
Minnesota State Board of Education

RE: 1999 Legislative Report on Graduation Standards

The State Board of Education forwards the attached draft 1999 Legislative Report on the Development and Implementation of the Graduation Standards, pursuant to the statutory requirement in Minnesota Statutes, 121.11, subd. 7c (f). Due to untimely submission of the draft report by the Department of Children, Families & Learning for board review before the January 15, 1999 deadline, the State Board of Education is forwarding the report as developed by the department, without comment or recommendation at this time. The board has not approved the report and would like to reserve the right to do further review and identify issues and perspectives to be addressed at the board's February 9, 1999 meeting.

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1999

Report on Graduation Standards

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Cost Estimate for Preparing this Report

The 1994 Legislature enacted, in Chapter 559, Section 1, a provision which provides as follows:

"A report to the legislature must contain, at the beginning of the report, the cost of preparing the report, including any costs incurred by another agency or another level of government."

The following provides the estimated cost incurred in the preparation of this report. This report provides information that the Minnesota Department of Children, Families & Learning already collects as part of its normal business functions. Therefore, the cost information reported below does not include the cost of gathering and analyzing the data, but rather is limited to the estimated cost of actually preparing this report.

Funding for this report:

The graduation standards project received no appropriated funds for this biennium. All costs, personnel, editing, producing and printing were paid from agency funds.

The following is an estimate of the cost incurred by the Minnesota Department of Children, Families & Learning to produce this report: $4,170. This is the total estimated cost of preparing the report.

Summary of Progress Towards Implementation of the Results Oriented Graduation Rule

To meet the demands of the 21st Century, Minnesota is focusing on both the basics – the 3Rs of reading, writing, and arithmetic – and on the higher levels of information and skills that our students need to succeed in this changing world.

Past state graduation requirements focused on the time (x hours per credit) students spent in the classroom. The new standards focus on what students know and can do. In standards based education the instruction, assignments and assessments of student achievement are squarely focused on what and how well students are learning. Teachers, students, and parents have clear expectations for student achievement.

Minnesota's Graduation Standards have two components, the Basic Standards and the High Standards. The Basic Standards are a "safety net" to make sure that no student graduates without learning the basic skills needed to live and work in today's society. Students must pass tests in reading, mathematics and writing to show they meet the Basic Standards and in order to be eligible to graduate from a public high school. The High Standards define what students should know, understand and be able to do to demonstrate a high level of achievement.

As directed in MS121.11, the State Board of Education (SBE) has now adopted all rules necessary to implement a "rigorous, results oriented graduation rule". A standards-based system, Basic and High Standards, is now in place for all Minnesota public school students currently in the ninth grade or below. We have moved from policy development to implementation of that policy.

The first half of last year was spent finishing the final rulemaking phase. However, implementation of the standards-based system in public school districts across Minnesota received major emphasis and resources. It should be noted that at the time of this report, schools have been officially implementing the new system for four months.

Listed below are the major initiatives accomplished during the past year.

1. Rulemaking

Policy Design

The final phase of rulemaking for Minnesota Graduation Standards was completed. The proposed rule for the High Standards (Profile of Learning) was heard before an administrative law judge (ALJ) on February 6, 1998. Using the ALJ's findings,

revisions were made and the State Board of Education signed into rule the High Standards in May 1998. Copies of the Statement of Need and Reasonableness and the Rule for the Profile of Learning (3501.0300 to 3501.0469) are available on the CFL web site at http://cfl.state.mn.us.

Implementation Activities
Copies of the rule language and the Statement of Need and Reasonableness (SONAR) were widely disseminated to schools, parents and community members, and policymakers. Mailings, large and small group meetings and the Children, Families & Learning web site increased access to documents.

Results
As of September 1998, 100% of the public school districts in Minnesota had submitted an approved Graduation Standards Implementation Manual and received Graduation Standards Implementation Grants.

Forward Look
Within six months, the State Board of Education will amend Rule 3501 Graduation Standards Rules for Mathematics and Reading. Current state law conflicts with adopted rule language regarding passage percentage. The amendment will align language with 1996 law to keep the passing score at 75% and with 1997 law to support the use of state tests only.

2. Basic Standards: Reading, Writing & Mathematics

Policy Design
No new law or rule was designed this year.

Implementation
Outside vendors were secured. Testing administration manuals were updated. Testing orders, shipping and handling, results analysis and reporting were standardized this year.

Results
Of the 66,568 Minnesota eighth grade students enrolled, 64,357 took both the Basic Standards Tests in reading and mathematics. Sixty-eight (68%) percent of the students passed the reading test and seventy-one (71%) percent passed the mathematics test. The number of students passing the Basic Standards Tests in reading and mathematics has increased from the first testing in 1996 (53% & 69% respectively).

Forward Look
The following dates have been set for the Basic Standards Testing in reading, mathematics, and for the first time, written composition for 1998-99 school year.

Reading	Tues., February 2	Make-up February 3
Mathematics	Thurs., February 4	Make-up February 5
Written Composition	Wed., January 20	Make-up January 21
Reading	Tues., April 20	Seniors (new and retakes)
Mathematics	Thurs., April 22	Seniors (new and retakes)
Reading	Tues., July 27	9th-12th graders (new and retakes)
Mathematics	Wed., July 28	9th-12th graders (new and retakes)
Written Composition	Thurs., July 29	9th-12th graders (new and retakes)

A vertical equating study is being conducted by CFL, which will allow schools to examine MCA results at 3rd and 5th grades and predict expected student performance at succeeding grade levels and the 8th grade Basic Standards Test.

3. High Standards: Profile of Learning

Policy Design
The Proposed rule for the High Standards was signed into rule by the State Board of Education (SBE) in May 1998.

Implementation
All Minnesota school districts declared, in letters submitted to the Commissioner by June 30, 1998, that they intended to proceed with full implementation of the Profile of Learning Rule in the fall of 1998. All districts also responded to rule language requiring each district to prepare an Implementation Manual that includes local district policies and procedures which guide implementation of the rule. In their manuals, each district describes how they:

- provide opportunities to achieve the standards and assess them in courses and other learning activities, K-12;
- review and adopt local performance packages;
- provide appropriate staff development for improvement of curriculum, instruction, and assessment;
- enable students to meet graduation requirements within or outside of the district's program;
- advise students and their parents or guardians regarding student progress and achievement;
- keep records and report student achievement; and
- facilitate appeals of local policies and procedures.

A survey was designed to provide basic information concerning teacher knowledge of the Graduation Standards and their ability to teach to the new standards. It was administered to teachers in public elementary, middle, junior and senior high schools in November 1998.

Findings include:

- All teachers in the sample are aware of the Minnesota Graduation Standards, and 82 percent believe that they know enough to apply the standards to their teaching. Teachers with four to ten years of experience and teachers at the high school level are the most likely to report that they know how to apply the standards.

- The primary source of learning about the graduation standards are other teachers and administrators with 84 percent of all teachers citing peers at their own school and 51 percent citing teachers and administrators from other schools as the primary sources for learning about the standards.

- While 58 percent of all teachers plan to pursue professional development in at least one of the ten content learning areas during the 1998-99 Academic Year, their interests are dispersed across all ten fields with fewer than one in five seeking development in any one area.

- Of the various teaching practices addressed by the Graduation Standards, teachers are least prepared in the areas of lifework planning and work-based and service learning. They are least interested in pursuing these areas through further professional development. At the same time, teachers are most interested in pursuing professional development concerning the use of state scoring criteria to evaluate student achievement and in techniques for adapting and creating performance packages.

A Graduation Standards Advisory Panel appointed by the former commissioner, Robert Wedl, as directed by the 1998 Legislature, submitted its recommendations on December 30, 1998. The report included two minority reports. Wedl submitted the report with his recommendations to Governor-Elect Ventura on December 31, 1998. The commissioner's recommendations showed some areas of agreement with those of the Panel and some disagreement. The commissioner's recommendations are listed below (* signifies an area of disagreement).

- The rule has too many required standards. Requirements should be modified at the high school and middle levels.
- Performance Assessment is an important requirement but needs to be more focused.
- The design of the standards should be reviewed to improve clarity and rigor.
- The state should not enact high stakes testing of the high standards. *
- Record keeping of student performance needs to be improved.
- The commissioner should immediately appoint two advisory bodies for ongoing oversight and to make recommendations for improved implementation and to address the remedial needs of students.

In preparation for implementation, the CFL has conducted workshops for teachers each summer for the past three years. Specific Areas of Learning were addressed each summer. With special preparation, teachers from districts throughout Minnesota were

presenters at the workshops. Districts were encouraged to send teachers who would be responsible for addressing the designated learning areas to each workshop.

1996	Inquiry	1,400 teachers at 17 regional locations
1997	Mathematics, Science, People and Cultures, Decision-making, and Resource Management	10,000 teachers at 33 regional locations
1998	Read, View & Listen, Write & Speak, Arts, World Languages, and Special Education	9,000 teachers at 33 regional locations

As a follow-up to each workshop, teachers were to deliver a standard in their classroom, assess student achievement using a Performance Package and bring student work to a session conducted regionally during the following spring. These sessions were designed to help teachers score student work consistently against criteria. An evaluation of the results of the summer workshops was conducted by the Center for Applied Research and Educational Improvement (CAREI). CAREI reports an increasing understanding of how the standards fit with district curriculum, increased confidence about ability to link activities to standards, and the belief that the use of standards can make a positive difference in both teaching and student achievement. Some teachers also indicated that use of performance assessments will positively alter instructional methods. In the September 1997 report, 29.% of teachers surveyed indicated that they felt sufficiently prepared to implement the Minnesota standards; 60% indicated that they needed more knowledge of the Minnesota standards in order to develop learning activities linked to the standards; and 55% were confident about their ability to link activities to standards. Results of the survey to Phase III participants will be available in March 1999.

All districts were invited to participate in statewide workshops about performance assessment as designated in rule. Building on this training, all districts were invited to select at least one person to participate in a training of trainers model so that each district could provide training for its teachers.

Curriculum framework documents in the areas of mathematics, science and the arts have been developed to assist districts in reviewing, revising or developing curriculum that is aligned with the High Standards. A curriculum framework for People and Cultures and including the Economics standard will be completed by the fall of 1999. A curriculum framework for communication arts will be developed the following year.

To support schools as they move from a time based to a standards-based model, the following statewide systems have been established.

Minnesota Educational Effectiveness Program (MEEP) – Regionally based MEEP Coordinators (1 in each of 10 outstate regions and 4 in metro area) are available to meet with staff in districts or at sites to provide training and information regarding the Minnesota Standards. Training is customized to meet the needs of individual sites and includes standards based instruction, assessing student achievement using performance

assessment, writing performance packages, and embedding the standards in the local curriculum. The focus for the 1998-99 school year is to insure that building level staff has the capacity to use performance assessment to evaluate student achievement of the standards and use the State Scoring Criteria to score student work. Workshops for individuals with unique roles in the district or school, such as principal, counselor, special education teacher, etc., are also being conducted.

District Graduation Standards Technicians – Each district has identified a person to be the key point of contact to insure a two-way flow of information between each district and the CFL. Graduation Standards Technicians will meet with MEEP Coordinators eight times during the 1998-99 school year. These meetings occur at 17 locations across the state and provide an opportunity identify issues, provide feedback to CFL and solve problems.

Best Practice Networks – Networks comprised of approximately 375 practicing teachers have been established in the areas of Math, Science, Reading, Writing, the Arts and People and Cultures. These teachers have in-depth understanding of the Graduation Rules as well as a repertoire of best instructional strategies in their content areas. They are available to assist teachers in their own or other schools to plan effective instruction that is aligned with the High Standards.

School Support Teams – School Support Teams work collaboratively with school districts and sites on Title I Program Improvement and school-wide planning to promote high academic achievement. Assistance includes school readiness, teaching and learning, professional development, school climate and parent involvement.

Special Education Teams – Workshops are available for teams of regular and special education teachers to develop plans to meet the needs of students with Individual Educational Plans within the context of the whole school. Special education and regular education teachers are being encouraged to collaborate to develop a plan for each student to achieve the standards.

SciMath MN – Curriculum framework documents and workshops are available to support planning for implementation of the mathematics and science standards. Research, information and improvement strategies are available to assist districts in providing equitable learning experiences for all students. SciMath MN also works with teacher preparation institutions to insure that preservice programs adequately prepare aspiring teachers to teach to and assess the High Standards

Minnesota Center for Arts Education – A curriculum framework document and workshops are available to support planning for implementation of the arts standards. The Arts Resource Center provides training and support for the Arts Best Practice Network.

School to Work – School to Work Partnerships have developed plans for supporting student achievement of the High Standards through identification of venues for learning

and achieving standards outside of the classroom. School to Work field staff are available to assist districts and partnerships plan contextual learning for students. All School to Work partnerships and their participating school districts are implementing "Lifework Planning" for all students.

Seminars for Superintendents – Seminars for superintendents are conducted at seven regional locations twice each year. Clarification of the Graduation Standards Rules, information regarding activities that support implementation and an opportunity to share experiences and provide feedback to CFL comprise the agenda.

Other programs and activities which support implementation include:

Scholars of Distinction - This program nurtures and recognizes distinguished achievement by highly motivated students. Students extend their learning achieved on the High Standards to a greater degree of specialization and complexity in areas such as geography, science, mathematics or theater. State-coordinated panels of experts from education and the workplace validate the student's achievement.

MN Assessment Project – This federally funded project creates ways in which students with limited English and students with disabilities can participate in Basic Standards Tests for Reading, Mathematics and Written Composition and Minnesota's Comprehensive Assessment and performance based assessments for the High Standards.

Clearinghouse of Best Practices – In cooperation with Education Minnesota, formerly Minnesota Federation of teachers/Minnesota Education Association, twenty K-12 teachers who have demonstrated skills in standards-based classroom instruction and outstanding leadership in their districts have been selected. They are assisting schools, individual educators and parents in the selection and implementation of best educational practices and shared decision-making in order to improve student performance. These Improvement Support Team teachers provide customized training; coaching and support to teachers and other educators to integrate educational reform measures into the schools. Assistance in identifying methods to engage parents and communities in improving student performance is also provided.

The Clearinghouse supports community stakeholder activities through the three Councils of Color and the American Indian Community. Liaisons are identified to work with Improvement Support Team teachers to insure that quality strategies are available to schools to meet unique learning needs of students. In addition, community outreach activities are being designed.

Workshops for External Providers – Workshops for organizations and individuals who provide learning experiences external to the school are being conducted regionally. These organizations include theaters, orchestras, environmental learning centers, newspapers, health organizations, state agencies, libraries, and builders and contractors. These organizations and individuals are a resource for individual students and schools as they search for appropriate learning venues for students.

Resource Grants – Twenty-seven grants have been awarded to develop learning resources in support of implementation of the standards. Projects provide opportunities for staff development, establish resource centers, support historical education programming and collections, develop site decision-making models, and expand attention and reading readiness programs. Projects were selected both on the quality of products and processes they will produce and their plan for making those projects available throughout the state.

Minnesota Electronic Curriculum Repository (MECR) – The MECR will distribute high quality curriculum materials to support implementation of the High Standards. Distribution will be done electronically so that the curriculum materials are available at computer workstations without local data entry. The curriculum materials will include assessments, instructional activities and other resources that are aligned with the High Standards. The MECR materials will be available on the Internet and in CD format. The materials may be downloaded with sufficient programming to establish a database on a district computer network. A prototype of the MECR was demonstrated at the Education Minnesota Conference in October and at the MEEP Conference in December. The system will be operational in mid-February. The prototype can be viewed on the CFL web site.

Scoring Student Work– This professional development program will be sent to every district in a CD format in March. The program has been designed to enhance teacher's skills in scoring student work using scoring criteria. The program will be demonstrated and disseminated to all Graduation Standards Technicians at their regularly scheduled meetings with MEEP coordinators.

Learning Academy – Learning Academy sites provide certified classes which prepare teachers to use technology in their classroom and to integrate technology into the curriculum. To receive certification, the course syllabus must describe alignment with the standards. Partial or full reimbursement is available for teachers who successfully complete certified courses.

North Central Educational Laboratory (NCREL) Gateway Project – An internet program for teachers interested in teaching students to use technology while learning concepts in the High Standards can be accessed through the Internet. The program is being designed collaboratively by CFL and NCREL and will provide resources to teachers as they design lessons in the standards based system. It will be linked to the MECR.

Record Keeping – Eleven grants were awarded to districts or consortiums of districts to develop and use electronic systems to store records required in the Graduation Standards Rules. Grant recipients are required to share their experiences and expertise with other districts. Certification criteria for software programs have been developed and are available to schools. All participants in the grant program have agreed to insure that the software they use meets certification criteria. These software programs were demonstrated during the Education Minnesota Conference in October and during the Minnesota Rural Education Conference in November. CFL staff will also hold informational meetings regionally.

Minnesota Gifted & Talented Development Center (MGTDC) – The MGTDC was established to provide a coordinated, comprehensive statewide infrastructure for gifted and talented services, training and research in the standards-based educational system. A set of gifted and talented program standards, which is aligned with national standards, has been created. These standards are intended to drive program quality, availability and accountability. A CFL web site offers educators and parents resources to assist these special needs learners.

Post Secondary Laboratory School Grants - Six Post Secondary Laboratory School Grants have been awarded to develop models that improve student achievement as defined in the Graduation Standards in both post secondary teacher-training institutions and in public school classrooms. These sites are establishing a new vision of what a lab school collaboration can be and how its work can impact increased student achievement, school improvement efforts, and certification in the teaching profession. A five-year partnership was established among post secondary institutions, public school districts, businesses and communities to build the models. Quarterly meetings of all grant site teams are conducted by CFL staff to collaboratively plan, report, debate issues and resolve barriers.

Results

- All Minnesota districts have declared that they are fully implementing the rule for the Profile of Learning.
- In a survey completed in December 1998, 82% of teachers declared that they "know enough to apply the Minnesota Graduation Standards to their teaching." 98% of all teachers indicated that they can effectively teach standards in at least one learning area.
- 20,400 teachers have participated in workshops focusing on specific learning areas and standards.
- 750 teachers have participated in workshops designed to build competence in performance assessment. Follow-up workshops prepared district staff to assist local teachers in using performance assessment.
- Thousands of teachers have participated in workshops conducted by MEEP Coordinators, curriculum specialists, Best Practice Teachers, SciMath MN and special education consultants.
- At least two-thirds of the state's superintendents have regularly attended seminars designed to increase their understanding of the standards-based system and to provide feedback to CFL regarding development and implementation.
- All districts have at least one individual (Graduation Standards Technician) charged with insuring that information regarding the standards is disseminated in the district and linked with other initiatives (e.g., system accountability, staff development). The Technicians also provide feedback to CFL regarding development and implementation.
- Electronic record-keeping systems have been developed to organize and store information required in the rule. The systems range from basic systems that record student achievement of standards to instructional management systems designed to

assist teachers with day-to-day decision-making. A certification system has been established.

- Model performance packages for each standard have been reviewed and revised. Each model performance package is a collection of activities and tasks that a teacher can use to assess student achievement of a standard. These packages serve as models for teachers as they develop their own set of activities and tasks to assess student achievement. These models will be available on the MECR by mid-February. In addition, teachers can assemble their own performance packages by selecting tasks on the MECR. This resource will expand as teachers write and submit their own assessment tasks.
- CFL established a coordinated, comprehensive statewide center for gifted and talented education. The Board of Directors includes the leaders of gifted and talented education from private and public post secondary institutions, professional organizations and the state agency. This collaborative approach is built to provide continuity, focus, and responsive service to students, teachers, and parents and community. As a result a sustaining infrastructure is being built, access to resources and services have increased, program standards have been written and summer teacher training has been designed.

Forward Look

- A curriculum framework is being developed for the standards in the People and Culture Learning Area. This framework includes the Economics standard. A framework will be developed for Communication Arts in FY2000.
- Videotapes demonstrating exemplary student work are being prepared for all learning areas.
- Customized training will continue to be offered through the MEEP, the Best Practice, and SciMath MN support systems. This training will be linked with system accountability and improvement planning.
- Workshops designed to increase competence in continuous improvement using data for decision-making are being piloted during FY98. This training will then be available for all schools. This initiative is a collaborative effort within the CFL and includes Shared Decisions MN, North Central Association, Minnesota Academic Excellence Foundation (MAEF) and other constituent groups.
- A follow-up survey will be conducted to determine specific needs of teachers, administrators, etc. to effectively implement the standards based system.
- CAREI will submit an evaluation of Phase III training in February 1999.

4. Communications

Implementation Activities

The Minnesota Department of Children, Families & Learning has provided local school districts with several information publications that they can reproduce and distribute to parents. These pieces include:

" The Minnesota Graduation Standard" monthly parent newsletter

"High Standards for Minnesota's Children"
"High School Level High Standards"
"Preparatory Level High Standards"
"Calculators and Statewide Tests"
"Minnesota Scholars of Distinction – Applied Geography Specialty"
"Planning Guide for Parents of Children with Disabilities"
"1998 Minnesota Comprehensive Assessments"
"Basic Standards Written Composition Test"
"Guide for Understanding Grade 3 Test Results"
"Guide for Understanding Grade 5 Test Results"
"Basic Standards Tests Study Tips"

Several resources were created for graduation standards technicians, teachers, and administrators which include:

- Communications Kit
- Sample press releases
- Hosting a Media Breakfast handout
- Graduation Standards Communications E-mail Discussion List
- Evaluating student work

Other communication efforts coordinated by CFL include:

- Graduation Standards web site with general information and statewide test results.
- E-mail hot link for parents, teachers and community member inquiries
- State Fair booth
- Practice Tests for the Minnesota Comprehensive Assessments and the Basic Standards Testing
- Workshop for Minnesota School Public Relations Assoc. members
- Meetings with education organization leaders to discuss Communication issues
- Direct contact with local media to encourage accurate and balanced reporting on Graduation Standards

Results

Since the Internet Access media contact database was initiated in February 1998, there have been 144 media inquiries on the Graduation Standards: 63 on Basic Standards Tests, 34 on MCA's, and 9 general statewide testing questions for a total of 106 on the Basic Standards; 25 on the High Standards; 8 general and Advisory Committee-related inquiries; and 5 on the "Scholars of Distinction." Communications staff has worked very closely with Teaching & Learning staff and reporters and editors from the Twin Cities and outstate media on several major stories about the Graduation Standards and statewide tests in the last year.

Data collected from the Minnesota Clipping Service shows, since last March, Graduation Standards and statewide testing account for much of the media coverage on CFL issues from 35% in a "slow" month like August to well over 75% when statewide tests are scheduled or results released (for example, over 550 individual clips from almost every newspaper across the state in May). These figures do not include articles on local school

board meetings or columns from local school leaders that discuss Graduation Standards along with other local issues.

5. Status

During this initial period of implementation, schools informally report that:

- registration guides for students have been rewritten;
- courses are being revised to incorporate the standards;
- new courses are being developed;
- structures are being examined to accommodate student needs as they work to acquire and apply learning;
- curriculum is being reviewed and revised to align with the standards and in response to assessment results;
- there is increased communication and collegial planning among teachers; and
- many students are successfully meeting new and rigorous learning expectations.

As might be expected, issues and concerns are emerging as schools strive to implement the standards. The issues that are identified most frequently include:

- time for teacher training and planning;
- record keeping, both final scores and ongoing progress;
- number of standards; and
- planning, conducting, scoring and reporting performance assessment.

Department of Children, Families & Learning and the State Board of Education are gathering additional information regarding these issues from practitioners. Issues are being examined to determine whether the issue is within the rule or is in implementation design or planning. Practitioners are being involved to identify solutions or make recommendations for revision. A study group has been formed to examine issues related to scoring student work and an advisory committee is responding to concerns regarding electronic record keeping.

Minnesota Department of Children, Families & Learning

Agency Budget Dedicated to Graduation Standards

	FY98	FY99
1. Graduation Rule Development Includes costs of rulemaking as well as materials for public participation in the rulemaking process.	**261,799.00**[1]	**110,379.00**[1]
2. Design and Development Includes materials for schools to support local implementation of High Standards; writing tests for grade 10 and a professional development tool in CD format to develop skills of scoring student work against criteria.	**1,173,303.00**	**1,305,000.00**
3. Recordkeeping Includes development of recordkeeping format and process as well as grants to develop electronic systems.	**90,000.00**[2]	**110,000.00**[2]
4. Best Practices Networks Includes training and materials for teachers selected as members of the Best Practices networks.	**119,716.00**[3]	**205,695.85**
5. District Training Includes materials, programs, and training for school personnel.	**1,010,000.00**	**1,470,000.00**
6. Grants to Districts Includes funding for districts to develop models for assessments and high standards.	**120,000.00**	**400,000.00**
7. Communications Includes development and distribution of materials for public information.	**114,514.00**	**92,000.00**

8. Basic Standards Testing and Reporting Includes development of retesting for reading and mathematics basic requirements.	**2,204,671.00**	**2,500,000.00**
9. Scholars of Distinction Includes development of materials and processes for achievement and recognition of expert performance by students.	**105,000.00**	**94,000.00**
10. Graduation Rule Staff Includes staff and office operations.	**1,194,333.00**	**1,137,532.00**
Total:	**$6,393,336.00**	**$7,424,606.85**

Footnotes:

[1] Development of the legal language of the Profile of Learning Rule and rule refinement

[2] Technology dollars

[3] Federal Eisenhower Fund

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APPENDICES

District Readiness Survey

Minnesota Graduation Standards 1998 Teacher Survey

Introduction

The Minnesota Graduation Standards survey was designed to provide basic information concerning teacher knowledge of the Minnesota Graduation Standards and their ability to teach under the new guidelines. Mandated by the State Legislature during the 1998 legislative session, the survey covers many of the key aspects of the state law including content standards, assessment, use of computers and professional development.

The findings from this study are based on a survey administered to a sample of 1600 teachers from 100 public Pre-K, elementary, middle, junior and senior high schools representing 80 school districts in 57 counties. The survey was administered during the months of November and December and through the course of two follow-up waves achieved a response rate of 65.6 percent with 1049 complete and usable surveys.

To help ensure accurate regional representation, survey responses were weighted based on the proportion of students enrolled at each school participating in the study relative to the total number of students enrolled in the economic development region of the district.[1] For statewide tabulations, all survey responses have a sampling margin of error at the 95 percent confidence level of plus or minus 4 percent or less.[2]

This study reflects the collective effort many individuals including Margaret Preska who served as co-designer of the survey questionnaire, Charles Coskran and Gene Piccolo among other staff at CFL who provided invaluable feedback and support. The research methodology, final questionnaire design, data collection and analysis were conducted by Human Capital Research Corporation (HCRC), Chicago Illinois.[3] Specific questions regarding this study should be directed to Brian Zucker, President of HCRC at 1-800-353-9715 or e-mail brian@humancapital.com

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[1] Respondent weights and the names and district of participating schools is given in Appendix A and B

[2] More detailed cross tabulations by number of years of teaching experience, grade level taught, teacher's undergraduate institution and region of the state have a sampling margin of error at the 90 percent confidence level of approximately 4.4 to 8.5 percent.

[3] . HCRC was established in 1992 to provide educators, policy makers, and other education stakeholders with the critical information needed to support complex decisions and long-term strategic planning, and to serve as a catalyst for educational reform. Our mission is to advance opportunity, productivity and value in education by ensuring that education policy is based on rigorous empirical analysis and by providing our clients with comprehensive examinations of their environments.

During the past six years, HCRC has conducted policy studies in 34 states and has surveyed more than 100,000 students, teachers, parents and administrators concerning issues related to education and professional development. Our client base includes middle schools and high schools, public and private two and four-year colleges and universities, human service and economic development agencies, state and national higher education associations, state coordinating boards, financial aid commissions and legislative bodies, state sector governing boards, non-profit research organizations, and private corporations.

Key Findings

- *Broad Awareness of the Standards*: All teachers in the sample are aware of the Minnesota Graduation Standards, and 82 percent believe that they know enough to apply the standards to their teaching. Teachers with four to ten years of experience and teachers at the high school level are the most likely to report that they know how to apply the standards.

- *Limited Capability in Five of Ten Content Standards*: Of the ten content learning areas identified in the survey, more than half of all teachers (52 percent) report that they can effectively teach either as a specific or embedded subject in at least five areas. The areas teachers are most likely to effectively teach in include: using information to make decisions and conduct research and communicate findings.

- *Diverse Priorities for Professional Development Related to Content Standards*: While 58 percent of all teachers plan to pursue professional development in at least one of the ten content learning areas during the 1998-99 Academic Year, their interests are dispersed across all ten fields with fewer than 18 percent seeking development in any one area.

- *Mixed Capability in Standards Related Teaching Practices*: Of the ten teaching practices addressed by the survey, teachers are most prepared in those aspects of the standards that concern engaged learning such as adapting teaching style to the various ways that students learn or inclusion of all learners, and least prepared in specific practices that concern Graduation Standards assessment tools and curriculum such as use of state rubrics, performance packages, lifework planning and work-based learning.

- *Strong Priority for Gaining Mastery in Learning Assessment:* Of the 26 areas of professional development covered by the survey, teachers are most interested in gaining mastery of the use of state rubrics to evaluate student achievement and in techniques for adapting and creating performance packages. More than one-half (52 percent) of all teachers will seek professional development in one or both of these areas during the 1998-99 Academic Year.

- *Strong Foundation in Computer Use for General Purposes and Mixed Capability in Web and Multimedia based learning:* Virtually all teachers (94 percent) report that they have adequate or superior capability in using computers for word processing and a large majority (more than three-fourths) can adequately use computers for e-mail or to maintain student records. One-half of all teachers have adequate or superior skills for web-based teaching or student learning and 40 percent have at least adequate skills in the use of multi-media based teaching/learning software.

- *High Priority for Web and Multimedia Training:* Of the six areas of professional development concerning computer use, 35 percent of all teachers will seek professional development in one or both of these areas during the 1998-99 Academic Year.

- *Limited Impact By Colleges and Universities in Preparing Teachers for the Standards:* Of the 36 percent of teachers whose undergraduate education overlapped with the inception of the Minnesota Graduation standards, slightly less than one-half (47 percent) believed that their college program was ineffective in preparing them to teach under the new standards while 9 percent considered their program fully effective. Among teachers who graduated from college in 1997 or 1998, 21 percent believed that their college program was ineffective in preparing them to teach under the new standards, and 15 percent considered their program fully effective.

- *Informal Networks Are the Primary Resource for Learning about the Standards:* Of the ten teacher learning resources identified by the survey, 84 percent of all teachers cited peers at their own school and 51 percent cited teachers and administrators from other schools as the

primary sources for learning about the Standards. Relative to these informal networks, Minnesota's colleges and universities and institutionalized efforts such as MEEP (Minnesota Educational Effectiveness Program), the Minnesota Best Practice Network or State Agencies currently play a secondary role collectively serving about 32 percent of all teachers.

About the Respondents

Respondents of the Minnesota Graduation Standards survey represent a broad cross-section of Minnesota's public school teachers. Of the 1049 respondents, about one-fourth have been employed as a full-time teacher for three or fewer years, about one-half have been teaching ten or more years and one in fourth have been teaching 25 or more years.

In terms of undergraduate background, about 35 percent of all respondents earned their Baccalaureate at one of Minnesota's seven state universities, another 17 percent received their degree from the University of Minnesota and 21 percent earned their Bachelor's at one of Minnesota's private colleges or universities. Overall, the largest producer of Baccalaureate's in the sample was Saint Cloud State accounting for nearly 14 percent of all teachers. Just under one in four teachers earned their BA in 1992 or later.[4]

In terms of grade level taught, the sample is almost evenly split with about one half of all teachers working at the Elementary or Middle school level, and half teaching at the Junior or Senior high school level. With respect to geography about half of all respondents teach in the Twin Cities.

Grade Level Taught	*Share of Respondents*
Pre-K and Elementary	19%
Middle School	28%
Junior High	16%
Senior High	25%
Multiple Levels	10%

Study Region	*Economic Development Region*	*Share of all Respondents*
Northwest	1,2,4 and 5	12%
Southwest	6E, 6W and 8	6%
Northeast	3	7%
Southeast	9 and 10	14%
Central	7E and 7W	10%
Twin Cities	11	51%

[4] A full listing of teacher's undergraduate college or university is given in the appendix

Teacher Knowledge of the Standards

Table 1. *Which Best Describes your Knowledge of the Minnesota Graduation Standards?*

	I Know little about the Graduation Standards	I Know enough to apply the standards to my teaching
All Teachers	**18%**	**82%**
By Years of Teaching		
0-3 Years	21%	79%
4-10 Years	15%	85%
11-24 Years	17%	83%
25+ Years	19%	81%
By Grade Level Taught		
Elementary	23%	77%
Middle	17%	83%
Jr High	17%	83%
Sr High	15%	85%
By Undergraduate College		
State University	23%	77%
University of MN	15%	85%
MN Private College	16%	84%
All Other Institutions	14%	86%
By Region of the State		
Northwest	11%	89%
Southwest	16%	84%
Northeast	27%	73%
Southeast	20%	80%
Central	15%	85%
Twin Cities	18%	82%

Teacher Knowledge of Ten Learning Areas Proscribed By the Standards

The Minnesota Graduation Standards include in ten learning areas. While teachers are not expected to address *all* ten standards, they should have the knowledge and skills to teach in more than one learning area, either as an embedded or specific subject.

Table 2. *In which learning areas can you effectively teach, either as an embedded or specific subject?*

	Use information to make decisions	Conduct research and communicate findings	Write and speak effectively in the English Language	Read and listen to complex information in the English language	Solve problems by applying math
All Teachers	**73%**	**64%**	**63%**	**62%**	**52%**
By Years of Teaching					
0-3 Years	75%	65%	60%	59%	49%
4-10 Years	74%	65%	60%	58%	54%
11-24 Years	74%	61%	66%	64%	53%
25+ Years	69%	63%	66%	66%	52%
By Grade Level Taught					
Elementary	80%	67%	89%	83%	87%
Middle	71%	63%	62%	60%	50%
Jr High	72%	63%	55%	54%	42%
Sr High	72%	63%	53%	54%	38%
By Undergraduate College					
State University	72%	61%	60%	59%	56%
University of MN	81%	67%	71%	69%	56%
MN Private College	73%	67%	63%	63%	50%
All Other Institutions	71%	63%	63%	60%	46%
By Region of the State					
Northwest	70%	65%	53%	52%	42%
Southwest	74%	62%	64%	63%	61%
Northeast	81%	72%	70%	72%	58%
Southeast	70%	57%	63%	59%	49%
Central	68%	59%	60%	59%	52%
Twin Cities	75%	65%	65%	63%	53%

Table 2 Continued: *In which learning areas can you effectively teach, either as an embedded or specific subject?*

	Understand interactions among people and cultures	Understand and apply scientific concepts and methods	Manage household, community or governmental resources	Apply and interpret artistic expression	Communicate in a language other than English
All Teachers	**49%**	**38%**	**33%**	**26%**	**8%**
By Years of Teaching					
0-3 Years	48%	36%	34%	26%	9%
4-10 Years	41%	37%	32%	23%	11%
11-24 Years	55%	39%	31%	30%	8%
25+ Years	53%	38%	35%	24%	7%
By Grade Level Taught					
Elementary	65%	63%	36%	27%	8%
Middle	45%	39%	29%	25%	7%
Jr High	47%	27%	31%	22%	6%
Sr High	45%	27%	35%	29%	11%
By Undergraduate College					
State University	47%	37%	32%	21%	8%
University of MN	51%	39%	40%	28%	11%
MN Private College	51%	41%	29%	27%	12%
All Other Institutions	50%	34%	31%	29%	5%
By Region of the State					
Northwest	49%	35%	35%	28%	10%
Southwest	51%	42%	30%	22%	14%
Northeast	55%	43%	38%	30%	8%
Southeast	46%	34%	34%	25%	11%
Central	43%	32%	28%	24%	10%
Twin Cities	51%	39%	33%	26%	7%

Table 3. *Distribution of teachers by number of learning areas that teachers can effectively teach as an embedded or specific subject.*

	At least one learning area	Two or more learning areas	Three or more learning areas	Four or more learning areas	Five or more learning areas	Six or more learning areas	Seven or more learning areas	Eight or more learning areas	Nine or more learning areas	All ten learning areas
All Teachers	**98%**	**89%**	**79%**	**65%**	**52%**	**39%**	**25%**	**15%**	**7%**	**2%**
By Years of Teaching										
0-3 Years	98%	90%	78%	63%	48%	38%	20%	13%	8%	3%
4-10 Years	98%	89%	80%	63%	47%	37%	20%	14%	7%	1%
11-24 Years	97%	89%	80%	68%	55%	40%	30%	16%	6%	1%
25+ Years	97%	90%	77%	64%	55%	39%	28%	15%	7%	2%
By Grade Level Taught										
Elementary	97%	95%	91%	85%	76%	58%	49%	33%	17%	5%
Middle	98%	88%	78%	61%	48%	39%	23%	11%	6%	2%
Jr High	97%	88%	71%	56%	43%	31%	19%	9%	4%	0%
Sr High	98%	89%	76%	60%	45%	30%	16%	9%	4%	1%
By Undergraduate College										
State University	96%	88%	76%	62%	48%	35%	24%	15%	7%	2%
University of MN	99%	94%	84%	74%	62%	44%	28%	17%	8%	3%
MN Private College	98%	91%	80%	65%	52%	39%	26%	14%	9%	2%
All Other Institutions	98%	87%	76%	62%	49%	38%	23%	12%	5%	1%
By Region of the State										
Northwest	98%	85%	79%	62%	43%	33%	19%	13%	5%	2%
Southwest	94%	90%	80%	68%	55%	37%	26%	19%	10%	3%
Northeast	99%	94%	85%	71%	55%	47%	37%	23%	14%	2%
Southeast	97%	86%	71%	59%	52%	40%	25%	10%	6%	0%
Central	99%	89%	78%	61%	44%	27%	18%	13%	6%	1%
Twin Cities	97%	91%	80%	66%	54%	40%	26%	15%	7%	2%

Professional Development in the Ten Learning Areas

Table 4. *In which learning areas will you seek professional development during the 1998-99 Academic Year?*

	Conduct research and communicate findings	Apply and interpret artistic expression	Understand interactions among people and cultures	Read and listen to complex information in the English language	Write and speak effectively in the English Language
All Teachers	**17%**	**17%**	**17%**	**16%**	**15%**
By Years of Teaching					
0-3 Years	20%	15%	18%	20%	15%
4-10 Years	20%	20%	18%	17%	15%
11-24 Years	17%	20%	17%	12%	12%
25+ Years	14%	15%	15%	14%	16%
By Grade Level Taught					
Elementary	16%	24%	17%	18%	19%
Middle	14%	15%	20%	16%	16%
Jr High	18%	14%	14%	14%	11%
Sr High	21%	17%	15%	16%	13%
By Undergraduate College					
State University	19%	17%	21%	15%	15%
University of MN	16%	14%	10%	20%	12%
MN Private College	17%	17%	21%	17%	19%
All Other Institutions	16%	21%	14%	14%	13%
By Region of the State					
Northwest	19%	17%	12%	16%	12%
Southwest	19%	23%	17%	16%	11%
Northeast	15%	17%	18%	19%	19%
Southeast	18%	15%	18%	16%	17%
Central	24%	19%	21%	20%	19%
Twin Cities	16%	17%	17%	14%	14%

Table 4 Continued. *In which learning areas will you seek professional development during the 1998-99 Academic Year?*

	Understand and apply scientific concepts and methods	Solve problems by applying math	Communicate in a language other than English	Use information to make decisions	Manage household, community or governmental resources
All Teachers	**15%**	**14%**	**14%**	**12%**	**12%**
By Years of Teaching					
0-3 Years	18%	17%	14%	10%	10%
4-10 Years	16%	17%	15%	14%	14%
11-24 Years	17%	12%	15%	12%	12%
25+ Years	12%	11%	12%	13%	13%
By Grade Level Taught					
Elementary	21%	11%	22%	17%	17%
Middle	13%	14%	10%	11%	11%
Jr High	15%	12%	13%	13%	13%
Sr High	14%	17%	12%	9%	9%
By Undergraduate College					
State University	19%	14%	15%	13%	13%
University of MN	16%	16%	11%	11%	11%
MN Private College	11%	13%	12%	13%	13%
All Other Institutions	14%	14%	16%	11%	11%
By Region of the State					
Northwest	14%	11%	17%	9%	9%
Southwest	18%	14%	21%	13%	13%
Northeast	24%	16%	15%	13%	13%
Southeast	11%	13%	13%	9%	9%
Central	14%	12%	12%	13%	13%
Twin Cities	16%	15%	13%	13%	13%

Table 5. *Percent of teachers who will seek professional development in one or more of the ten learning areas during the 1998-99 Academic Year.*

	At least one learning area	Two or more learning areas	Three or more learning areas	Four or more learning areas	Five or more learning areas	Six or more learning areas	Seven or more learning areas	Eight or more learning areas	Nine or more learning areas	All ten learning areas
All Teachers	**58%**	**37%**	**20%**	**12%**	**8%**	**5%**	**4%**	**3%**	**2%**	**2%**
By Years of Teaching										
0-3 Years	65%	43%	22%	12%	5%	3%	3%	3%	2%	2%
4-10 Years	63%	40%	22%	14%	8%	7%	6%	2%	2%	2%
11-24 Years	57%	36%	19%	12%	9%	5%	3%	2%	1%	1%
25+ Years	48%	30%	18%	11%	8%	7%	5%	3%	3%	2%
By Grade Level Taught										
Elementary	53%	41%	27%	15%	8%	5%	3%	2%	2%	5%
Middle	58%	34%	17%	10%	5%	3%	1%	0%	1%	2%
Jr High	55%	32%	12%	7%	4%	2%	0%	0%	0%	3%
Sr High	59%	34%	17%	10%	5%	4%	3%	1%	1%	2%
By Undergraduate College										
State University	56%	32%	18%	11%	7%	5%	3%	2%	2%	5%
University of MN	56%	32%	16%	9%	5%	2%	2%	0%	1%	2%
MN Private College	62%	41%	19%	9%	4%	3%	2%	0%	0%	2%
All Other Institutions	54%	36%	19%	11%	5%	3%	1%	0%	0%	1%
By Region of the State										
Northwest	62%	36%	15%	11%	4%	2%	2%	0%	0%	1%
Southwest	56%	35%	23%	13%	9%	4%	0%	0%	0%	3%
Northeast	61%	41%	28%	13%	7%	4%	4%	2%	2%	3%
Southeast	53%	31%	14%	8%	5%	5%	4%	2%	2%	3%
Central	57%	39%	24%	13%	8%	4%	3%	2%	2%	3%
Twin Cities	56%	34%	17%	10%	5%	3%	1%	0%	1%	2%

Teaching Practices Under the Graduation Standards

Under the Minnesota Graduation Standards, teachers draw on a diverse set of skills and knowledge, some of which are addressed below.

Table 6. *How would you assess your capability in each teaching area?*

	Adapting your teaching style to the various ways students learn			Inclusion of all learners: (e.g., special needs, gifted, disabled, students of color)		
	Unfamiliar with this concept	Limited capability	Adequate or superior capability	Unfamiliar with this concept	Limited capability	Adequate or superior capability
All Teachers	**1%**	**21%**	**79%**	**3%**	**35%**	**61%**
By Years of Teaching						
0-3 Years	1%	20%	80%	3%	37%	60%
4-10 Years	1%	14%	84%	1%	32%	67%
11-24 Years	1%	25%	75%	3%	37%	60%
25+ Years	1%	24%	75%	6%	36%	59%
By Grade Level Taught						
Elementary	2%	20%	79%	4%	35%	61%
Middle	1%	19%	81%	2%	34%	64%
Jr High	1%	20%	79%	3%	34%	63%
Sr High	0%	24%	76%	5%	38%	58%
By Undergraduate College						
State University	1%	19%	80%	4%	35%	61%
University of MN	0%	22%	78%	2%	34%	64%
MN Private College	1%	20%	79%	3%	34%	63%
All Other Institutions	1%	23%	76%	5%	38%	58%
By Region of the State						
Northwest	0%	19%	81%	2%	40%	58%
Southwest	2%	27%	72%	2%	47%	51%
Northeast	1%	20%	79%	7%	40%	53%
Southeast	1%	28%	72%	3%	40%	57%
Central	1%	23%	76%	4%	33%	63%
Twin Cities	1%	18%	81%	3%	32%	65%

Table 6 Continued. *How would you assess your capability in each teaching area?*

	Design collaborative, contextual and hands-on learning activities for engaged learning			Plan and integrate curriculum focused on one or more content standards		
	Unfamiliar with this concept	Limited capability	Adequate or superior capability	Unfamiliar with this concept	Limited capability	Adequate or superior capability
All Teachers	**5%**	**27%**	**68%**	**6%**	**34%**	**60%**
By Years of Teaching						
0-3 Years	4%	28%	68%	7%	40%	53%
4-10 Years	4%	23%	72%	5%	31%	64%
11-24 Years	6%	28%	67%	8%	32%	60%
25+ Years	7%	30%	63%	6%	34%	61%
By Grade Level Taught						
Elementary	2%	32%	66%	5%	35%	60%
Middle	6%	22%	71%	5%	34%	62%
Jr High	5%	30%	66%	8%	27%	65%
Sr High	7%	27%	66%	8%	38%	54%
By Undergraduate College						
State University	7%	32%	61%	9%	38%	54%
University of MN	4%	24%	73%	7%	33%	60%
MN Private College	5%	25%	70%	6%	28%	66%
All Other Institutions	4%	25%	71%	4%	34%	62%
By Region of the State						
Northwest	5%	32%	63%	4%	40%	56%
Southwest	7%	35%	58%	9%	42%	50%
Northeast	5%	30%	64%	8%	39%	53%
Southeast	7%	29%	64%	7%	35%	59%
Central	7%	27%	67%	8%	40%	52%
Twin Cities	4%	24%	71%	6%	30%	64%

Table 6 Continued. *How would you assess your capability in each teaching area?*

	Use techniques for adapting and creating performance packages			Design individualized assessments of student learning		
	Unfamiliar with this concept	Limited capability	Adequate or superior capability	Unfamiliar with this concept	Limited capability	Adequate or superior capability
All Teachers	**9%**	**50%**	**41%**	**11%**	**54%**	**35%**
By Years of Teaching						
0-3 Years	11%	52%	37%	11%	55%	34%
4-10 Years	8%	48%	45%	8%	54%	38%
11-24 Years	8%	52%	40%	12%	55%	33%
25+ Years	9%	49%	42%	14%	51%	35%
By Grade Level Taught						
Elementary	10%	52%	38%	12%	50%	38%
Middle	10%	52%	38%	10%	55%	34%
Jr High	11%	45%	44%	14%	49%	37%
Sr High	6%	50%	44%	10%	58%	32%
By Undergraduate College						
State University	9%	53%	38%	13%	58%	29%
University of MN	9%	47%	44%	9%	53%	39%
MN Private College	9%	50%	41%	10%	51%	39%
All Other Institutions	8%	48%	44%	10%	52%	37%
By Region of the State						
Northwest	3%	57%	40%	5%	67%	28%
Southwest	11%	48%	42%	14%	51%	36%
Northeast	12%	52%	37%	14%	56%	30%
Southeast	9%	48%	43%	14%	57%	30%
Central	12%	55%	32%	15%	54%	31%
Twin Cities	9%	48%	43%	10%	50%	40%

Table 6 Continued. *How would you assess your capability in each teaching area?*

	Use state rubrics to evaluate student achievement of standards			Integrate home and community based learning experiences		
	Unfamiliar with this concept	Limited capability	Adequate or superior capability	Unfamiliar with this concept	Limited capability	Adequate or superior capability
All Teachers	**14%**	**56%**	**30%**	**22%**	**52%**	**25%**
By Years of Teaching						
0-3 Years	14%	52%	34%	19%	55%	26%
4-10 Years	10%	57%	33%	23%	54%	24%
11-24 Years	14%	57%	29%	20%	55%	26%
25+ Years	16%	59%	26%	27%	47%	26%
By Grade Level Taught						
Elementary	12%	53%	35%	23%	46%	31%
Middle	15%	54%	31%	23%	54%	23%
Jr High	15%	58%	28%	19%	59%	23%
Sr High	12%	58%	30%	23%	52%	25%
By Undergraduate College						
State University	19%	57%	24%	26%	53%	21%
University of MN	9%	61%	31%	14%	59%	27%
MN Private College	11%	52%	37%	21%	58%	21%
All Other Institutions	11%	55%	33%	24%	44%	33%
By Region of the State						
Northwest	10%	63%	28%	19%	57%	24%
Southwest	12%	64%	24%	27%	51%	22%
Northeast	18%	57%	25%	23%	52%	26%
Southeast	16%	56%	28%	21%	55%	24%
Central	17%	56%	28%	28%	51%	22%
Twin Cities	12%	53%	34%	22%	51%	27%

Table 6 Continued. *How would you assess your capability in each teaching area?*

	Integrate work-based and service learning experiences			Prepare lifework plans		
	Unfamiliar with this concept	Limited capability	Adequate or superior capability	Unfamiliar with this concept	Limited capability	Adequate or superior capability
All Teachers	**30%**	**50%**	**21%**	**37%**	**40%**	**24%**
By Years of Teaching						
0-3 Years	25%	55%	20%	34%	46%	20%
4-10 Years	29%	53%	18%	39%	35%	26%
11-24 Years	30%	47%	23%	37%	37%	26%
25+ Years	34%	43%	23%	36%	41%	23%
By Grade Level Taught						
Elementary	40%	43%	17%	46%	35%	19%
Middle	31%	51%	19%	41%	36%	24%
Jr High	28%	52%	20%	36%	43%	21%
Sr High	24%	51%	25%	28%	43%	29%
By Undergraduate College						
State University	33%	50%	18%	38%	38%	25%
University of MN	24%	53%	23%	40%	35%	25%
MN Private College	29%	55%	16%	40%	43%	18%
All Other Institutions	31%	42%	27%	32%	42%	27%
By Region of the State						
Northwest	26%	57%	17%	32%	42%	26%
Southwest	25%	51%	24%	35%	38%	27%
Northeast	37%	45%	18%	43%	31%	26%
Southeast	32%	51%	17%	41%	35%	24%
Central	32%	53%	15%	39%	43%	19%
Twin Cities	29%	47%	23%	36%	41%	24%

Professional Development for Teaching Practices

Table 7. *In which areas will you seek professional development during the 1998-99 Academic Year?*

	Use state rubrics to evaluate student achievement of standards	Use techniques for adapting and creating performance packages	Design individualized assessments of student learning	Plan and integrate curriculum focused on one or more content standards	Design collaborative, contextual and hands-on learning activities for engaged learning
All Teachers	**43%**	**40%**	**34%**	**28%**	**24%**
By Years of Teaching					
0-3 Years	42%	43%	42%	32%	30%
4-10 Years	45%	43%	37%	32%	26%
11-24 Years	47%	40%	34%	26%	22%
25+ Years	40%	33%	26%	24%	19%
By Grade Level Taught					
Elementary	41%	37%	34%	31%	22%
Middle	39%	35%	34%	23%	21%
Jr High	41%	39%	32%	28%	28%
Sr High	50%	48%	36%	32%	26%
By Undergraduate College					
State University	46%	43%	37%	28%	24%
University of MN	44%	38%	38%	34%	29%
MN Private College	40%	41%	33%	26%	27%
All Other Institutions	41%	36%	29%	27%	19%
By Region of the State					
Northwest	37%	37%	29%	30%	25%
Southwest	35%	32%	27%	20%	21%
Northeast	56%	46%	49%	27%	22%
Southeast	50%	44%	44%	28%	20%
Central	47%	47%	36%	27%	25%
Twin Cities	42%	38%	32%	29%	25%

Table 7 Continued. *In which areas will you seek professional development during the 1998-99 Academic Year?*

	Inclusion of all learners: (e.g., special needs, gifted, disabled, students of color)	Adapting your teaching style to the various ways students learn	Integrate work-based and service learning experiences	Integrate home and community based learning experiences	Prepare lifework plans
All Teachers	**21%**	**20%**	**12%**	**9%**	**8%**
By Years of Teaching					
0-3 Years	30%	30%	12%	10%	9%
4-10 Years	24%	21%	15%	12%	7%
11-24 Years	17%	13%	12%	8%	8%
25+ Years	15%	17%	9%	7%	9%
By Grade Level Taught					
Elementary	23%	18%	12%	12%	9%
Middle	20%	20%	13%	9%	6%
Jr High	26%	22%	7%	8%	6%
Sr High	20%	20%	13%	8%	10%
By Undergraduate College					
State University	23%	19%	14%	12%	10%
University of MN	21%	17%	11%	6%	9%
MN Private College	24%	28%	10%	8%	4%
All Other Institutions	18%	17%	10%	9%	7%
By Region of the State					
Northwest	17%	17%	10%	10%	9%
Southwest	24%	18%	9%	10%	5%
Northeast	20%	18%	16%	9%	13%
Southeast	31%	22%	15%	10%	10%
Central	25%	27%	15%	13%	13%
Twin Cities	19%	19%	10%	8%	6%

Computer Use

Table 8. *How would you assess your computer skills in each application? (percent indicating adequate or superior capability)*

	Word processing and writing	E-mail and other electronic communication tools	Maintain student records	Web-based teaching / student learning	Quantitative methods of analysis	Multi-media teaching / student learning packages
All Teachers	**94%**	**85%**	**78%**	**50%**	**42%**	**40%**
By Years of Teaching						
0-3 Years	99%	93%	91%	65%	54%	51%
4-10 Years	99%	91%	86%	53%	54%	45%
11-24 Years	91%	81%	67%	38%	29%	31%
25+ Years	88%	78%	69%	43%	31%	35%
By Grade Level Taught						
Elementary	92%	85%	51%	42%	28%	39%
Middle	95%	84%	84%	47%	42%	42%
Jr High	93%	89%	84%	58%	41%	41%
Sr High	95%	85%	85%	52%	50%	38%
By Undergraduate College						
State University	92%	83%	75%	50%	42%	38%
University of MN	95%	85%	76%	51%	38%	41%
MN Private College	92%	84%	74%	52%	43%	42%
All Other Institutions	97%	90%	85%	47%	43%	41%
By Region of the State						
Northwest	95%	87%	86%	45%	40%	33%
Southwest	95%	78%	68%	38%	40%	35%
Northeast	87%	67%	55%	42%	30%	32%
Southeast	91%	84%	77%	51%	40%	33%
Central	94%	92%	78%	50%	47%	39%
Twin Cities	95%	87%	80%	52%	43%	46%

Professional Development for Computer Use

Table 9. *In which applications will you seek professional development during the 1998-99 Academic Year?*

	Multi-media teaching / student learning packages	Web-based teaching / student learning	Quantitative methods of analysis	Maintain student records	E-mail and other electronic communication tools	Word processing and writing
All Teachers	**25%**	**24%**	**17%**	**15%**	**10%**	**5%**
By Years of Teaching						
0-3 Years	26%	23%	15%	9%	8%	3%
4-10 Years	29%	30%	16%	15%	9%	4%
11-24 Years	28%	25%	20%	19%	13%	9%
25+ Years	19%	18%	15%	18%	11%	5%
By Grade Level Taught						
Elementary	27%	26%	22%	26%	11%	8%
Middle	27%	22%	17%	12%	9%	4%
Jr High	22%	21%	13%	13%	10%	5%
Sr High	26%	25%	14%	13%	12%	5%
By Undergraduate College						
State University	26%	23%	19%	17%	12%	5%
University of MN	22%	22%	20%	16%	9%	4%
MN Private College	25%	21%	13%	15%	10%	6%
All Other Institutions	26%	28%	14%	13%	9%	5%
By Region of the State						
Northwest	26%	28%	14%	13%	10%	2%
Southwest	28%	27%	17%	17%	13%	9%
Northeast	24%	30%	19%	23%	15%	8%
Southeast	26%	21%	18%	18%	13%	7%
Central	24%	24%	18%	16%	8%	5%
Twin Cities	25%	22%	16%	14%	9%	5%

Table 10. *Percent of teachers seeking professional development in one or more computer applications during the 1998-99 Academic Year*

	At least one computer application	Two or more computer applications	Three or more computer applications	Four or more computer applications	Five or more computer applications	All six computer applications
All Teachers	**47%**	**27%**	**12%**	**5%**	**3%**	**2%**
By Years of Teaching						
0-3 Years	43%	23%	11%	4%	2%	1%
4-10 Years	52%	30%	11%	4%	3%	3%
11-24 Years	50%	32%	17%	9%	4%	3%
25+ Years	45%	22%	9%	5%	4%	3%
By Grade Level Taught						
Elementary	51%	32%	18%	12%	6%	4%
Middle	49%	24%	11%	3%	2%	2%
Jr High	44%	22%	10%	4%	3%	2%
Sr High	46%	29%	12%	5%	2%	2%
By Undergraduate College						
State University	52%	27%	13%	5%	3%	2%
University of MN	46%	28%	12%	5%	2%	1%
MN Private College	41%	24%	12%	6%	4%	3%
All Other Institutions	47%	27%	12%	5%	2%	2%
By Region of the State						
Northwest	50%	29%	13%	2%	0%	0%
Southwest	43%	28%	16%	12%	9%	3%
Northeast	55%	34%	18%	4%	3%	3%
Southeast	51%	26%	11%	7%	5%	4%
Central	49%	26%	11%	6%	2%	1%
Twin Cities	45%	25%	11%	5%	3%	2%

College/University Preparation for Minnesota Graduation Standards

Table 11. *Which statement best describes how effective your college or university teaching program was in preparing you to teach under the Minnesota Graduation Standards?*

	Ineffective	Partially effective	Fully effective	My program pre-dated the MN Graduation Standards
All Teachers	**17%**	**16%**	**3%**	**64%**
By Years of Teaching				
0-3 Years	24%	38%	9%	29%
4-10 Years	15%	15%	2%	67%
11-24 Years	16%	7%	1%	77%
25+ Years	13%	6%	1%	81%
By Grade Level Taught				
Elementary	14%	15%	2%	69%
Middle	15%	15%	5%	65%
Jr High	18%	17%	2%	63%
Sr High	20%	17%	2%	61%
By Undergraduate College				
State University	18%	13%	2%	67%
University of MN	12%	21%	4%	63%
MN Private College	12%	21%	5%	62%
All Other Institutions	22%	13%	3%	62%
By Region of the State				
Northwest	20%	10%	2%	68%
Southwest	24%	13%	2%	62%
Northeast	10%	13%	2%	75%
Southeast	21%	12%	2%	66%
Central	23%	16%	1%	60%
Twin Cities	14%	19%	4%	63%

Sources for Learning About the Graduation Standards

Table 12. *Is there any other source outside your teacher education program from which you have learned about the Minnesota Graduation Standards?*

	Other teachers / administrators in my school	Teachers / administrators from another school	Consultants	State Professional Organizations	MN Colleges / Universities
All Teachers	**84%**	**51%**	**27%**	**25%**	**15%**
By Years of Teaching					
0-3 Years	80%	59%	14%	14%	19%
4-10 Years	87%	55%	24%	26%	21%
11-24 Years	86%	48%	33%	29%	12%
25+ Years	82%	43%	36%	29%	7%
By Grade Level Taught					
Elementary	85%	49%	24%	19%	13%
Middle	80%	47%	27%	25%	17%
Jr High	81%	52%	24%	24%	13%
Sr High	86%	55%	30%	29%	15%
By Undergraduate College					
State University	80%	50%	27%	23%	12%
University of MN	83%	54%	23%	31%	18%
MN Private College	84%	56%	26%	23%	16%
All Other Institutions	87%	47%	31%	25%	15%
By Region of the State					
Northwest	86%	50%	25%	24%	13%
Southwest	82%	51%	29%	31%	12%
Northeast	77%	66%	28%	25%	22%
Southeast	81%	48%	34%	20%	14%
Central	86%	60%	40%	27%	14%
Twin Cities	84%	48%	23%	25%	15%

Table 12 Continued. *Is there any other source outside your teacher education program from which you have learned about the Minnesota Graduation Standards?*

	MEEP (MN Educational Effectiveness Program)	Other sources	MN Best Practice Network	Government Agencies	Non-MN Colleges / Universities
All Teachers	**12%**	**12%**	**7%**	**6%**	**1%**
By Years of Teaching					
0-3 Years	5%	14%	4%	4%	0%
4-10 Years	14%	11%	8%	7%	0%
11-24 Years	15%	12%	8%	8%	2%
25+ Years	14%	10%	9%	6%	1%
By Grade Level Taught					
Elementary	17%	9%	9%	5%	0%
Middle	10%	13%	7%	5%	1%
Jr High	9%	12%	7%	6%	0%
Sr High	12%	12%	7%	8%	2%
By Undergraduate College					
State University	16%	9%	8%	5%	1%
University of MN	12%	14%	4%	8%	2%
MN Private College	12%	11%	8%	5%	0%
All Other Institutions	8%	15%	9%	7%	1%
By Region of the State					
Northwest	14%	7%	12%	3%	1%
Southwest	21%	7%	11%	8%	0%
Northeast	16%	11%	4%	4%	3%
Southeast	17%	14%	13%	8%	0%
Central	14%	10%	6%	7%	1%
Twin Cities	8%	13%	5%	7%	1%

Appendix A: Participating Schools

School Name	*District*	*Enrollment*
Central Middle	Columbia Heights	640
Columbia Heights Sr.	Columbia Heights	868
Oak View Middle	Anoka-Hennepin	1048
St. Francis Sr.	St. Francis	1580
Anoka Sr.	Anoka-Hennepin	2961
Frazee Sec.	Frazee	635
Bemidji Middle	Bemidji	1327
Pleasant View El.	Sauk Rapids	645
Ortonville Sec.	Ortonville	443
Mankato East Jr.	Mankato	539
Mankato East Sr.	Mankato	1010
New Ulm Jr.	New Ulm	707
Cloquet Middle	Cloquet	567
Waconia Sr.	Waconia	556
Chaska Middle	Chaska	1094
Pine River Sec.	Pine River-Backus	636
Montevideo Sr	Montevideo	585
Chisago Lakes Middle	Chisago Lakes	835
Moorhead Sr.	Moorhead	1752
Crosby-Ironton Jr	Crosby-Ironton	753
Eagle Ridge Jr.	Burnsville	693
Westview El.	Rosemount-Apple Valley-Eagan	775
Kenwood Trail Jr.	Lakeville	833
Greenleaf El.	Rosemount-Apple Valley-Eagan	1008
South St. Paul Sec.	South St. Paul	1741
Burnsville Sr.	Burnsville	2257
Triton High School	Triton	589
Discovery Middle	Alexandria	1080
Southwest Jr.	Albert Lea	676
Red Wing Sr.	Red Wing	1138
Dowling El.	Minneapolis	393
Zachary Lane El.	Robbinsdale	546
Grandview Middle	Westonka	568
Wayzata West Jr.	Wayzata	596
Folwell Middle	Minneapolis	672
Sandburg Middle	Robbinsdale	799
Hosterman Middle	Robbinsdale	813
Mound-Westonka Sr.	Westonka	929
Hopkins West Jr.	Hopkins	965
Plymouth Middle	Robbinsdale	1156
Roosevelt Sr.	Minneapolis	1657
South Sr.	Minneapolis	1890
Eden Prairie Sr.	Eden Prairie	2611
Lacrescent-Hokah El.	Lacrescent-Hokah	751
Park Rapids Middle	Park Rapids	626
Cambridge El.	Cambridge-Isanti	942
Grand Rapids Sr.	Grand Rapids	1086
Mora Sec.	Mora	1019
Kennedy El.	Willmar	1065
Falls El.	International Falls	510
Lecenter Sec.	Lecenter	406

School Name	*District*	*Enrollment*
Marshall Jr.	Marshall	388
Tracy Sec.	Tracy	491
Hutchinson Park El.	Hutchinson	942
Fairmont Sr.	Fairmont Area Schools	974
A.C.G.C. Sec.	A.C.G.C.	557
Princeton Middle	Princeton	698
Little Falls Sr.	Little Falls	1262
Ellis Middle	Austin	953
St. Peter Sr.	St. Peter	630
Dover-Eyota Sec.	Dover-Eyota	474
Mayo Sr.	Rochester	1912
Fergus Falls Middle	Fergus Falls	1064
Lincoln Sr.	Thief River Falls	705
Pine City Sec.	Pine City	913
East Grand Forks Sr.	East Grand Forks	655
Edgerton El.	Roseville	430
Humboldt Jr.	St. Paul	538
Edgewood Middle	Mounds View	644
Island Lake El.	Mounds View	698
Highview Middle	Mounds View	913
Chippewa Middle	Mounds View	1334
Central Sr.	St. Paul	2061
Reede Gray El	Redwood Falls	521
Northfield Middle	Northfield	903
Faribault Sr.	Faribault	978
Luverne Middle	Luverne	480
Grant Magnet El.	Duluth	383
Memorial Sec.	Ely	449
Lowell Music Magnet El.	Duluth	560
Central Sec.	Duluth	1540
New Prague Middle	New Prague	710
New Prague El.	New Prague	863
Big Lake Sr.	Big Lake	526
Vandenberge Jr.	Elk River	1045
Sauk Centre Jr.	Sauk Centre	401
Sartell Middle	Sartell	614
Apollo Sr.	St. Cloud	1636
Owatonna Jr.	Owatonna	897
Motley-Staples Middle	Staples-Motley	436
Plainview Sec.	Plainview	605
Nrheg Elem/Middle	N.R.H.E.G.	488
Woodbury Jr.	South Washington County	665
Lake Jr.	South Washington County	912
Stillwater Sr.	Stillwater	2112
St. James Northside El.	St. James	410
Lewiston Sec.	Lewiston	454
Maple Lake Sec.	Maple Lake	508
Annandale Sr.	Annandale	608
Buffalo Middle	Buffalo	1115
Granite Falls Sr.	Yellow Medicine East	468

Appendix B: Sample Weights

Survey responses were weighted based on the proportion of students enrolled at each school whose teachers participated in the study relative to the total number of students enrolled in the economic development region of the district (e.g., the ratio of public school enrollment in the region divided by school enrollment for the institutions participating in the study).

Economic Development Region	*Student Ratio Weight**	*Respondent Teacher Weight**	*Sample Weight*
1	13.3	85.0	1134.2
2	7.9	150.2	1184.7
3	10.8	54.8	592.3
4	8.2	88.8	728.4
5	9.5	61.7	587.5
6E	8.6	95.0	816.1
6W	5.7	31.8	179.9
7E	4.9	81.6	395.9
7W	8.5	53.8	454.7
8	12.1	45.9	555.6
9	7.4	67.1	497.2
10	7.5	127.5	962.7
11	10.5	111.3	1172.5

Appendix C

Distribution of Teachers By Baccalaureate Institution

Institution Name	*Percent Share*	*Institution Name*	*Percent Share*
Saint Cloud State University	13.7%	College of Saint Catherine	0.6%
Mankato State University	9.5%	University of St Thomas	0.6%
University of Minnesota Twin Cities	8.9%	University of Northern Iowa	0.6%
Bemidji State University	6.0%	Northern State University	0.6%
University of Minnesota-Duluth	5.0%	Drake University	0.5%
Moorhead State University	4.3%	Univ. of Wisconsin-Superior	0.5%
Concordia College At Moorhead	3.9%	Iowa State University	0.4%
Winona State University	3.3%	Northwestern College	0.4%
Gustavus Adolphus College	2.8%	Saint Mary's University	0.4%
University of North Dakota	2.5%	Wartburg College	0.3%
University of Minnesota-Morris	2.4%	University of Sioux Falls	0.3%
Southwest State University	2.0%	Macalester College	0.3%
Univ. of Wisconsin-River Falls	1.7%	University of South Dakota	0.3%
Saint Olaf College	1.7%	Carleton College	0.3%
Hamline University	1.4%	Buena Vista University	0.3%
Bethel College	1.3%	Westmar University	0.3%
North Dakota State University	1.3%	Concordia College St Paul	0.2%
Saint Johns University	1.2%	Black Hills State University	0.2%
Augsburg College	1.1%	Cornell College	0.2%
South Dakota State University	1.0%	Univ. of Wisconsin-Platteville	0.1%
College of Saint Scholastica	1.0%	Dakota Wesleyan University	0.1%
College of Saint Benedict	1.0%	Univ. of Wisconsin-Oshkosh	0.1%
Valley City State University	1.0%	Minot State University	0.1%
Univ. of Wisconsin-Eau Claire	1.0%	Jamestown College	0.1%
Luther College	0.9%	Univ. of Wisconsin-Stevens Point	0.1%
Univ. of Wisconsin-La Crosse	0.8%	Univ. of Wisconsin-Milwaukee	0.1%
University of Iowa	0.8%	Silver Lake College	0.1%
Univ. of Wisconsin-Stout	0.7%	Mount Mercy College	0.1%
Univ. of Wisconsin-Madison	0.7%	Lawrence University	0.1%
Dakota State University	0.7%	Saint Norbert College	0.1%
Mayville State University	0.7%	Grinnell College	0.1%
Augustana College	0.6%	Mount Senario College	0.1%

Sample Communication Pieces

Minnesota Educational Effectiveness Program (MEEP)

Evaluation of the Pilot Testing of Performance Packages for the Inquiry Standards Implemented in the 1996-97 School Year

Evaluation conducted by:
The Center for Applied Research and Educational Improvement
College of Education and Human Development
University of Minnesota
July 1997

Table of Contents

Section I: Introduction

The Minnesota Educational Effectiveness Program (MEEP) has assumed a Herculean task in bringing the High Standards portion of the Minnesota Graduation Rule to teachers across the state. For the 1996-97 school year, implementation has had the following elements as part of the process:

- summer training sessions in 1996 for teachers in "what is inquiry," what is standards-based education, what is a performance assessment package, and how they should use it;
- school-based "technical coordinators" whose role it is to support and mentor teachers' first experiences with implementing standards and assessment packages;
- MEEP Regional Coordinators who met regularly with the technical coordinators in order to support their efforts, to answer questions, and to act as a liaison to the MEEP leadership team at the state level;
- the MEEP Leadership Team in the Minnesota Department of Children, Families, and Learning who act as the state-wide coordinators and who regularly meet with the MEEP Regional Coordinators, school superintendents, and others to remain in constant contact with happenings, concerns, and questions from around the state.

This evaluation report focuses on the experiences of the teachers who have volunteered to pilot the assessment packages which have been specifically developed for use with the state-developed standards. The Inquiry Standards were chosen to be the first standards to be implemented state-wide.

It is important to note that Phase I training in the Inquiry Standards was intentionally focused on the performance packages developed by the state to accompany the standards. Teachers were asked to pilot a package as a complement to their implementation of a standard. By using this focus the state would be able to collect an adequate amount of student work from which exemplars could be chosen.

In the spring of 1997, the Center for Applied Research and Educational Improvement designed and sent out a survey regarding this standards based training and the use of these packages this past school year (for a copy of the survey, see Appendix A). Input on content and clarity of the questions was gathered from the MEEP leadership team, the MEEP regional coordinators, and members of the Minnesota Assessment Project team. Surveys were sent to a stratified random sample of 289 school faculty members who received training to use such packages. There were 209 surveys returned for a response rate of 72.3%. Out of those 209 respondents, 201 completed the survey. Eight respondents indicated that for various reasons they did not use the performance packages, and thus did not fill out the survey. (An analysis of 199 surveys, rather than 201, will be included in the statistical part of this report because two surveys arrived after that portion was completed. However, several anecdotal statements from these two surveys were included in the appropriate appendices.)

The report is organized in the following way: Section II examines the teachers' responses to questions 3 and 11 of the survey regarding the training they received in the summer of 1996 for use of the performance packages during the 1996-97 school year. (For a description of the training, see Appendix B). Section III contains an analysis of questions 1, 2, and 12, in which specific packages are reviewed. Sections IV through VI deal with types of special education modifications/teacher involvement, LEP/ESL adaptation/teacher involvement, and involvement of media specialists. Section VII examines teachers' reflections on their own changes in teaching, as well as the understanding of the standards movement by their coworkers. Finally, Section VIII offers some reflections and conclusions.

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Section II: Training

Question 3: What part(s) of the training prepared you to use this package?

Out of the 201 respondents who completed the survey, there were 11 who left this item blank and an additional 25 who made an attempt to answer the question but did not directly address this topic; for example, seven individuals discussed something in their own background that had prepared them to use these packages, but did not mention the training. For a detailed list of all the responses to this question, see Appendix C.

Of the remaining 165 valid responses, 21 (13%) noted that there was nothing helpful about the training. However, the majority (87%) of the teachers were able to specify what they found helpful about the training and it is these responses which are discussed below. Comments that were made just once or twice are not included here—this is a general overview.

The area of training that was most often mentioned was related to learning about the inquiry method. Twenty-six teachers indicated that they learned more about either inquiry in general or ways to use inquiry methods in the classroom. For example, one individual stated that the inquiry training had helped by demonstrating "that students need to be free to explore new ideas on their own." In addition, two teachers appreciated that the inquiry process was utilized by the trainers in order to demonstrate its use.

Clearly, it was important to these teachers that they learned specifically about the performance packages. Twenty individuals commented that "unpacking the package," or going through it step by step had helped them the most, while an additional 15 acknowledged that being able to see and review the packages was beneficial.

Very general comments were made by many of the respondents. The "whole thing" was found to be helpful by 19 individuals, while "summer training" was named by 12 teachers. One respondent each mentioned "pre-panel" training and "1/2 day training last winter." They were not specific about how the training had been helpful, nor was it clear what other training they had received.

Sixteen respondents found that sharing and networking with other teachers had been useful. As one individual pointed out, "Talking over concerns with other teachers always alleviates the stress level when trying something new or different." This networking allowed one teacher the "opportunity to exchange ideas on how each package could be used at different levels."

Besides simply learning about performance packages, ten respondents found that learning which parts of the package could be adapted to fit teacher needs or style was very important. This allowed them to adapt parts of the package to make it

more pertinent and useful to what they were doing. Shared one teacher, "It was beneficial to go through a package and find out what things you can and cannot change without jeopardizing the package intent."

It was volunteered by nine individuals that listening to someone who had written and/or implemented a particular performance package was quite useful. As one respondent remarked, "Listening to the teacher who piloted an inquiry package and being able to ask him questions was most helpful."

A similar number of respondents (N=9) noted that actually implementing the packages with their students was what worked for them, rather than any of the training they received. As one teacher explained, "It comes together as you do it—you're not sure until then."

Another nine individuals discussed their appreciation for gaining additional background information and/or general knowledge of the graduation rule and performance packages. "Learning the whole picture for the Standards overall," was the most beneficial piece for one respondent.

The opportunity to begin planning for how they would implement the packages was named as most helpful by seven teachers. It was simply stated by one, "I was able to spend time planning how I was going to teach the package."

A slightly smaller number of individuals (N=6) wrote about the affective outcomes of the training. Specifically, three felt more motivated after completing training, two noted gains in their confidence levels, and one left feeling that implementing a package was "do-able."

Many other responses were submitted about helpful parts of the training, such as specific trainers (N=8), emphasis on getting media specialist involved (N=5), authentic assessment (N=5), meeting with own graduation standards technician (N=4), question and answer sessions (N=3), task management skills (N=3), and availability of samples of student work (N=2).

Question 11: "Please provide specific suggestions to change/improve training experiences:"

This report is an overview of suggestions given by the respondents concerning ways to change/improve performance package training. Similar to the previous report (question 3), this report gives a summary of the teachers' comments, with a detailed categorized list of responses located at the back of this report (see Appendix D).

Of the 201 teachers who responded to the questionnaire and who had actually used a performance package, 160 answered this question. Thus, 41 individuals left

this question blank, or 20% of the respondents. Various suggestions were made on how to change/improve the training, but the following were mentioned most frequently:

- more networking among teachers
- trainers/presenters should be teachers who have experience in implementing a package
- better assessment training and tools
- training that is more specific and hands-on, and uses model packages
- teachers should be better informed about what is expected of them

Each of these suggestions is further discussed below.

These respondents clearly saw a need for more opportunity to network or share with other teachers regarding ways in which to use the packages. Fifteen individuals suggested that during the training there should be more time allocated for having teachers discuss among themselves ways to implement the packages. Urged one respondent: "Allow teachers a chance to brainstorm in small groups—How I can adapt/use/imbed... the package?" Some of these individuals recommended networking with teachers in the same subject area, others said networking should occur with those who are utilizing the same package, and still others advised networking with teachers of the same grade level.

Along with the idea of teachers having more opportunity to network among themselves during training, some respondents proposed that during the school year teachers should network or collaborate together, or get some type of supervision while doing the package. Some ideas included "allow time for teachers to collaborate" during the school year, have teachers using the same package get together for support and share ideas while they are implementing the packages, and communicate over the phone or by e-mail with other teachers who are using the same package. A few respondents called for additional training or meetings during the school year, and several others requested follow-up training. One individual who had the opportunity to attend a training after using the package noted, "Follow-up training was very beneficial. One reason was because we worked with others at our grade level who did the same package. Sharing experiences was wonderful!" In addition, six teachers touched on the need for some type of supervision/mentoring in which they could learn about strategies and techniques to use with their package.

Another often raised concern focused on who should conduct the performance package training and how. Eleven respondents advised that there should be more presenters who have actually used the packages. One individual pointed out, "Training was especially good in the presentations by people who have done a package. It would be nice to see more of those people." Similarly, eight others recommended that teachers who created or implemented packages be at the training to answer questions and to talk to the participants. As one teacher said, "It would be great to have the people who wrote the package be at the training to talk

with those who choose to do that package." In addition, eight respondents said that they thought the presenters should model the process more, such as demonstrating how to teach with the package.

Another area of concern for many teachers was the assessment part of the performance packages. Six respondents volunteered that the checklist was difficult to understand and that there should be more information on "how to create a quality checklist." Seven others wrote that there should also be more training on ways to evaluate and assess the students' work. For example, one teacher stated: "It would be better if during the training we would go through the assessment procedures as a teacher and also as if we were a student." Another individual indicated that more time is needed on the "actual assessment of the process and finished product."

The respondents offered a number of practical suggestions for improving the training. Ten individuals shared the belief that "teacher and/or student demos" to model the packages should be provided. Six teachers recommended that trainers need to be more specific about ways to implement packages. "Go through step-by-step the activities pilot teachers employed during the package," suggested one respondent. In addition, five individuals alluded to the fact that the packages themselves need more specific information and directions. The need for more time for teachers to work on the packages (planning, hands-on activities, etc.) was taken up by five respondents. Three others agreed and added further that there should be expert help available while teachers prepare to use a package.

Seven individuals wanted to know more about what was expected of them. As one respondent explained, "Teachers should have a better understanding of what will be expected of them during and after the training." A few of these teachers acknowledged that they did not know what the state guidelines for performance packages were. They asked for clarity in this area, with one suggesting: "Make state expectations clear, standard, and consistent—they seem to shift."

Section III: Performance Packages

For all of the 199 responses received for Questions 1 and 2, the following tables show the overall reaction to the labelling of the packages:

Question 1: Is this package appropriately identified for the subject area? Please comment.

Response	Frequency	Percent
Yes	183	92.0
No	7	3.5
Not Applicable/Other	9	4.5
TOTAL	199	100.0

Question 2: Is the level of assessment appropriate for the identified grade level? Please comment.

Response	Frequency	Percent
Yes	115	57.8
No	56	28.1
Not Applicable/Other	28	14.1
TOTAL	199	100.0

Responses to questions 1, 2, and 12 from the survey were combined here because the responses relate to specific, identified performance packages. The information that follows will group the responses by the *name of the package* selected by the teachers.

Some packages were chosen by many teachers to pilot in their classrooms, other packages were chosen by only one or a handful of teachers. The frequency of package selection was based primarily on the subject or content area and whether many or few students took a course in that area. Subjects such as social studies and general science have many students enrolled and, thus, more packages were piloted in those areas. However, advanced math, for instance generally has fewer students and teachers working in that area and consequently there are fewer teachers who piloted packages appropriate for such content.

The format for reporting the reponses about the specific packages will be to provide the quantitative data for questions 1 and 2 in the first and second paragraphs. Then a qualitative analysis by package of the open-ended responses to questions 1, 2, and 12 is provided in the third paragraph.

NOTE: For each package described above, the first paragraph addresses question 1 of the survey (appropriateness of subject area), the second addresses question 2 (appropriateness of level of assessment), and the third addresses question 12 (any additional comments about package)

African American History Time Line

Both of the teachers that utilized this package indicated that it was subject area appropriate. It was noted by one individual that, "Adjustments were made to adapt the subject matter to the curriculum."

While one respondent answered "yes" regarding the suitability of the assessment for the grade level and added, "Students handled the assessment well," the other teacher felt differently. The latter checked "no" and elaborated, "There were self-assessments, but they were really vague. There were also 2 questionnaires that were above the students' level of vocabulary."

The individual that wrote additional comments on the package had this to say: "Needed far more teacher support than I anticipated. Students did not even know enough about the persons/events involved to make hypotheses - especially the ones further back. I ended up changing the lesson a good deal so students would get more out of it."

Art History

There was only one teacher who had used this package. This individual responded affirmatively regarding the package's appropriateness for the subject area, adding that although it was designated for art history, it was used for humanities.

In terms of the level of assessment being appropriate for the identified grade level, this teacher checked "yes" and reflected, "I used it with juniors and mostly seniors in an elective course. The note taking and extensive research demands that students have had prior skill development in research."

Additional comments were written by this respondent, including, "I'm disturbed by the apparent mass distribution of these packets before the assessments have been viewed... I was told our student work would help establish the assessment criteria - It seems premature to continue to distribute these packages until some adjustments are made and some actual assessment criteria is available..."

Author Study

There were four valid responses (from five teachers) to the question regarding appropriateness of subject area identification. All of these respondents answered "yes," with one explaining, "The study of authors at the elementary level is very common."

NOTE: For each package described above, the first paragraph addresses question 1 of the survey (appropriateness of subject area), the second addresses question 2 (appropriateness of level of assessment), and the third addresses question 12 (any additional comments about package)

Interestingly, these teachers generated vastly different answers to the item about the suitability of the level of assessment for the identified grade level. Two of these individuals had attempted to use this package with first grade students and acknowledged mixed results. While one responded affirmatively to this question, the other stated, "For first grade it is definitely not appropriate as written." The remaining three respondents had utilized this package in third grade classrooms, again offering differing conclusions in this regard. One teacher checked "yes," (with no accompanying explanation), but the other two did not agree. It was observed by one that "this performance task was too difficult for the students. Our students needed lots of one-on-one help."

Further comments shared by these teachers focused on resources ("There are not enough resources in media centers to complete the assignment properly. I had to spend over $300 from my budget to obtain minimum sources"), necessary revisions ("To do the Author Study a number of modifications were made to make it workable"), amount of time allotted ("One to two weeks is not feasible time to complete the assignment. Much time was spent on individual teaching/guidance"), and level of difficulty ("I believe that most of the students did not understand what they were doing during the assessment. I had to thoroughly explain what each of the questions on the evaluation meant").

Bartholomew's Question

All three teachers responding about this package found it to be appropriate for the subject area. One teacher replied, "I adapted this for use in my Family Living Skills class," while a science teacher volunteered, "This package fits in very well with understanding and using the scientific method, and a knowledge base on properties of liquids and solids."

However, according to these teachers, the checklist for this package is less than ideal. The concerns that were expressed included: "too many items," "not age appropriate," and "far too detailed and used language too difficult for the age group."

Additional comments about this package echoed the concerns about the checklist. One respondent suggested, "If we are going to evaluate students using checklists, then let's write them in a 'language' they can understand. I felt the section in the checklist on variables was ridiculous for this age level."

NOTE: For each package described above, the first paragraph addresses question 1 of the survey (appropriateness of subject area), the second addresses question 2 (appropriateness of level of assessment), and the third addresses question 12 (any additional comments about package)

BioLine

Eight respondents had experimented with this performance package in their classrooms. These teachers unanimously described the package as subject area appropriate. Interestingly, four of them discussed how this package could be, or had been, used with reading/language arts as well as with social studies (for which it is identified).

There were two individuals who did not believe the level of assessment was suitable for the grade level. Both of these people alluded to the package being too vague, with one commenting, "My students needed specific directions and wanted feedback more specific... I worked up a more specific criteria and used it along with what was supplied." The remaining six teachers all checked "yes" on this item. Recalled one, "My students were challenged, but were able to complete all aspects of the package."

Other remarks specific to this package were made by five teachers, two of whom referred to the suggested time frame, which was characterized by one as "very inadequate." The amount of resources necessary for successful implementation of this package was also brought up by two respondents. Another concern raised was that the "concept of the sociological bioline was too difficult for fourth graders." On a positive note, a final respondent mentioned the "many positive comments from parents/students about depth and breadth of project."

Book Illustration

One teacher did not feel that the package was appropriate for the subject area, although there was no accompanying explanation for this belief. The remaining three respondents answered "yes" to this question. Two of these individuals made reference to pre-teaching that was necessary in order to use this package. Remarked one, "I found that the 'art' terminology, principles, and background needed to be taught first. The project was indeed fun, valuable, a definite addition to curriculum - a good experience for all students and time consuming!"

The responses to the grade level appropriateness question were quite mixed. The one media person who responded announced that the grade level was not appropriate and that this package should have been used with second or third graders; however, it is not apparent which grade level he/she used this package with. Interestingly, a teacher who tried it with third grade students declared that it was "much too in depth" for children of this age and would be more appropriate for sixth through twelfth grade students. The other two teachers answered affirmatively, though one had this comment, "The level was fine but there were specific numbers of books that the children were to examine which were too

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exhausting for 3rd graders. Even the best 3rd grader is ready to stop and move on when they've already found the answers to their questions."

Recommendations were submitted by one teacher when asked for additional comments. These included, "Parts are repetitious. Stating definitions of the elements and then summaries of each element really came off as writing the definition twice. Asking each student to interview 18 other students was not sensible. Trying to get other teachers to give up enough class time for my class to individually do the surveys with interviews was difficult." Statements by the remaining three teachers revealed positive experiences. "Most of the kids really enjoyed the projects, gained a lot of information/knowledge, but also realized it was a 'big project,' and most of them are proud of what they accomplished," voiced one teacher. Another made a similar statement, "I really enjoyed this package. We truly learned new things about the importance of illustrations and I believe the kids will never be the same!"

Child Development - Case Study

All three of the teachers who utilized this package claimed that it is appropriately identified for the subject area. Elaborated one, "We have a year long child development program in which students usually do observe children and do research papers. We've never integrated the two before."

Likewise, these respondents also expressed the belief that the assessment is grade level appropriate. One acknowledged, "The second time was better for the students - I did some adaptations," while another reasoned, "It is rigorous but I understand it needs to be."

One individual advised that this package undergo "major revamping because it is unclear." Several areas were addressed by another teacher, who listed problems as being, "the disparity in students' research skills... I feel my students' work is very weak in observations, both in number and quality," but went on to say, "The package is a very rigorous one. I am hopeful that as the graduation standards are implemented, students will come to my classes with many of these skills already developed. I liked the way the package tied primary and secondary research together. I also liked how individual it was. My students enjoyed posing their own questions to research rather than having a topic assigned to them. The package forced a role change for me as the teacher - one of being more of a facilitator and guide. It was new, challenging, and rewarding."

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Children and World War II

Both teachers who evaluated this package agreed it is appropriately identified for the subject area. One pointed out, "Before teaching this package, however, I had to pre-teach vocabulary, introduce the historical time frame and political events of W.W.I so students would have some background information."

These respondents had differing opinions regarding the grade level appropriateness of the assessment. One teacher checked "yes" and further explained, "I like that both student and teacher evaluated the product which was a source chart and a monologue. It would be nice if there was a task management checklist for both students and teacher to be completed for each work session then averaged out." However, the other individual thought the package was "much too hard - more appropriate for 8th grade or higher."

When asked for additional feedback, one respondent identified the issues of age appropriateness and cost. "Resources for the package as originally written were costly and not easy to use by a group of students. The package was too difficult for 10 and 11 year olds; too many parts with many steps and much adult supervision. I think it would be appropriate for some 14 and most 16 year old students and interesting for adults."

Cultural Diffusion

Only one teacher who had experimented with this package returned the survey. The package is subject area appropriate, according to this respondent, who indicated, "This was a social studies package and it worked fine in a foods class."

This individual also believed that the package is appropriate for the identified grade level. However, the following recommendation was made, "More tasks required than necessary to meet the declarative and procedural knowledge. I'd combine the info into less tasks yet still have the similar requirements."

Additional suggestions proposed by this teacher include: "1) E's used only for 'Exceptional Work'. Students should verify why they should get an E if they believe it's acceptable; 2) S's and N's as suggested evaluation; 3) Overall evaluation of performance and Task Management Skills; and 4) Students cannot be graded on 'who they are' or their 'effort'." It was finally noted by this individual that he/she is "thoroughly enjoying the experience."

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Deer Me

Of the five teachers who identified this as the package they had tried, only one did not find it to be subject area appropriate, adding the remark, "I feel it would be much better identified as a social studies package [than science]." The remaining four individuals answered "yes" to this question. Some explanatory comments included, "Fits nicely with environmental unit," and "Students had an interest in the subject. It could 'cross lines' between social studies, science and English."

Feelings were mixed regarding grade level suitability of the level of assessment. Two teachers checked "yes" and two marked "no," with one stating the belief, "I feel this package is better suited for ninth grade [than eighth]."

Additional comments specifically about the package were offered by two individuals. One lamented that there was "too much red tape and paperwork, not enough time left to deal with students as they work through the package," while the other wrote, "This is a great package for civic responsibility and the students enjoyed it."

Descriptive Research Process

All seven of the teachers who responded indicated that "yes," this package is appropriately identified for the subject area. While one respondent claimed, "It worked well in my English (American Literature) class," another remarked, "I modified the task for the German II students." Additionally, it was volunteered, "The descriptive research process while accurately coded for Language Arts could be used in any curricular area which requires research products."

Despite the fact that all seven individuals thought the level of assessment was appropriate for the identified grade level, three of them went on to describe concerns. Two teachers focused on the language used in the package: "The assessment is appropriate - some of the vocabulary in the package was ambiguous and unclear for 11th and 12th graders," and, "The directions are very high flying." Another respondent urged, "The assessment criteria should be detailed more clearly. The different levels of evaluation (total package and tasks) should have uniform evaluation language. The packages have 4, 3, 2, 1 and the tasks have E, S, N."

Three individuals shared favorable comments about the package such as, "I like the package a lot, though I've made several minor editorial/ adoption changes." A German teacher cited the following benefits: "My students not only learned about inquiry, but they also learned about word order and vocabulary for questioning in the German language." Two respondents were a bit more cautious with their

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enthusiasm for the package: "It is a bit overwhelming - teachers need to be clear on the required elements and realize that some parts of the package are merely suggestions," as well as, "The language is too formal and vague."

Designing an Interactive Web Site

Regarding subject level appropriateness, the sole respondent for this performance package checked "yes," adding the following qualification, "However, we teach computer application not computer programming and we felt that teaching HTML was not appropriate to an application class - therefore, we modified it."

This individual also responded affirmatively in terms of the appropriateness for the identified grade level. "The students enjoyed the packages. It was an interesting way to pursue inquiry and incorporated all aspects of research well."

Additional comments generated by this respondent included, "With the adjustments we made - this package was valuable in a computer applications class. It was time consuming - as are all of the packages."

Drug Effectiveness Analysis

Three respondents had utilized this particular package. All three voiced their agreement that it was appropriate for the subject area.

Similarly, these teachers answered affirmatively regarding its appropriateness for the grade level. "I feel that this could be used in any level of high school biology," pointed out one individual.

In terms of additional comments, one teacher suggested, "Actual performance of the lab rather than a data table." Another reflected, "It was a very worthwhile experience... I can see where this will be very useful."

Expert Interview

All three respondents who had tried this package replied that it is appropriate for the subject area. One teacher explained, "This is listed as any content area. I modified the package so my class interviewed a 'math expert'."

The individuals who used this package, which is identified for fifth grade, all teach much older students. It was cautioned by one respondent, "This work would

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be difficult for a 4th/5th grader. I worked with seniors." The others used the package for ninth through twelfth grades.

One additional comment regarding this package was brought up: "For my particular purpose, the package helped students focus on key items needed for an interview. The information gathered from this article was incorporated into actual articles written. The articles improved in quality... to a more concrete approach to interviews. Also, fewer students (if any) skipped the interview step before writing the article."

Finding Out: An Investigation

Each of the eight teachers responding regarding this package noted that it is appropriately identified for the subject area. One characterized it as being "Perfect for scientific method."

Due to the fact that these respondents used this package at every level between kindergarten and third grade, there were differences in terms of whether they believed the level of assessment is appropriate for the identified grade level. One-half (N=4) of the teachers checked "yes," though one recommended, "It does need to be rewritten for first and second grade however as their writing skills are not as developed yet and they need help on 'student evaluation'." The fact that this process is simply too foreign to students at this point was addressed by two individuals. One reasoned, "I think as students become more familiar with this type of activity, this [assessment] will be appropriate."

When asked for additional comments, two teachers expressed frustration that they were not supposed to modify the package for their younger (first and second grade) students. According to one, "The freedom to change the package is necessary to make it work." Other comments included, "This package was difficult to implement at school. Would have been better if all had the same question - especially at early grade levels. Time and materials could then have been consistent. Many had to do it at home," and, "My students really enjoyed the experiment part of the package. It took a lot more classroom time than I expected, about 12 days, because we had to practice observation, prediction and conclusion skills."

Finding Relevant Information

Of the 14 individuals who utilized this package, 13 made valid responses to question 1 (the remaining teacher had adapted the package to both a different subject area and grade level and simply wrote "N/A"). Only one teacher checked "no" regarding the appropriateness of the package for the subject area, explaining, "This

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package can be used with just about any subject area." However, it should be noted that a similar remark was made by two of those who answered "yes." Other comments by the latter group included, "It was used as a joint project between social studies and English," as well as, "This package worked beautifully with our existing curriculum."

Twelve individuals responded to the item that questioned the suitability of the assessment for the grade level. Interestingly, the two who checked "no" gave opposing reasons for their answer, one describing it as "too simple" and the other as "too difficult" for eighth grade students. The remaining ten respondents, however, did find the assessment to be appropriate. It was proposed by one teacher that "it could also work with older students," and by another that "it could be adapted for the younger students also."

Difficulties encountered by these teachers included, "It was not appropriate for students who write and read at two or more grades below their grade," "The time line indicated on the package (1 week per task) was much too short. I need twice that," and "The student presentation to the class was not real helpful in assessing the quality of the work and did not provide an additional learning experience for the class." One individual discussed making "an adjustment which was permitted. I used the Thea Holton method of note taking and labeling instead of the charts that were suggested. I believe this works well with students." Positive remarks generated included: "There are many skills taught in this package," "This is a good package. It is easy to use... I think the checklists were quite helpful," and "I enjoyed completing it. All my students completed it. Most students took pride in their 'project'."

The Food Pyramid

Every one of the 17 teachers utilizing this package agreed that it is subject area appropriate. A high school teacher announced, "Even though the package was designed for grade 3 nutrition, I felt it very appropriate for my introductory unit in high school nutrition."

Sixty percent (N=9) of those responding to this item checked "yes," while the remainder did not believe the level of assessment is appropriate for the identified grade level. Three teachers from the latter group advised that the assessment is too difficult for third graders. Acknowledged one, "It was even difficult for many of my 5th graders." Even some of those answering "yes," however, submitted comments that qualified their response. Examples include: "Yes, although taking notes is a difficult concept for primary students," "Yes, if children are provided enough developmental activities before third grade... Many didn't have the foundation to

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do the tasks required," and "Yes, but too lengthy, too detailed, needs to be streamlined so it's less time consuming."

Eight of the 11 respondents making additional comments brought up various concerns. The most common of these (N=5) dealt with the amount of time the project took to complete. As one individual reported, "It was a very time consuming project... Because it took so long they were unable to get as far in science." Secondly, three of these teachers addressed the issue of preteaching necessary in order to successfully complete the package. Specifically, the areas of graphing, note taking, and research skills were listed. Additional concerns included, "It is difficult to accurately know if the children are writing down everything they eat. Also some parents tend to take over that portion of the package," "it was redundant in checklists - one would have been plenty. Inquiry on the food pyramid was hard because of the unavailability of sources at a primary level," and, "The directions are very unclear... The average student isn't capable of doing the student evaluation. Most students checked all 11 items or things they had done when in reality many of them had not met all that criteria." A final suggestion was also made, "I would shorten the food diary to three days..." Positive remarks were offered by six teachers, who volunteered, "I enjoyed this package! I learned right along with the students," "The children loved it," "It really made the children responsible for learning and teaching others too," as well as, "The kids definitely knew the material better after completing it and that's what it's all about in the end!

Heating Up

Three of the four teachers who implemented this package felt that it is appropriately identified for the subject area. The fourth raised concern that it "could be confused as a science package and not inquiry?!"

These respondents seem to be in agreement that the level of assessment is suitable for the identified grade level. Two individuals made reference to the fact that as students gain more experience with the inquiry process, they will be "ready" for and "comfortable" with the package.

Additional concerns raised by these teachers included, "Not a totally clear package to administer. The standard was asking for graphing results, but the package activity did not yield clear, easy data that would be workable for intermediate students," and "I found students have a difficult time seeing how data is collected for graphing..." While one respondent reflected, "I may do a little more pre-teaching on heat energy first next time," another volunteered, "My plans are to do this package again next year without too many changes."

NOTE: For each package described above, the first paragraph addresses question 1 of the survey (appropriateness of subject area), the second addresses question 2 (appropriateness of level of assessment), and the third addresses question 12 (any additional comments about package)

Hexagonal Writing

All four teachers responding about this package declared it to be subject area appropriate. Further comments were shared by one individual, "When I first began, I wasn't sure if it all would fall together as 'hexagonal,' but after going through it - I felt it was a worthwhile activity. I was surprised at the output of the students (at times - beyond expectations)."

Answers were mixed regarding this package's appropriateness for the identified grade level. The sole negative response included the following explanation, "It is set at intermediate level but I think the concepts are too hard." The remaining three teachers answered affirmatively, with one adding, "I thought it was more advanced in grade level - but the students handled it well. It was a lot of work for just the developmental level."

When asked for additional comments about this package, it was observed, "This would be a great junior high activity. It would be nice if we could cross over grade levels and use some of those activities in different grades - adapting them," as well as, "I felt it was hard to understand the directions. I think there needs to be a more detailed description of the process."

High School Market Research

Six respondents had used this package. All of them expressed the belief that the package is appropriately identified for the subject area. One teacher stated, "I used it in my career math class," while another characterized it as an "excellent project for an entrepreneurship class."

Responses regarding the assessment's appropriateness for the identified grade level (ninth grade) were mixed. While three individuals simply checked "yes," the remaining three made the following remarks: "Too difficult for my entrepreneurship students," "This package would be more appropriate at 10th-11th grade," and, "This project is for 11-12 grade students with prior knowledge."

Two teachers offered additional comments. It was believed by one that "there needs to be many changes made. The checklist was not appropriate!" while the other remarked, "Most students responded to the project favorably. 10% of the students did not get interested enough to move to the second interview and the research."

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Interviewing Portfolio

Affirmative responses were generated by all three of the individuals in terms of this package's subject area appropriateness. One added, "This is a language arts performance package and so much more. It worked in with our MN unit of study and also the intergenerational partnership is so good!"

Regarding grade level suitability of the assessment, two teachers answered "yes," with one elaborating, "Much is open-ended and so it is appropriate for a multi-grade level study. Excellent package for 6th graders. Everyone took part and everyone stretched to meet requirements for themselves."

Additional comments about the package included, "Videotaping of interviews gave a very nice personal touch to the interviews. Students at a third grade level are just starting to work on (self) organizational skills. They need help to visually see how to organize this type of project," as well as, "Great package that fit in really great with our curriculum and our community. Will do this again next year and feel more confident."

Joe's Metals

The sole teacher responding regarding this package felt that it was appropriate in terms of the subject area. He/she added, "The package is appropriately titled for an industrial ed. class. I used the package (with some modification) for a visual arts (sculpture) class."

Similarly, when questioned about this package's appropriateness for the identified grade level, this individual checked "yes."

An additional comment revealed that this respondent thought the package "was very well written and very thorough in its instruction."

Main Street

Four respondents had utilized this package, all of whom agreed that it is subject area appropriate. One teacher pointed out that it "could be used for any subject area by altering the theme given in the package."

Three of the respondents checked "yes," referring to the assessment's suitability for the grade level. It should be noted, however, that apparently this package was used at a variety of levels. An elementary teacher explained, "We adapted [this package] for 3 and 4 grade level. We used the assessment as a guide to

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create our own for our grade level." Another individual tried the package with "10th grade at-risk students," adding, "This project challenged my students. I think this package could be adapted to a high school standard." The remaining teachers also used this middle school package at the high school level. One found, "Most 11th graders can perform adequately to the standards of the package if given the time."

Regarding additional comments, one teacher expressed grave concerns not only about this package in particular, but performance packages in general: "The package requires so much time that significant content of the US. history curriculum has been sacrificed... The original plan was to embed packages into current curriculum. Now, it appears, the plan is for the packages to become the curriculum... Not good!!!" Remarks specific to this package were offered by another individual, "Students found chart #3 confusing and unnecessary - they are not skilled researchers... Evaluation tool provided seems lacking, doesn't allow for reflection or articulation of learning." This teacher did acknowledge, however, that "Students enjoyed selecting questions." Finally, it was noted by one respondent that the package "was exciting and well-received by parents and students!"

Market Research

While all three of the teachers who used this package answered "yes" regarding its appropriateness for the subject area, it further appears that they believe its application goes beyond that for which it was specified. Opined one, "The package tied in nicely with a multi-disciplinary approach to teaching," while another commented, "I also incorporated many other subjects. Because of this I don't think it should be under the subject math."

Regarding the suitability of the assessment for the grade level, one teacher had mixed feelings ("some part are, some are not"), while the other two responded "yes."

Other comments specific to this package included, "The assessment was vague," and, "I thought it was a great learning experience for my class. The students enjoyed it and were excited about trying other packages in our room this year."

Mathematics Research

Regarding this package's appropriateness for the subject area, three of the four teachers that tried this package answered "yes," while the fourth checked "no," adding, "Since the emphasis is on inquiry, I think that the package would be more appropriate for a class that teaches inquiry methods. Perhaps in the future when

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students have been exposed to the inquiry method on an easier topic they will be able to handle this package... About half of the students had no previous Internet training so time had to be spent in teaching them how to navigate." One individual that answered this question affirmatively went on to discuss the fact that, "I added a few topics to the list already given in the package... Algebra students were to choose a specific topic to explore while I had the geometry students investigate bridges and use what they learned to construct a toothpick bridge."

While one respondent indicated that the level of assessment was appropriate for the grade level, the remaining three disagreed. Negative comments included, "It is too vague. There should be specific criteria for each subject area within math," as well as, "I found it very difficult to have students evaluate themselves as well as their peers. At this age, it seemed to me anyway, students were somewhat shy or afraid to give an honest evaluation of their peers..."

Additional comments included one teacher suggesting, "Before this package can fly both teachers and students need a lot more experience. It would also be beneficial to see a good sample. Better yet would be several good samples in different styles." Another individual observed simply that it was "fun," while a final teacher shared the following experience, "I used this in calculus A.P. and consumer math. In calculus, it was open-ended and students could work in groups. In consumer math, students worked independently. However, I gave them step-by-step instructions - with a topic I chose. Both were successful (in my opinion)."

Mock Trial

There were only two respondents who had experienced this package. Both answered affirmatively that it was appropriate for the subject area, with one adding, "Fit nicely with soc studies/history."

Neither individual thought the level of assessment was appropriate for the grade level. One had used it with seventh graders and recalled that the "results varied," while the other advised that "the mock trials are better when done at 9th grade and above."

Additional remarks included the belief that "this should be a middle level package," as well as the following suggestion: "I include the roles of judge and jurors... This gives all students in the room a more realistic experience of a trial. It also provides a role (jurors) for students who aren't up to the much more demanding role of a lawyer."

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The Mystery of Mysteries

Both of the two individuals who used this package indicated their belief that it is appropriately identified for the subject area. Explanations included, "I used this package in my language arts curriculum," and, "I've used this in other areas as well."

Again, these teachers felt this package was appropriate in terms of the level of assessment being suitable for the grade level. It was added by one, "Very challenging in the length of task completion time. I felt that one task is sufficient. I hate to beat something to death."

In terms of additional comments related to this package, both respondents offered some remarks. "It seems that this is 'curriculum' and not a vehicle to extend higher level thinking skills. It took so much time to just do one task (3 weeks). Kids were tired of it by the end," stated one individual. The other teacher attached several pages, part of which will be reported here: "I found that although the students worked hard to achieve the standard in the package, the resources needed for the package were difficult to find... Therefore I changed some of the descriptions in the tasks, still allowing the students to meet the standard." This individual went on to say (regarding tasks #1, 2, and 3), "The allotted amount of time is not nearly enough for the students to complete the task," and offered the example that task #2, which is supposed to take one week, actually took nine weeks.

Newscast

Five of the six teachers writing about this package indicated that it is appropriate for the subject area. Noted one individual, "The package fit well in the area of language arts especially. Research, writing, and speaking skills were mainly used."

Only one individual identified the assessment as being grade level appropriate. Most of the remaining teachers had used this package with older than the specified third grade students and found it to be the right level (in the eyes of a sixth grade teacher) or still too difficult (according to two fifth grade teachers). Specific comments included, "We used this package with 5th grade and they had difficulty charting the news stories based on the speed info is presented. Summarizing is also a difficult skill," as well as, "It was difficult for many [fifth graders] to choose an interesting report on the subject they chose from watching TV..."

Concerns listed by these respondents were: time, resources, space management, paperwork, and equipment. One mentioned, "I'm left confused about

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scoring on the checklist. Some parts... are E, S, N and checklist is 4, 3, 2, 1?" and another referred to this as being "a frustrating experience." Positive remarks included, "Improvement was shown as unit progressed so kids were picking up quality of work. Many skills were used," and, " A fun project. The students took turns taking their 'newscast' home so their parents could see what they did."

Non-Euclidean Geometry

Each of the two teachers responding about this package indicated that they felt it was subject area appropriate. However, one went on to point out, "The package involves work that is currently taught at two different levels. The trigonometry task cannot be done until advanced math since trig is taught there. Some of the higher degree polynomials are also not taught until this class. Therefore, package was placed in advanced math not algebra II."

Responses were mixed regarding the appropriateness of the level of assessment for the identified grade level. On the one hand, it was announced, "I would totally change my checklist to fit our school's research policies and technology grading sheets," while on the other, a teacher claimed, "Our first attempt with this type of assessment in a math class went fairly well."

A final comment that was made dealt with the need for more clarity regarding the expectations of the package. This teacher urged, "Help us to understand what the package is asking of the student!"

Photographic Observation

Each of the five teachers who used this package indicated their belief that it was subject area appropriate. One teacher replied, "Current events allows the package to be used in social or reading/language arts. I was able to develop lessons in both of these classes," while another proposed, "It could be used in many ways other than the way it is defined in the package."

None of these teachers thought that the level of assessment was appropriate for the identified grade level. Two respondents described the assessment as too difficult or "sophisticated," while a similar number characterized it as too vague.

Additional comments offered included, "I extended the package to include an interview using the questions and a written news article that was published in the local paper," and, "Had student write newspaper article as a follow-up; Students said they learned how to get answers to their questions and how to ask questions; learned telephone etiquette." Concerns regarding this package included, "Needed to

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choose a different article/picture to use as other was too graphic and violent for this age group," as well as, "Selecting the photo was extremely difficult even though I had parental participation. 5 of 27 did not choose a picture and tried the package with something 'left over' from someone else. If their photo was not of interest to the student, their project seemed much more difficult. Follow up questions were difficult to generate."

Planning and Carrying Out an Investigation

All eight of the respondents who had tried this package were in agreement that it is appropriately identified for the subject area.

Regarding the suitability of the level of assessment of the identified grade level, five individuals checked "yes," that it was appropriate, although one added, "There may have been too many questions for primary students." It should be noted, too, that two of those responding affirmatively actually teach first grade, and therefore may not really be able to judge this package in terms of third grade students. Each of these first grade teachers described modifications that were necessary in order to utilize the package with younger children (e.g., "Our class formed a question in pairs"). The remaining remarks were offered by two third grade teachers, who stated, "The paperwork suggested (the actual paper for the children to fill out) was not appropriate for the level of handwriting development of many 3rd graders," and, "When the students were to evaluate themselves using the checklist, it was hard for them to understand the wording. If children are to evaluate themselves, put the wording at a primary readability and understanding."

Further comments were offered by two individuals. The following statement, it should be noted, was made by a first grade teacher: "The package is so inclusive - kids can't stay on task to get it completed - needs to be scaled down - cut back! Maybe just deal with asking the question." Finally, a third grade teacher was frustrated that "the lab report and checklist do not ask same things. This is confusing. Changes need to be made."

Policy Debate

The sole respondent utilizing this package believed it was appropriate for the subject area.

However, he/she did not feel similarly regarding the grade level suitability, adding, "I understood this would work for 9th grade - it was too advanced."

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In terms of additional comments about the package, this teacher explicated the following frustrations, "It was a disaster. My kids were too young for it (I was told they weren't) [and] the projected time for completion of activities was completely unrealistic. I admire the debate people for pulling this together and I support them - but this was the wrong package for these kids."

A Portfolio for Inquiry

The three respondents for this package all indicated that the package was subject area appropriate. One teacher elaborated, "The package content and format are on line with the primary goals in science education."

All three teachers also responded affirmatively that the level of assessment was appropriate for the identified grade level. However, one respondent offered, "The checklist needs to be cleaned up. We had several class discussions for clarification."

Only one teacher offered additional comments: "The portfolio assessment provided a new experience for both me and my science students. A process I've always wanted to try in science, but didn't know quite where to start. It was positive - very reflective process for the students. Good learning tool."

Recording History

All three teachers that utilized this package felt that it was subject area appropriate. It was written by one, "It fit quite well into our US. History class!" The other noted, "The package was written for each student to be working with a different event. I modified it so that each was working with a different phase of the same event." On a negative note, one teacher added, "Not a very effective way to measure. It seems as though there is not enough instruction, too broad a scope, and too much paperwork."

Modifications were also discussed in terms of the grade level appropriateness of the assessment. Although two individuals answered this item affirmatively, one acknowledged, "I had to modify it a bit to make it reachable for 9th grade, but I really did not modify it too much," while the other explained, "The assessment allowed different mediums for assessment: written and visual (and I included oral also, which we videotaped). I do believe, however, the package author's directions for the form of a final written assessment was clear enough." The sole respondent who checked "no" added, "Not without the developmental stages."

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When asked for additional comments, two individuals expressed concerns regarding this package, which was described by one as "Very confusing. Difficult for students to fit in to a course if they have no prior knowledge so it needs to be toward the end of a course." The other respondent explained, "I felt there was terminology not properly defined. I also felt there was some 'paperwork' not really necessary. All it did for my students was take them away from the interest in the research without - in my mind - serving a real need." Finally, one teacher pointed out, "The students enjoyed doing this project!"

The Research Question

Two of the three individuals who experimented with this package answered the question regarding subject area appropriateness affirmatively (the third did not check either "yes" or "no"). Explanatory comments included, "Used in social studies class," and "the subject area is wide open and easily used in language arts."

Similarly, the two teachers who responded to the item about grade level both checked "yes." Added one, "It can be adapted to any senior high level."

Other comments pertaining to this package were offered by one individual, "This package does not really ask for a hypothesis. It can be worked in easily, but it could be approached more directly. A question outline is a type not usually used as an outline style. Could it be something other than a question outline?"

Researching Immigration

One of the two individuals responding about this package made the following notation, "This package was too hard for my kids to implement because they don't know English. I used it but it was hard to teach it." The other respondent indicated "yes," that the package is appropriately identified for the subject area, adding, "Immigration worked well with MN history."

Similarly, this individual believed the assessment to be suitable for the grade level, although noted, "I made some adjustments as I thought necessary."

A final comment offered by this teacher was, "I believe this package can be adapted in several ways in order to be used with several grade levels."

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Researching and Writing a Biography

A total of five respondents had tried this package. Three of the five reported that they felt the package was appropriately identified for the subject area. One explained, "Package required a variety of skills considered as integral to the class in which it was utilized." One teacher did not answer this question and the remaining teacher circled both "yes" and "no" and added, "I taught a media studies course in which I used this package - I did end up leaving a lot of 'media' curriculum out due to the depth of this project."

The respondent just quoted did not feel the assessment was grade level appropriate and explained, "This was a huge project and a lot of skills need to be taught prior to the introduction of a package." However, the remaining four teachers all responded affirmatively that this was appropriate. One individual alluded to using the package with tenth grade students and another acknowledged that they had "amended/adjusted the checklist."

There were four additional comments written by respondents. The one negative remark was, "... I'm not sure I would do [this package] again. I'd rather write my own to have a better understanding and have the true ownership of the standard." One teacher referred to extenuating circumstances and described it as an "excellent package but with blizzards, flooding, and low ability of the class, we did not get it done." It was declared by one individual, "I look forward to using it again next year!"

Roller Ball

All four responding teachers noted that this package is appropriately identified for the subject area. One respondent observed, "It fits well with 5th grade science on energy transfer."

This package appeared to have been used with 5th, 6th, and 7th grade students by these teachers. One individual felt that "6th grade students were appropriate - 5th graders would be assessed by me with different criteria," though another acknowledged that "students in grade 5 easily understood the written expectations." Concern was expressed by one teacher that "It was difficult for kids to think of a reasonable question," but added, "They really enjoyed setting up their own experiment and many said that they learned more than if they had just read from the text."

Two teachers responded to the additional comments section. One exclaimed, "Has good potential!" while the other submitted, "I changed the checklist from

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letters to numbers (4=Excellent, 2=Satisfactory, 1=Needs improvement). Variable should be identified. Rubric needs to have a place for comments."

State Presentations

The two individuals (out of 15) who did not check "yes" in terms of this package's appropriateness for the identified subject area offered similar explanations, one of which was, "It includes all disciplines. It is a very integrated, interdisciplinary package." The remaining 13 respondents (87%) indicated their belief that it is appropriate. It was elaborated by one, "In 4th grade we study the 50 states. Having each child do some additional research on one state is very appropriate."

Regarding the suitability of the level of assessment for the grade level, three-quarters (N=11) marked "yes." Those who responded "no" agreed that this package is too difficult for the specified grade level (grade five). One individual described it as "much too hard for 5th graders to accomplish without doing every portion with direct supervision," while another felt it is "better suited to 6-8 graders." However, one teacher who used this package with sixth grade students referred to using "a modified version of the assessment tool" in order to make it "more rigorous." Another pointed out that "all work here can be done by intermediate students."

Approximately one-half (N=8) of the respondents offered additional comments regarding this package. While several gave positive feedback, there were also suggestions and concerns raised. Three individuals noted that this package took longer than anticipated. Although the manual stated that this package should take two weeks, this was felt to be "totally unrealistic." It seems that there was some difficulty in getting the materials necessary to complete the projects in a timely manner. The question of whether or not this package was truly "inquiry" was raised by two teachers, one of whom lamented, "This package did not lend itself to very much inquiry - the students were told what they had to research." Some recommendations offered included, "I would like to see prerequisites listed on the packages - if there are any," and, "I'm mostly concerned about the low average students and the complexity of this - don't make packages so difficult for the profiles that everyone is so snowed under that they can't enjoy learning!" Four teachers talked about what a positive experience this had been. Their comments included: "All [students] did a good job and learned valuable lessons about research and visual and oral presentation," "I am impressed with the work my class has done... They enjoyed the process and are proud of their work," as well as, "All students gained an appreciation for receiving materials and researching it. Some took a lot of time and became very interested in their county [modification from state] - driving to places with their family, taking pictures of sites, etc... I think this project was worthwhile

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and beneficial... [the students] certainly were more actively involved in the learning process."

Systematic Observation (a/k/a Any Content Area)

This package was utilized by six of the respondents, each of whom stated their belief that it is appropriately identified for the subject area.

A variety of responses were garnered to the question about the appropriateness of the level of assessment for the identified grade level, namely because this package was tried at so many different levels. Specifically, two answered "yes," one marked "no," and three checked neither but wrote an accompanying explanation. A teacher who successfully used this package with gifted second grade students believes it "would work late winter of 3rd [grade] for others." Another agreed, "I do not think this should be used as written before third grade." However, it was volunteered by one respondent, "I did it with 5th graders and I did have students who struggled with it."

General remarks about performance packages were offered by one teacher, who stated, "In order for these packages to be successful, and developmentally appropriate, elementary students must be looked at differently than high school students. Developmentally most children are not ready for the rigor of these packages before third grade." Three individuals offered comments specific to this package, including, "Children needed prior knowledge," and, "I would add a section where students write a summary of their learning." Finally, a respondent who used this package with fifth through eighth grade students listed a number of problems, such as, "Needed to order special equipment to do the project (ex. stop watches, long tape measures, etc.); lack of supervision for observation times; coordination of recess time and getting kids out of other classes; had to cover too much material in small periods of time; not ample time to communicate with partner to get a connection."

Tally Sheet

Five teachers responded about this package, all of whom felt that it is subject area appropriate. It was added by one, "I taught some of the skills in different areas (graphing in math, inquiry in reading, for example)."

While three of the respondents indicated that the level of assessment is suitable for the identified grade level, two (both of whom, it should be noted, teach first grade) disagreed, with one stating that "students had a hard time using [tally marks] accurately." However, another individual wrote, "I have a multiage classroom, grades 2/3. It worked just fine for both grades."

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In terms of additional comments about the package, a suggestion was made by one teacher, "I found that color coding each day was a good way to help them go back and check when an error was discovered. I made paper dolls and pictures of playground equipment for a bulletin board that we practiced watching with a clock before we went outside."

Turning a Chemistry Demo into an Inquiry

All three individuals who had experimented with this package indicated their belief that it is appropriately identified for the subject area.

While one teacher checked "yes" regarding the appropriateness of the level of assessment for the grade level, the other two felt differently. It was pointed out by one respondent that while this package "was in the middle school section of the inquiry materials last August, the example shared in special notes is for sure high school." The other teacher noted that this package seems to be "for an advance chemistry class maybe instead of a beginning," and went on to elaborate, "students were not able to frame questions or have a strong enough background to complete it."

Time was an issue taken up by all of these individuals, one of whom reflected, "Time frame (3 days) was not realistic, it took 5-1/2 days," while another shared that it "took a lot of class time, over 1-1/2 weeks with the 4 period day." Finally, it was noted by one respondent that the "rubric was so detailed as to be unusable - streamline."

Turning a Physics Demo into an Investigation

This package was used by three of those responding to the survey. Two individuals checked "yes" regarding the subject area appropriateness of this package. The one teacher who marked "no" added, "I reworded and used this package for 9th grade physical science."

Again, two respondents answered affirmatively in terms of the assessment's suitability for the identified grade level, one of whom reported, "It was developmental which is appropriate." The negative response was followed by this explanation, "At a session package evaluation, I learned the package is not up to the standards of a package."

The one additional comment offered was, "It took much more time than listed and much more than I had allotted."

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Turning Points in World History

All three respondents indicated their belief that this package is subject area appropriate. Added one, "I modified the topic to fit our curriculum. We did our inquiry on ancient civilizations from pre-history to the fall of the Roman Empire."

The one teacher who did not find the assessment appropriate indicated that the "assessments are often redundant." However, the remaining two teachers answered affirmatively. One explained, "Although some of the younger students in our mixed classes had difficulty, overall it was appropriate." The other respondent pointed out that the assessment "requires higher order thinking and comprehension - necessary for students preparing to leave high school."

In terms of additional comments about the package, it was described by one respondent as "very vague, needs refinement." Another teacher made the following suggestion: "I also would like examples of student work placed on your web site, so that we could see what a good final product looks like."

Westward Expansion

Two teachers who utilized this package responded to the survey. Both answered affirmatively regarding the subject area appropriateness of the package. It was noted by one that, "It tied in with our social curriculum as well as language and reading," while the other explained, "I selected this package because I planned on introducing the westward expansion this fall. However, many adaptations were needed."

Responses varied in terms of the package's appropriateness for the identified grade level. The teacher who checked "no" added, "It was extremely difficult for my ESL students and even for my more advanced students." Alternatively, the other respondent reported, "We've been working on criteria and evaluation charts in our class so it was comfortable for the students to assess themselves."

Similarly, there were both positive and negative statements offered in terms of additional comments. One individual wrote, "I was very frustrated using my package and had to make many calls to Jeanne Klein. Many changes had to be made to make it a worthwhile project, I spent many hours just getting ready. Teaching multi-grade in a charter school was difficult due to limited staff and resources." Again, a different feeling was generated by the other respondent, who shared, "It was something that fit with my teaching style - it may not be for everyone. Because of the adapting that is allowed, it is easy to adjust to fit your classroom. We appreciate the flexibility."

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Section IV: Special Education

Question 5: Are any adaptations being made to the package contents or its delivery format that enable it to be used by students with disabilities? If yes, please describe adaptations and type of disability. If no, please describe why not.

A total of 195 teachers responded to this question. Responses were fairly evenly divided between making adaptations to the package (35.2%) and not making adaptations (31.7%). Teachers who stated that they did not make adaptations did not clarify whether they did not have any students with disabilities, or whether they did have such students, but adaptations were not necessary. Fifty-four (27%) of the respondents reported not having students with disabilities in their classroom and therefore, not having to make adaptations.

Response	Frequency	Percent
Yes	70	35.2
No	63	31.7
No Students with Disabilities	54	27.1
Other	8	4.0
Blank	4	2.0
TOTAL	199	100.0

Over half (N=112) of the teachers who answered this question went on to further explain their experiences. Some special education students received extra support and guidance when working on the packets. Four respondents relied on junior or senior high school students to help the special education students and serve as tutors and mentors. Volunteered one individual, "I am having junior high students aid in graphing and organizing material to help students with various reading/behavior abilities." Ten other respondents indicated that they received help from the special education or chapter one teacher. "I had the special education students work with our special education instructor and the chapter one students with our chapter one teacher. They helped them find and organize their information," shared one teacher. Another individual wrote, "I had my special education students work with the support staff in their preparation of the game, directions, survey questions and the making of their graphs. They presented individually to the class. I was amazed with the high quality of their work and understanding." Seven others mentioned that they receive extra help and assistance from a paraprofessional or teacher's aide who works with students. One teacher noted, "A student in my room has an adult aide who works individually with her. This aide guided the child through all parts. It was viewed as more of a teaching unit for her not assessment." Three other respondents discussed providing "more one to one help," but did not specify who was offering this support. Parents were named by two individuals as those providing extra support to the students.

Five teachers acknowledged that they have made modifications to how the packet is presented such as reorganizing the contents and point size, adding a graphic organizer, retyping the activity to allow more area for the questions and answers to be written, providing fill in the blank questions, and making a time line for when assignments are due. Ten others mentioned they provided adaptations for students who struggled with writing. Examples of these modifications include dictating story/report to the teacher and using sentence starters. Eleven respondents referred to adapting the amount of work or modifying what the special education student was required to complete. Offered one individual, "The inclusion teacher and I decided to cut the number of themes from 6 to 3." One respondent described moving slower and giving the students more time to complete the packet, while yet another had enlarged the type for a student with visual impairments.

Modifying the actual projects the students were asked to complete was another way teachers made adaptations. In some cases, students were required to give an oral (rather than written) delivery of their project. Other students submitted pictures or drawings in place of a written project. One respondent reflected upon "two girls that have a hard time reading and writing, so they were the film crew and did all the video taping of our package material during the speech presentations. They enjoyed listening to the reports." When asking students to do research, two teachers recalled, "Giving students topics that were related to their own experiences in order to build on their background knowledge."

Modifications were made for varying reading levels by nine respondents. One individual made reference to tape recording the material for those students who were unable to read, while another alluded to using a packet that was at a lower reading level. Providing research materials that were at a lower reading level was another strategy used.

Using specific teaching strategies were proposed as ways to provide adaptations for students with disabilities. Twenty respondents reported having students with disabilities work in groups, teams or partners. One individual commented, "Children who had difficulty were in groups of various abilities so they could share their knowledge with each other." Other teaching strategies mentioned included practicing some of the pre-requisite skills such as tallying in class before they were expected to use it in the packet and giving the notes to students in smaller groups to help them focus. Six teachers replied that simply providing more "direct instruction" of what needed to be done had helped students to be successful.

Five teachers pointed out they graded students based on their own individual performance and encouraged students to participate to the best of their ability. Remarked one individual, "My standard was adjusted to meet the ABC's of performance. Any student can take it and work with it. Many of my students had varying disabilities and they all produced their best product."

According to one teacher, adaptations were not allowed. Another respondent did not make any adaptations this year, but next year planned to re-write the checklist and break the package up into smaller parts so it is not so overwhelming. One teacher's students could not participate because it did not match their IEP goals. Another felt that further adaptations were not necessary because, "When writing the unit to go with the package, we used the Detroit Lakes Unit Design. This had modifications and alternatives built into it. So, yes, there were adaptations made in process/activities and the learning environment."

Eleven respondents claimed they really did not see the need to make any adaptations. "Depends on the disability. It is my feeling that special adaptations are not necessary," reported one teacher. Another elaborated, "No, I have several special education students who used the package as designed. They teamed with regular education students for the group work and I used their IEP to grade their individual reports."

Question 8: Please describe how the special education teacher in your school or district has become involved with you in the teaching of this standard/use of the package.

Out of the 199 teachers who answered this question, 37.2% reported that their special education teacher had been involved with them in the teaching of the package. Special education teachers were said to be "not involved" by 27.6% of the respondents. A comparatively equal number of teachers revealed that this was not applicable to their situation.

Response	Frequency	Percent
Involved	74	37.2
Not Involved	55	27.6
Not Applicable	60	30.2
Other	10	5.0
TOTAL	199	100.0

As shown in the above table, seventy-four respondents acknowledged the involvement of the special education teacher in some way or another, and it is this number upon which the following percentages are based. It was indicated by 54 individuals (73%) that the special education teacher assisted students directly. Of these, 16 respondents gave general comments such as providing support or helping the student. Another 11 teachers in this group mentioned they helped students with the writing portion of the package which may have included having students dictate themes or stories to the teacher. Five respondents in this group remarked that the special education teacher helped organize the information for the student which may have included the research paper. Other ways in which the special

education teachers helped were as follows: helped with the research portion of the package, worked with students in small groups, provided back-up instruction, provided computer assistance, and helped make graphs/charts.

Seven individuals stated that the special education teacher assisted the teachers directly; for example, helping to modify the packet. Three of these respondents referred to team teaching with the special education teacher. Shared one, "We team teach. We planned and implemented the teaching of the package together." Another commented, "We work 'hand-in-hand' in completing the package. I had the outline and some ideas. She had some ideas and creativity. What a wonderful experience for these students. It was extremely successful. The other students realized their success."

Eighteen teachers made comments which were very general in nature and served more or less to rate the level of involvement. One respondent offered that the special education teacher "helped a lot," while two others experienced "very little help." It was felt by three individuals that the special education teacher took "very little interest." Ten teachers noted that the special education aides or paraprofessionals had assisted the students. Finally, two teachers explained that their students had refused any services from the special education staff.

Section V: LEP/ESL

Question 6: Are there any adaptations being made to the package or its delivery format that enable it to be used by students with limited English proficiency (LEP)? If yes, please describe adaptations. If no, please describe why not.

The majority of teachers who answered this question (79.9 %) reported that it was not applicable to their situation. Only 8.5% of the respondents answered "yes," they had made adaptations to the package or its delivery format. Another small number of teachers (11.6 %) indicated that they did not make adaptations.

Response	Frequency	Percent
Yes	17	8.5
No	23	11.6
Not Applicable	159	79.9
TOTAL	199	100.0

Twenty teachers provided additional comments to this question. Fifteen individuals further explained how the package contents and its delivery format was adapted to be used by students with limited English proficiency (LEP), while five teachers reported making no adaptations or changes.

Three respondents described having students complete only certain aspects of the packet or requiring less from LEP students. One individual offered, "I found that it was difficult for the ESL students. They only did the research and not the display." Another teacher added, "They were required to carry out all tasks, but the finished product had less required."

Another three individuals acknowledged helping the students complete the writing activities. One teacher gave a specific example, "I worked with these children in writing responses so I knew what foods they were talking about." Another mentioned how the writing requirement was adapted: "One student has difficulty with the written language so he drew pictures from his research dealing with culture, history, economics, etc."

Providing students with general kinds of help was referred to by three respondents. One teacher stated she provided "constant help and encouragement." Another noted that these students were receiving help but did not list specifics: "Yes, my students enrolled in ESL are receiving help in that area."

Two individuals identified adapting the layout and design of the packet. One teacher "rewrote the package to put in 'student' terms so it is less frustrating," while another "reorganized the contents and point size to increase its readability, and added a graphic organizer to help them through the project."

Having LEP students work in groups or with other peers was another strategy used by two respondents. One teacher shared, "I encouraged them to work with their peers and the ESL department."

Other strategies cited by single individuals were:
"Meet with individual students to explain and discuss the package."
"Materials were read to the ESL students."
"Help with oral presentation, plus writing and visual presentation."
"Some adaptations used: 1) Spanish/English translations, 2) Samples to follow, 3) A lot of visual materials, 4) Extra time to complete the package."

Five respondents commented that they did not make adaptations. Reasoned one individual, "Since there was time for me to individually help kids, I then could work with them." The other four teachers reported having LEP students in their class, but these particular students did not need adaptations and were "able to function without changing the format." Another teacher explained, "We had one ESL student in class; she is very proficient and only needed assistance in the comprehension of her resource materials."

Question 9: Please describe how the ESL/bilingual person in your school or district has become involved with you in the teaching of this standard/use of the package.

A total of 199 teachers answered this question. However, only 3.5% stated that their ESL/bilingual person was involved in the teaching of the standard/use of the package, while 15.1% of the respondents reported no involvement. A relatively high number of the teachers (77.4%) indicated this was not applicable to their situation.

Response	Frequency	Percent
Involved	7	3.5
Not Involved	30	15.1
Not Applicable	154	77.4
Other	8	4.0
TOTAL	199	100.0

Six individuals wrote additional comments to this section. One respondent acknowledged receiving minimal support from the ESL teacher, "as the only student we share this year has no trouble with English skills." Four of the teachers volunteered that the ESL students received some level of support. According to one, "They provided work and concept clarification as needed." Another respondent described their help as "Inclusive as part of everyday classroom work: vocabulary, spelling, math, etc." Finally, one individual referred to more intense

involvement by the ESL teacher, who "instructed the package in her room, but at a less rigorous rate than I did."

Section VI: Involvement with Media

Question 7: "Please describe how the media person in your school or district has become involved with you in teaching of this standard/use of the package:"

Response	Frequency	Percent
Involved	126	63.3
Not involved	30	15.1
Not needed, N/A	18	9.0
"No media person"	17	8.5
Other	5	2.5
Blank	3	1.5
TOTAL	199	100.0

As shown in the statistical report above, almost two-thirds of the media people in the schools (N=126) did get involved in the performance packages. The media people seem to have been a very helpful, if not essential, part of the success of the performance packages. As one teacher stated, "I have counted heavily on our media person... I don't think this package would have been nearly as successful as it was without her help and work with my students. She was a tremendous source of help." Another teacher explained, "We were helped immensely by the media specialist in use of the Internet, vertical files, and resources in the media center." Approximately 15 teachers mentioned that the media person was very helpful. Others indirectly indicated the same by pointing out the many helpful ways in which their media person became involved with the package.

At the same time, there were a number of media people who either did not get involved (N=30) or were not needed for that particular package (N=18). Five of the 30 teachers who responded that the media person did not become involved, said that they would have liked help, but that the media person was either too busy or just did not want to get involved. In addition, some teachers from smaller schools in rural Minnesota remarked that they did not have a media person at their school (N=17).

The following is a summary of the comments made by teachers who indicated that the media person was involved in some way or another. Many teachers listed more than one way in which the media person became involved. All of their comments were categorized, thus frequently more than one comment is included per teacher.

The most common response was that the media person assisted students/ teachers with researching and finding resources or that the media person actually supplied the materials. More specifically, 34 respondents noted that the media specialist researched and actually supplied resources, while 13 individuals

commented that the media person "assisted" or "helped" the students or teachers in the research process. In addition, thirteen teachers said that the media person ordered or acquired materials for them, such as books or computer software.

The second way the media specialists were involved with the packages was through computer assistance or instruction. Often, the Internet was used for the research portion of the packages. Twenty-nine teachers reported that the media person assisted or instructed students with the use of the Internet. Thirteen others volunteered that the media specialist assisted students with computer needs apart from using the Internet, such as making graphs or charts, and using encyclopedias and other software resources.

Some teachers pointed out that they had collaborated or teamed up with the media specialist in utilizing the packages. Here the media person seemed to take on a more important role in the implementation of the packages. Two respondents discussed having "co-taught" the package. Four others reflected that they had "worked as a team, [they] planned and implemented things together." In a few other cases the media person simply gave the teacher ideas or suggestions in order to make the packages more successful.

Some other ways in which the media person became involved with the packages included allowing use of the media center and computer lab, providing help with video equipment and taping, giving students an introduction to the references/materials available in the library, and identifying possible topics for students' research projects. In addition, some teachers indicated that their school did not have a media specialist, but that another person helped them, such as an aide, clerical worker, or technology person.

Section VII: Teaching Change

Question 4: How has your teaching changed, if at all, as a result of using the package?

Response	Frequency	Percent
Changed	109	54.8
Not changed	51	25.6
Other	34	17.1
Blank	5	2.5
TOTAL	199	100.0

Of the 199 surveys analyzed, five were left blank for this item. An additional thirty-four respondents (17.1%) made an attempt to answer the question, but did not directly address the issue at hand. For example, ten of the latter group instead discussed if and/or how they would use this package again in their teaching, while four referred to increased knowledge/ awareness of the graduation standards.

The remaining 160 responses to this question were determined to be valid and it is this number upon which the following percentages are based. Of these, over two-thirds (N=109) indicated that their teaching had changed as a result of using the package, while the other one-third of the respondents (32%) maintained that it had not changed.

Interestingly, almost half of the group of individuals who denied that their teaching had changed went on to explain that they have been using these methods already, which accounts for their lack of change. For example, one teacher wrote, "I have always tried to apply problem solving, scientific method, and activity oriented methods to achieve student understanding of the process of science and the application of concepts connecting classroom to real life," while another stated, "I've been moving towards this gradually for many years. All the training and classes I've been involved with as a pilot site teacher have made me feel I've been moving in the right direction."

As previously mentioned, 109 of the respondents reported that their teaching had indeed changed as a result of using the package, and an extensive list of specific changes was generated. The most common change, not surprisingly, was in terms of these teachers' use of inquiry. Twelve individuals specifically identified their increased awareness and/or use of inquiry in their teaching. As one teacher remarked, "I'm more aware of where inquiry is fitting in regular previous classroom activities and am more open to ways of increasing inquiry techniques whether in an 'assessment package' or in current curriculum. I'm trying to

encourage deeper 'digging' by students and am including more discovery ideas in lessons as time has permitted for change thus far."

Related to inquiry, though mentioned in different terms, were topics such as research and questioning. It was pointed out by ten respondents that they encourage more questioning on the part of their students than they had previously, while two noted that they themselves question the students differently. Six teachers offered that their students now do more research than in the past.

Fifteen respondents made reference to their newfound appreciation for assessing and/or teaching the skills necessary prior to successful learning. Reflected one individual, "I am much more aware of the preparatory work I need to do and have students do before we work on a performance package." Specific skills named included: library, phone, interviewing, writing, graphing, note taking, data collection, report formats, and research.

Assessment was an issue raised by 13 of these respondents. Eight teachers volunteered that they now use checklists. Shared one, "I think more in terms of checklists at the end of student performance - have we met our goals?" Two individuals commented on their increased use of more authentic assessment, while one teacher each described using rubrics, performance assessments, assessment tools, and fewer tests and quizzes.

Different teaching strategies are now being utilized by several of these respondents. Since the use of performance packages, activities have become more student- rather than teacher-directed (N=5), interdisciplinary (N=4), hands-on (N=3), student-designed (N=1), and applicable to real life (N=1), as well as involving critical thinking (N=1) and open-ended tasks (N=1). Two individuals acknowledged using more performance-type activities, while another two now rely more on other types of assignments/projects than textbook-based. Teachers characterized themselves as more focused (N=2) and organized (N=2) and as using task management (N=2) and the scientific process (N=1). Classrooms are more flexible (N=2), student-centered (N=3), and small groups are utilized more frequently (N=3).

Another area addressed was that of the changing role of teachers. Nine respondents alluded to this change, describing their new role as that of "coach," "guide," "facilitator," "advisor," "resource person," and "exploration leader," as opposed to their previous role of "sage on the stage" or "the keeper of all information." Related to the topic of a teacher's specific role were comments that revealed that these individuals now use less lecture (N=2), utilize more class- or student-led discussion (N=2), encourage higher level thinking skills (N=1), do more guiding than presentation (N=1), and "give" less information (N=1).

Students are being treated differently as well. Five of these respondents found themselves being more specific, with clearly defined instructions and expectations. A similar number of teachers reflected that they now have higher

expectations for students. According to one respondent, "I expect more from my students because I saw what they are capable of when guided properly." Other comments suggested that these individuals are encouraging more student involvement (N=3), student responsibility for learning (N=1), curiosity (N=1), ownership (N=1), and discovery (N=1).

Three teachers brought up the topic of process versus outcomes, though they were not necessarily in agreement about which is more important. While one made reference to "looking at process and not always the end product," two others believe they have become more outcomes-based, with one observing that "more emphasis is on producing products."

The issue of skills versus content was dealt with by two individuals, who agreed that their new focus is on skills rather than content. Stated one, "It has changed my emphasis of content to thinking skills and problem solving skills."

Finally, some specific teaching activities submitted as examples of change by these respondents included utilizing the Internet (N=2), requiring students to keep a journal (N=1), and having more class presentations by students (N=1).

Question 10: Has the use of this package affected the teaching and/or understanding of the standards movement for other persons in your building? If yes, please explain.

Response	Frequency	Percent
Yes, affected	122	61.3
No, not affected	35	17.6
Other	32	16.1
Blank	10	5.0
TOTAL	199	100.0

There were 122 valid responses to the explanation portion of this item, if yes was the response. However, most respondents alluded to the process of change in others' understanding rather than addressing how their colleagues' teaching has actually been affected. Based on the responses offered, it is clear that these individuals believe it is premature for them to know if or how other teachers have actually changed their teaching at this point in time.

In addition, 17.6% of the respondents indicated that their co-workers teaching or understanding had not been affected, 16.1% offered an answer which did not directly address the question, and 5.0% left this item blank.

As noted above, many respondents did acknowledge their belief that a change in understanding or awareness of their co-workers has taken place. Some of this understanding, these teachers believe, has been negative, while others noted positive changes. Some remarks that fit into the former category include: "They are more worried about all the 'extra' work they will need to do in an already busy school year," and, "People are overwhelmed by the thought of doing several extensive packages each year." On the positive side of changes were, "It has definitely heightened all of the staff's awareness of this major shift in educational methodology," and, "They understand that the standards fit right in with what good teaching has done all along."

A similar number of those responding (N=32) reported that there has been much communication, discussion, and/or sharing regarding the standards and performance packages. One individual stated that "the sharing of this packet and explanation of its piece of the 'total' picture of the standards has, at least, gotten the ball rolling." Another commented, "By sharing my experiences in working with this package others have become interested. The sharing and networking with other staff members has been helpful!"

Twenty-six teachers made reference to their co-workers' gaining exposure to the performance package(s) this year: both the process and some of the results. These respondents characterized other teachers as "intrigued by the neat projects and displays my students incorporated," "involved and excited about what my class accomplished," and "quite interested in our presentations and were amazed at the depth of the 3rd grade project." Furthermore, one individual referred to the fact that their colleagues "noted students seemed interested in the topic and [were] less of a discipline problem."

A slightly smaller number of respondents (N=25) wrote that they had given presentations or workshops to other staff members, apparently citing this as an indication of how changes in understanding are occurring. One teacher shared, "I found after my presentation of the package that I prepared in an in-service meeting, the teachers were better prepared to work on their own packages."

Sixteen percent of these respondents (N=19) cited that the fact that others in their building have used the performance packages as reason to believe that they are learning about the process. While some noted that all of the teachers in their building have tried the packages, it was also pointed out, "Others will not try packages at all," or that "it has been a struggle for most."

Finally, a similar number of respondents (16%) cited the fact that others ask questions or come to them for help and/or advice as evidence that the teachers around them are changing. One individual reported that "Several teachers have asked me to help them unpack a package." The process of answering questions has "helped ease concerns [teachers] have in using a package," according to one respondent.

Section VIII: Summary and Reflections

The efforts of the Minnesota Educational Effectiveness Project to initiate systemic reforms on a state-wide basis are very successful, according to the findings of this evaluation study. The experiences of the teacher-respondents in this report reflect a growing understanding of performance assessment in general, and how moving towards a standards-based educational system can and will alter how and what we teach. Teachers are slowly but surely coming to the conclusion that having a curriculum based on what we want students to know *and be able to do* encourages learning at a deeper level.

By seeking this first year to implement only one learning area state-wide, the inquiry standards, the state coordinators were able to obtain feedback regularly about concerns, issues, and obstacles. Much was gleaned from teachers about various aspects of the assessment packages they selected. This information will be used to modify and improve the packages for further use.

The feedback about the training sessions provides important information about teachers' own learning needs as additional standards are added each year. In many ways, teachers are much like their students in that they are asking for more hands-on learning, and that they need to see demonstrations and talk with fellow teachers during the learning process. We, as educators, know these needs to be true for learning in general--it makes sense that it would be no different for our teachers as learners as they incorporate new ideas and approaches into their instructional repertoire.

Probably most important within this evaluation is the acknowledgment by more than two-thirds of the respondents to the survey that their teaching is changing. It is changing because of the continued implementation of the Graduation Rule and the professional development courses which relate to the standards and to their own content areas. Whether the training is provided by the state in use of performance packages or it is obtained through local workshops and collegiate courses, teachers are reporting a re-discovered joy in teaching. Becoming a facilitator in the learning process for students creates a partnership. Together teachers and students form an alliance which is quite different from the historical "we-they" stance of education in years past. The inter-dependence is much more akin to what students will encounter as they enter the work world, and the content learning is brought to the practical application level. Embedding performance assessments into the curriculum will certainly serve to enhance the facilitative role of the teacher in the future.

It became clear in this training process that much greater emphasis in training must be given to the standard, rather than the performance package. Teachers who participated in Phase I training were not always able to separate the standard from the package, and often equated the two. The Phase II training was modified to focus more heavily on the standard, and parts of the Phase II curriculum focused on ways

to adapt performance packages. As a result, it is predicted that Phase II trainees will perceive themselves to be implementers of standards rather than implementers of packages.

In summary, the first-year efforts of MEEP to implement the standards on a state-wide scale have proceeded according to plan. The various feedback loops available through the local district to state networks provided vital information about outcomes and needs. The result has been a viable system which is responsive without being reactionary. The changes in teaching and learning are becoming self-evident and, as additional standards are incorporated, we expect them to continue to propel Minnesota's systemic reforms.

Minnesota Educational Effectiveness Program (MEEP)

Evaluation of Standards Implementation in Phase II

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September 1998

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Executive Summary

This evaluation report provides a picture of what is happening/has happened across the state with regard to teachers' understanding and use of standards in teaching and learning. Areas such as their knowledge, beliefs, practices, and further needs have been assessed. The leadership of the Minnesota Educational Effectiveness Program (MEEP) wanted to find out the current status of those areas in an effort to understand and support the successful evolution of change towards a standards-based educational system in Minnesota.

Phase II of MEEP began during the summer of 1997. As in Phase I, the task of Phase II was to continue the training of K-12 teachers in the use of performance assessment packages as part of the implementation of the Profile of Learning. The Profile of Learning is the high standards portion of the Minnesota Graduation Rule. In the summer of 1997, teachers from across the state were invited to attend a Phase II training session in their geographic region. About 10,000 teachers participated in the Phase II summer training.

Demographic information reveals that the teachers involved in Phase II are rather evenly represented in the random sample of 500. Nearly two-thirds of the respondents were female. In addition, these individuals have been teaching for between one and 36 years, with an average of 17 years. The teachers have been in their schools for an average of 13 years. Teachers were almost evenly divided between working at the elementary (44.0%) and secondary (45.7%) levels, with the remaining 10.3% teaching at both levels. The average district size was approximately 2000, although responses ranged from 50 to 46,000.

Findings from the written survey reveal that while more respondents agreed than disagreed that they have sufficient understanding of how the standards fit with their district's curriculum, it was also the case that almost half of the teachers indicated that they did not feel sufficiently prepared to implement the standards and that sixty percent noted that they need more knowledge of the standards in order to develop learning activities linked to the standards. Questions relating to changes in practices indicate that while less than half of respondents have discussed the standards with *parents*, these teachers are, in fact, discussing with *colleagues* a variety of issues related to the standards.

Analysis of the items regarding teachers' beliefs and attitudes revealed that these individuals are confident about their ability to link activities to standards, yet are divided in their belief that standards are just another passing fad. Many more respondents agree than disagree that the use of standards can make a positive difference in both their teaching and in student achievement. The use of performance assessments will positively alter instructional methods, according to the respondents.

Approximately three-quarters of the respondents reported having at least one special education student in the classroom in which they implemented a standard. Of those, a similar percentage acknowledged having sought resources or advice from special education regarding accommodations for assessment. A slightly smaller number actually used accommodations to assess the standard and about the same number of teachers either agreed that they were effective or were neutral about the effectiveness of the accommodations. For teachers having students with limited English proficiency (LEP), only one-quarter of the individuals responding had at least one LEP student in the classroom where the standard was implemented. Of those teachers, over two-thirds stated that they had sought resources or advice regarding assessment accommodations. However, only one-third agreed that the accommodations had been effective, while one-quarter disagreed. It is important to note that this is significantly less agreement than had been generated regarding special education accommodations.

Responses to questions of support at the district level reveal generally positive findings. Over half noted that their district staff development activities are relevant to their learning about and using standards and nearly two-thirds acknowledge that their district staff development policies support their learning about and using standards.

When asked about their needs, by far the most common topic about which these individuals wrote was that of needing more time. Thirty-four percent of the remarks dealt with this issue. Time is needed to develop the tasks in the packages, to meet with colleagues about shared activities, and to integrate the standards into the curriculum. Other needs which surfaced included the need for clearer scoring rubrics for the packages, better exemplar packages, and the need for resources such as money for equipment, books, and software needed to complete the packages. Negative comments dealt with issues of record-keeping and with confusing roles and expectations across subject areas.

Finally, the observations of the teachers' meetings during the summative conferences indicated that there appears to be much interest in performance assessment and dedication to changing education with the use of standards. Teachers' conversations were lively and impassioned. Comments from focus groups amplified the findings from the written survey. Also they shed new light on the deeply felt positives that are occurring in individual classrooms, for both the teacher and the learner.

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September 1998

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Section I: Introduction

A. BACKGROUND

Phase II of the Minnesota Educational Effectiveness Program (MEEP) began during the summer of 1997. As in Phase I, the task of Phase II was to continue the training of K-12 teachers in the use of performance assessment packages as part of the implementation of the Profile of Learning. The Profile of Learning is the high standards portion of the Minnesota Graduation Rule.

In Phase I (the 1996-97 school year), the only learning area being targeted was the "Inquiry" area. During Phase II and the 1997-98 school year, more learning areas were added: Decision Making, People and Cultures, Math Applications, Scientific Applications, and Managing Resources. In the summer of 1997, teachers were invited to attend a Phase II training session in their geographic region. About 10,000 teachers participated in the Phase II summer training.

Each district in the state has one designated "graduation standards technician." At least one teacher, and usually more, in every school in the state was engaged in the implementation of an assessment package in the high standards. The teachers were asked to provide formative feedback about the package--its tasks, time needed to implement it, necessary resources, and student reaction/ performance--at the end of the school year. To enable teachers to share that information, the MEEP regional summative conferences were held in spring and early summer, 1998.

This evaluation report seeks to provide a picture of what is happening/has happened across the state with regard to teachers' understanding and use of standards in teaching and learning. Areas such as their knowledge, beliefs, practices, and further needs were assessed. Through the writing and implementation of one or more assessment packages, teachers come to develop knowledge, beliefs, and practices. The MEEP Leadership wanted to find out the current status of those areas in an effort to understand and support the successful evolution of change towards a standards-based educational system in Minnesota.

As a final note of background, the MEEP outreach system in the state is comprehensive and is intended to reach every single teacher. From the individual teacher to the Department of Children, Families, and Learning, a web or a network is present and provides invaluable feedback loops in all directions. The following persons have a focus upon the standards implementation effort:

- school-based "technical coordinators" whose role it is to support and mentor local teachers' experiences with implementing standards and assessment packages;

- district standards technicians from the 349 districts across the state who meet with their local school coordinators and who have regular contact with their MEEP regional coordinator;
- MEEP Regional Coordinators who meet regularly with the district standards technicians, in order to support their efforts, to answer questions, and to act as a link to the MEEP leadership team at the state level;
- the MEEP Leadership Team in the Minnesota Department of Children, Families, and Learning who act as the state-wide coordinators and who regularly meet with the MEEP Regional Coordinators, school superintendents, and others to remain in constant contact with happenings, concerns, and questions from around the state.

B. METHODS

Survey

In late fall of 1997, evaluation staff at the Center for Applied Research and Educational Improvement (CAREI) began formulating a survey for teachers who had been involved in Phase II training during the summer of 1997. The purpose of the survey was to gain a better understanding of teachers' knowledge, attitudes, and practices in delivering the graduation standards, and to determine any further needs they might have. Input on content and clarity of the questions was gathered from the MEEP leadership team, the MEEP regional coordinators, members of the Minnesota Assessment Project team, and 12 Phase II teachers who were randomly selected for a 'pilot test' of the survey (for a copy of the final instrument, see Appendix A).

Surveys were mailed to a random sample of 500 teachers of the approximately 10,000 who had participated in Phase II training. Teachers who had not responded at the time of the initial deadline were then sent a second copy of the survey. A total of 357 surveys were returned to CAREI for a response rate of 71.4%. Of the 357 returned surveys, 352 were appropriately completed and thus eligible to be used in the analysis of the data (to be reported in Section II).

Observations

During the spring and summer of 1998, summative conferences for teachers involved in Phase II were conducted by the MEEP leadership and were held in each MEEP region of the state. At each session, teachers were placed in small groups based on the performance package they had chosen. These groups discussed the implementation of the package each had done in his/her classroom, noting instructional techniques and resources used. They were then asked to sort and score the examples of student work each had brought and attempt to reach consensus on what constituted '4', '3', '2', and '1' work.

CAREI evaluation staff attended one session for Regions 5 and 7 that took place in St. Cloud on May 11, 1998, and two Region 11 sessions that were held in Little Canada on June 16 and 18, 1998. The learning areas that were the focus of those conference sessions were People and Cultures, Decision Making, and Math Applications, respectively. Upon receiving permission from group members, staff from CAREI observed small groups at each of the three conferences attended (these will be discussed in Section III).

Focus Groups

At each of the summative conferences attended by CAREI staff (noted above), teachers were invited to participate in a 30-minute focus group wherein they could discuss their experiences with implementation in Phase II. Because the written survey generated primarily quantitative data, a deeper understanding of some of the results obtained could be gained with focused discussions with small groups of teachers. Several of the focus group questions were, therefore, based on findings from the survey (see Appendix B for a copy of the questioning route). The voluntary and confidential nature of participation in the focus groups was made explicit.

Telephone Interviews

Because CAREI evaluation staff were unable to attend one summative conference session for Region 10 in Rochester that they had planned on observing, the regional coordinator was requested to obtain names and telephone numbers of teachers who would be willing to participate in a brief telephone interview with an evaluator at CAREI. The names and phone numbers of five teachers were given to CAREI by the regional coordinator and all of these teachers were contacted and interviewed by telephone late in the summer of 1998. Because the same questions were asked in both the interviews and the focus groups, these data were analyzed together and can be found in Section III of this report.

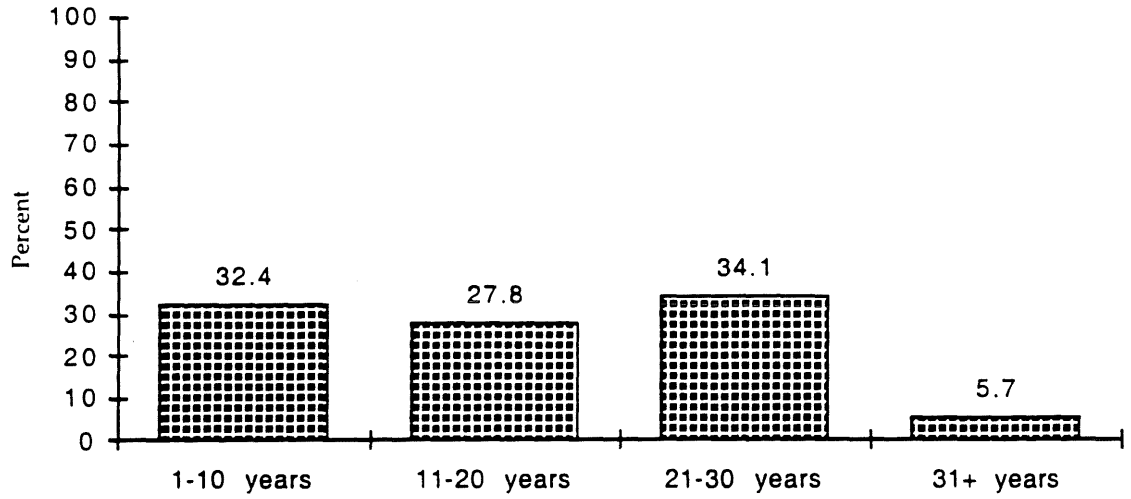
Section II: Survey Data

This section of the report describes information obtained from the results of the MEEP Survey for Teachers Implementing Standards in Phase II (for a copy of the instrument, see Appendix A). Quantitative data were analyzed with the statistical package SPSS, while qualitative data were analyzed with the help of NUD*IST software. It should be noted that throughout this section of the report, the percentage of responses reported are based on the number of responses available rather than on the total number of respondents, as some individuals left certain items blank. It is also important to point out that while certain categories (such as agree and strongly agree) were combined for ease of reading the graphs, complete information that includes all categories can be found in a small table following each graph that contains collapsed categories.

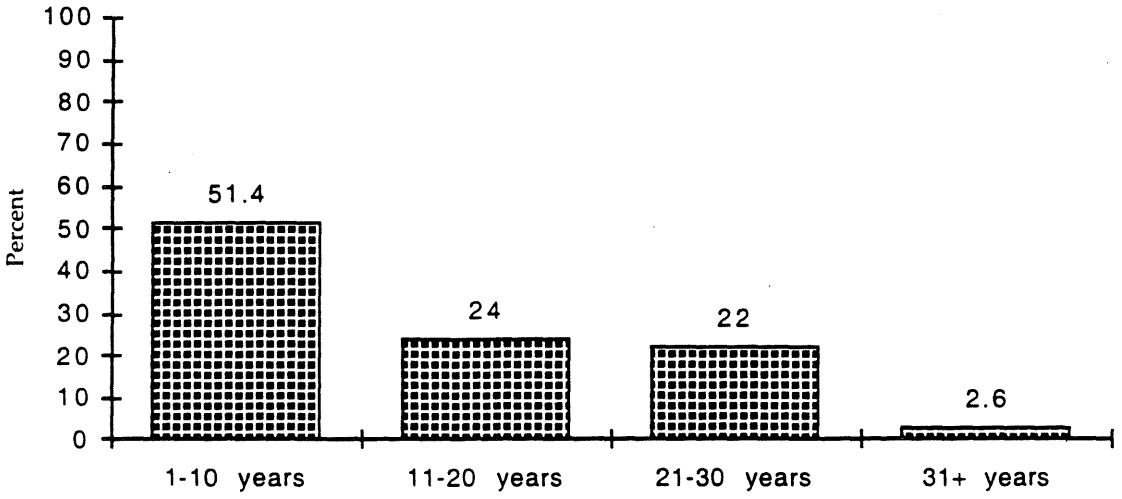
A. Demographic Information

Nearly two-thirds of the respondents (64.3%) were female. In addition, these individuals have been teaching for between one and 36 years, with an average of 17 years. The teachers have been in their schools for an average of 13 years and in their districts for an average of 14.5 years. Teachers were almost evenly divided between working at the elementary (44.0%) and secondary (45.7%) levels, with the remaining 10.3% teaching at both levels. The average district size was approximately 2000, although responses ranged from 50 to 46,000. (For further detail on these demographics, see the following graphs).

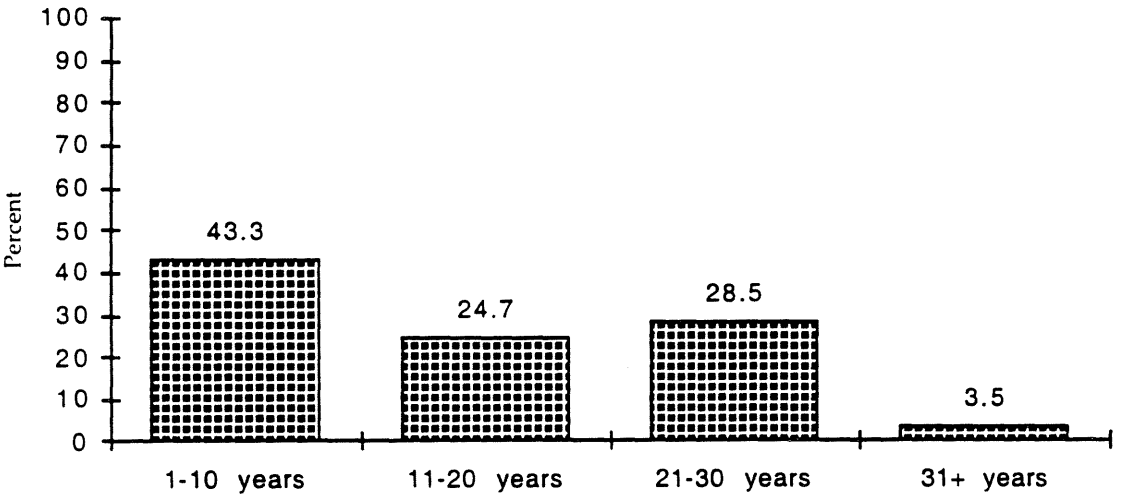
Number of Years Teaching (mean=17 years)



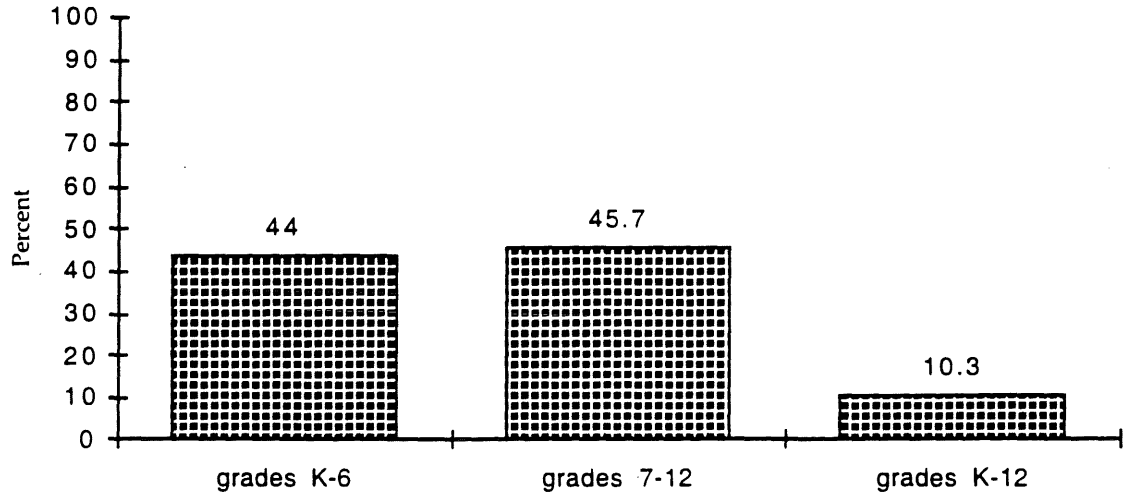
Number of Years in Current School (mean=13 years)



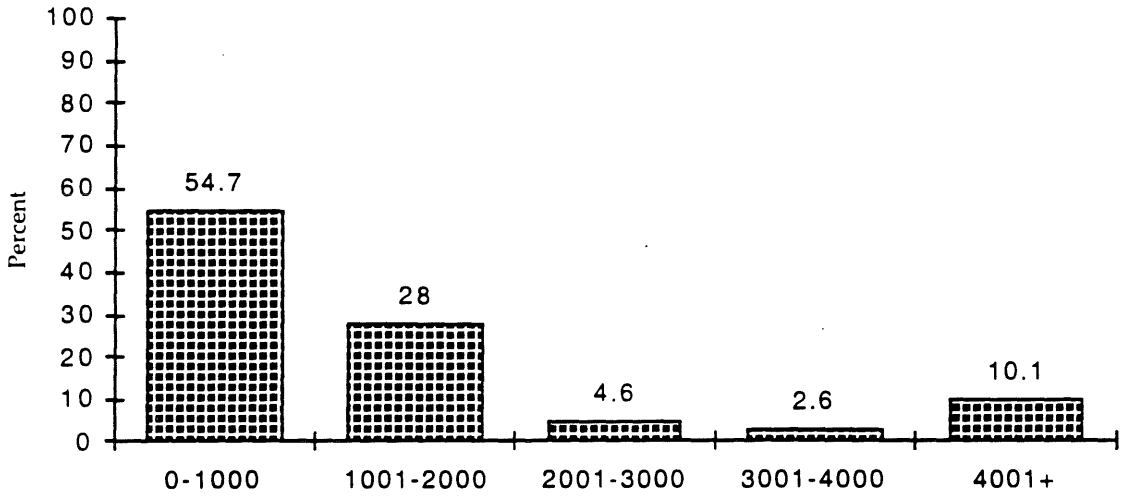
Number of Years in Current District (mean=14.5 years)



Grade Level(s) Currently Teaching



Approximate K-12 District Enrollment (mean=2000)



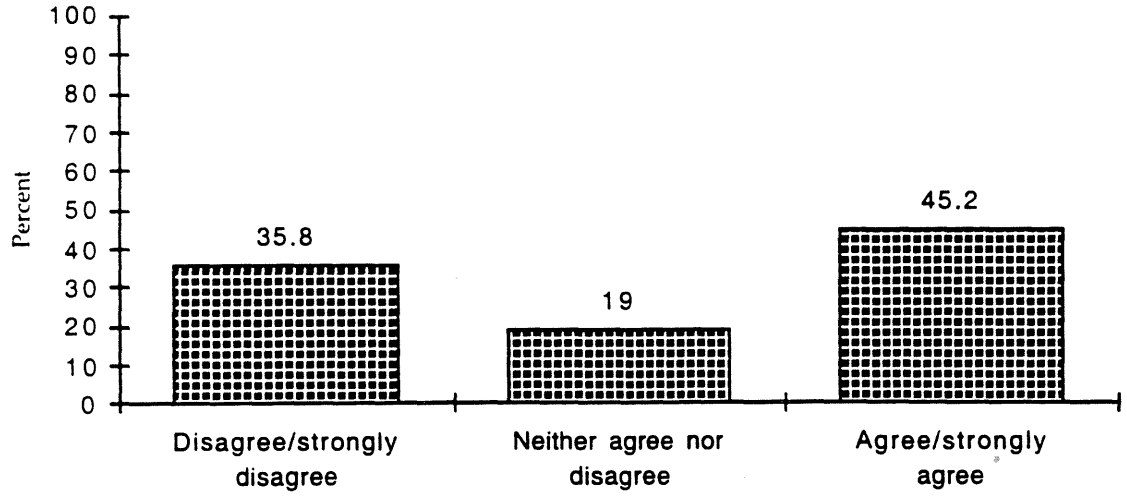
Finally, the packages selected by these respondents for Phase II were as follows:

Learning Area	N	%
Mathematics	98	28.4
Decision making	72	20.9
People and cultures	64	18.6
Sciences	48	13.9
Managing resources	39	11.3
Inquiry	13	3.8
Writing and speaking	5	1.4
Arts	4	1.2
Read, view, listen	2	0.6

B. Knowledge

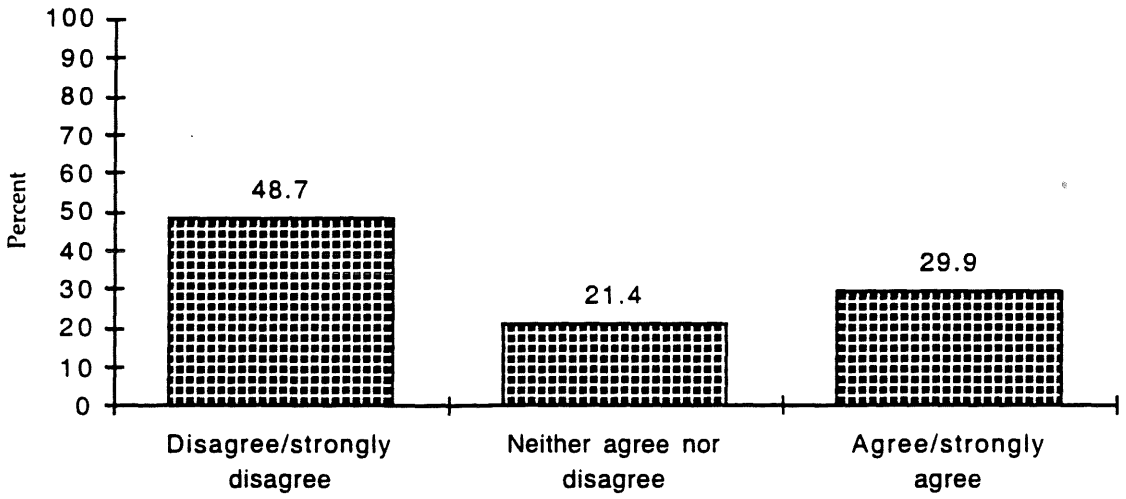
The first three items looked at where the Phase II teachers stand with regards to their knowledge of the Minnesota standards. While more respondents agreed than disagreed that they have sufficient understanding of how the standards fit with their district's curriculum, it was also the case that almost half (48.7%) of the teachers indicated that they did not feel sufficiently prepared to implement the standards and that 60.4% noted that they need more knowledge of the standards in order to develop learning activities linked to the standards.

Question 1: I have sufficient understanding of how the MN standards fit with our district's K-12 curriculum.



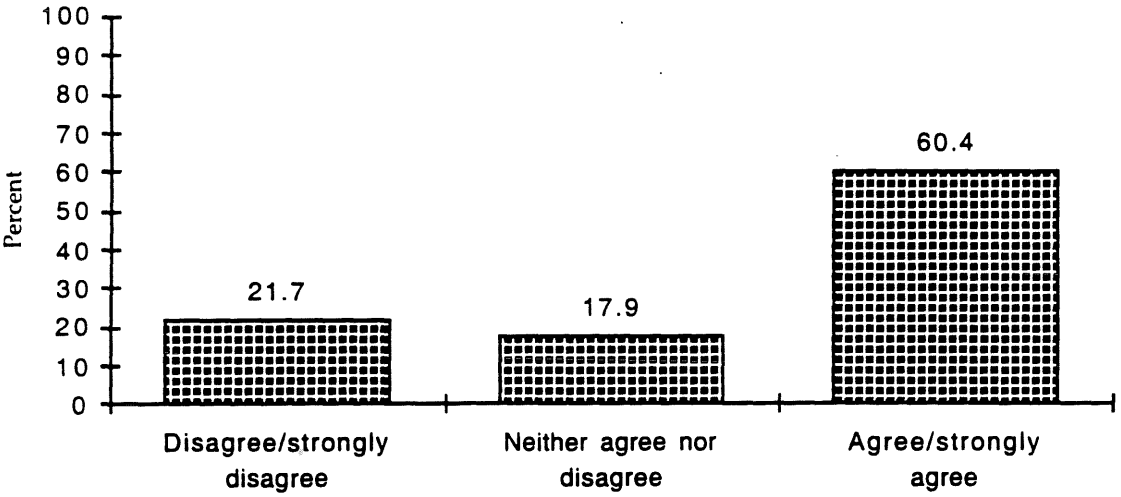
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
8.2	27.6	19.0	37.2	8.0

Question 2: I feel sufficiently prepared to implement the MN standards currently in place.



Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
12.8	35.9	21.4	24.5	5.4

Question 3: I need more knowledge of the MN standards in order to develop learning activities linked to the standards.



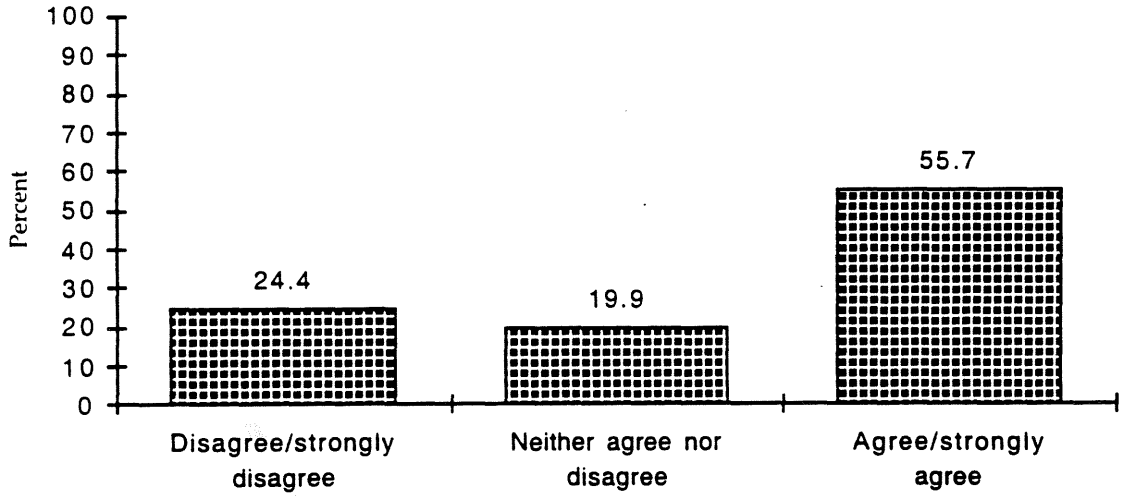
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
5.1	16.5	17.9	38.5	21.9

C. Beliefs/Attitudes

Analysis of the items regarding teachers' beliefs and attitudes revealed that these individuals are confident about their ability to link activities to standards, yet are divided in their belief that standards are just another passing fad. Many more respondents agree than disagree that the use of standards can make a positive difference in both their teaching and in student achievement. The use of performance assessments will positively alter instructional methods, according to these teachers, who also reported feeling comfortable in the role of "facilitator" of learning vs. the more traditional "dispenser of knowledge."

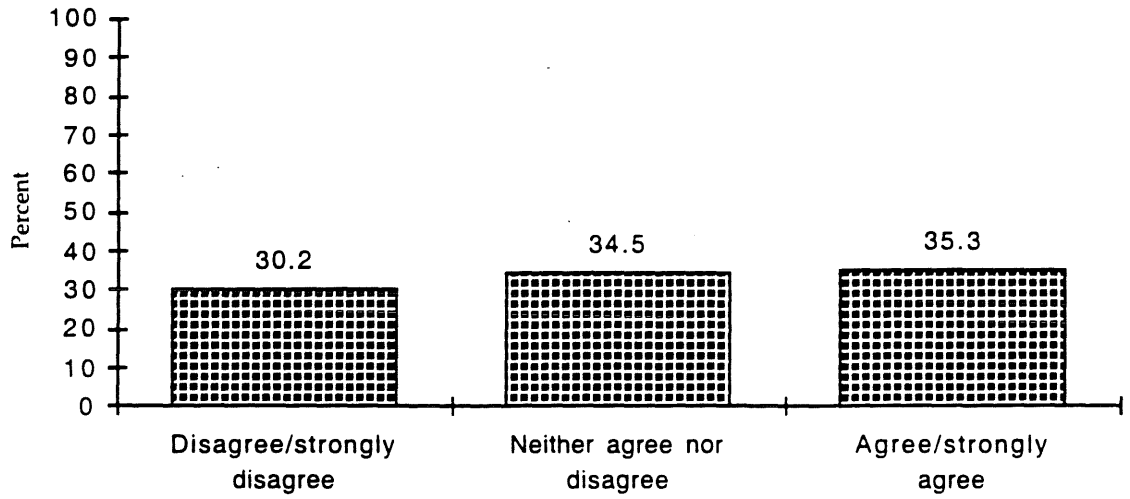
Overall, respondents were equally divided regarding whether student success or failure is due to factors beyond or within their control. However, a statistical comparison indicated that secondary teachers were more likely to attribute such success or failure to factors beyond their control than were elementary teachers. Finally, most individuals (71.6%) described their beliefs about student capacity for learning as not having changed as a result of implementing standards. Because this result was somewhat surprising, this was one topic that was explored via the focus groups and telephone interviews (see Section III).

Question 4: I am confident about my ability to link activities to standards.



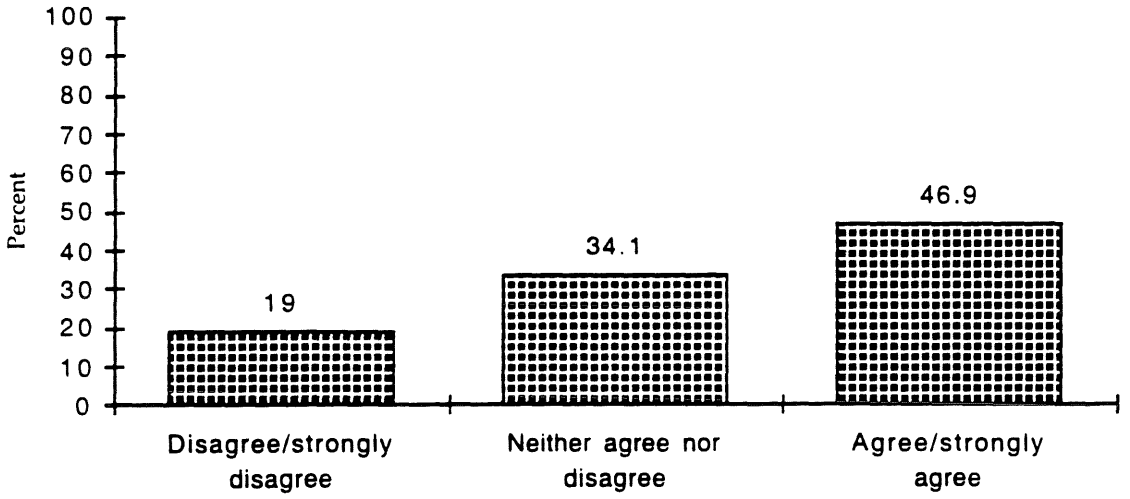
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
3.4	21.0	19.9	44.6	11.1

Question 5: I think that standards are just another passing educational fad.



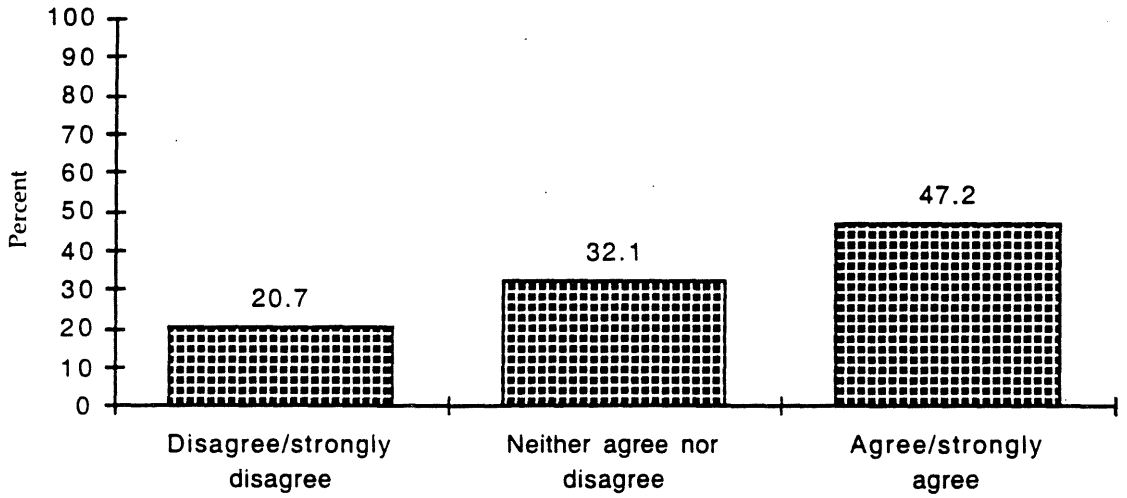
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
10.3	19.9	34.5	19.1	16.2

Question 6: I believe that using standards can make a positive difference in my teaching.



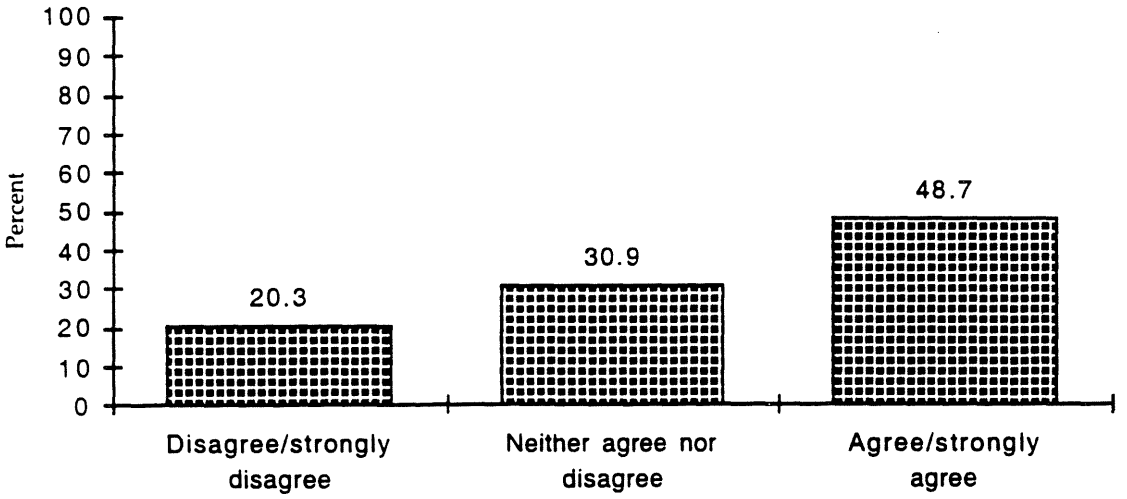
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
6.0	13.1	34.1	35.5	11.4

Question 7: I believe that using standards can make a positive difference in student achievement.



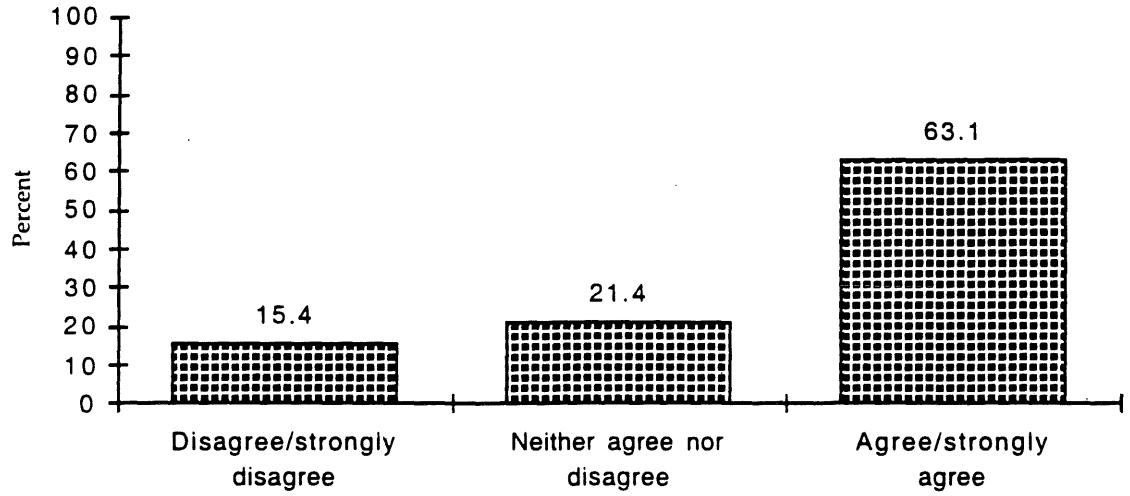
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
5.7	15.1	32.1	35.8	11.4

Question 8: I believe that teachers' use of performance assessments will positively alter instructional methods.



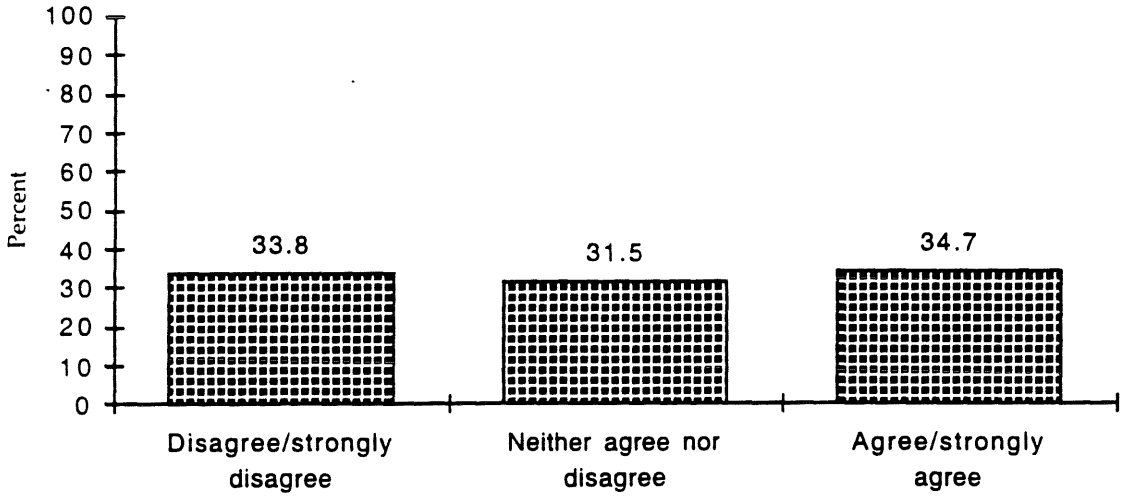
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
4.3	16.0	30.9	39.0	9.7

Question 9: I am comfortable in the role of "facilitator" of learning vs. "the dispenser of knowledge."



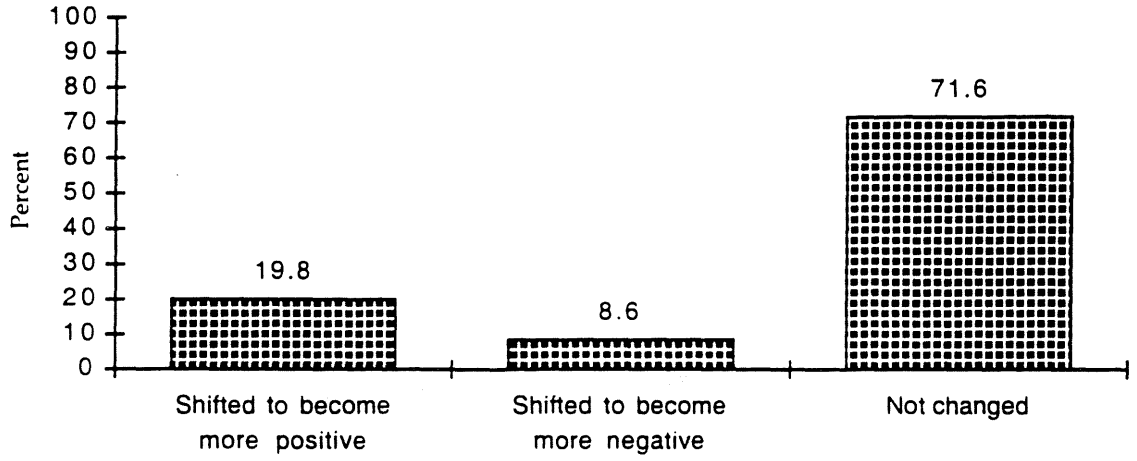
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
3.4	12.0	21.4	42.9	20.3

Question 10: The degree of student success or failure is due more to factors beyond my control than within my control.



Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
4.8	29.0	31.5	27.3	7.4

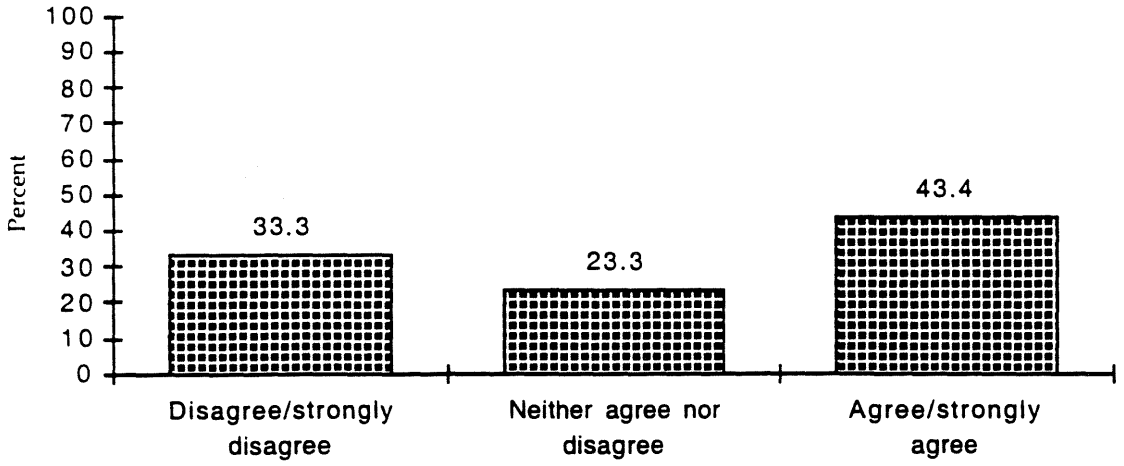
Question 11: As a result of implementing standards, my beliefs about student capacity for learning have:



D. Practice

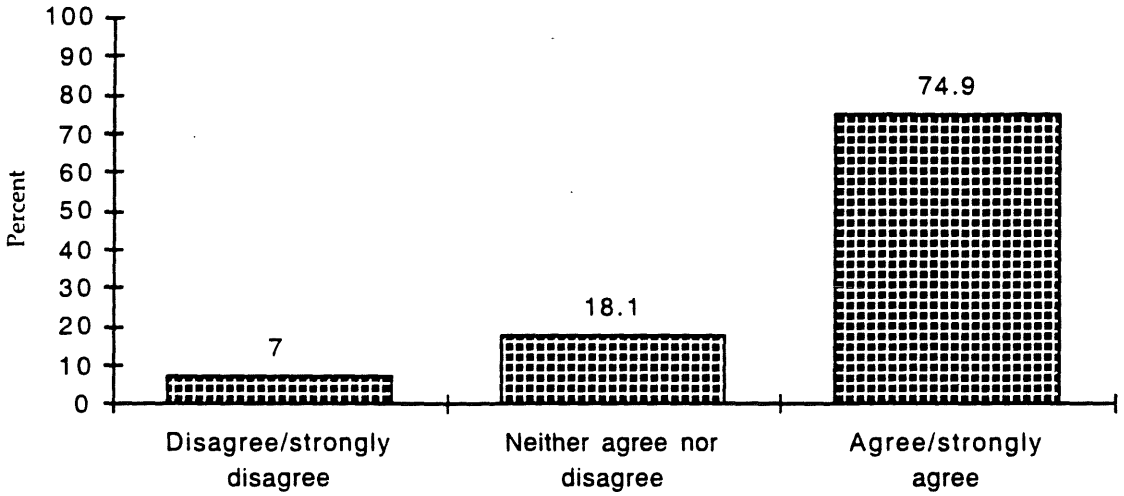
Items 12 through 21 were included in order to determine the degree to which conversations and sharing with others are occurring as a result of standards implementation. Results indicate that while less than half (43.4%) of respondents have discussed the standards with *parents*, these teachers are, in fact, discussing with *colleagues* a variety of issues related to the standards.

Question 12: I have discussed with parents the role of standards in learning.



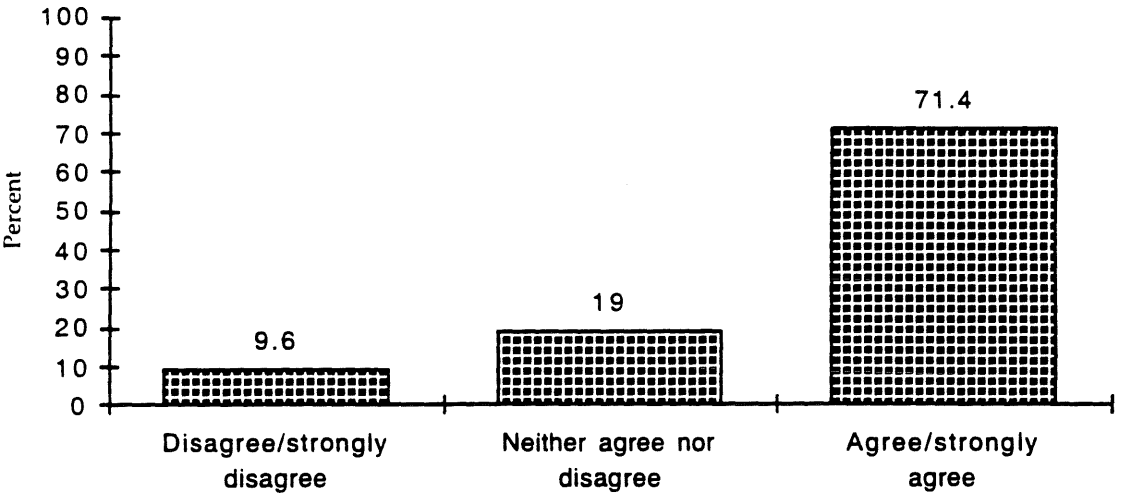
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
10.6	22.7	23.3	38.8	4.6

Question 13: During the implementation of the package, I shared activities and experiences with colleagues.



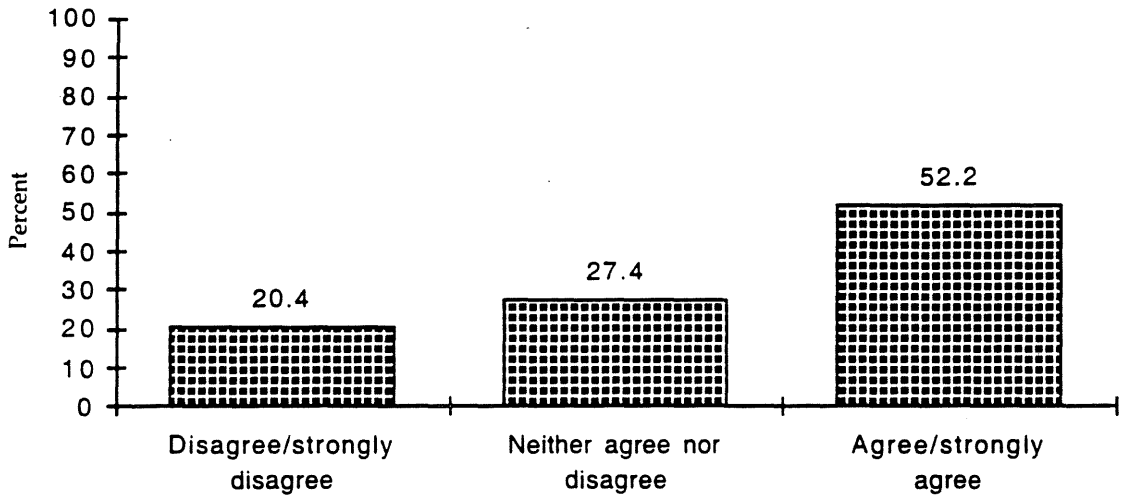
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
2.0	5.0	18.1	61.8	13.1

Question 14: During the implementation of the package, I solicited input from colleagues about the learning activities.



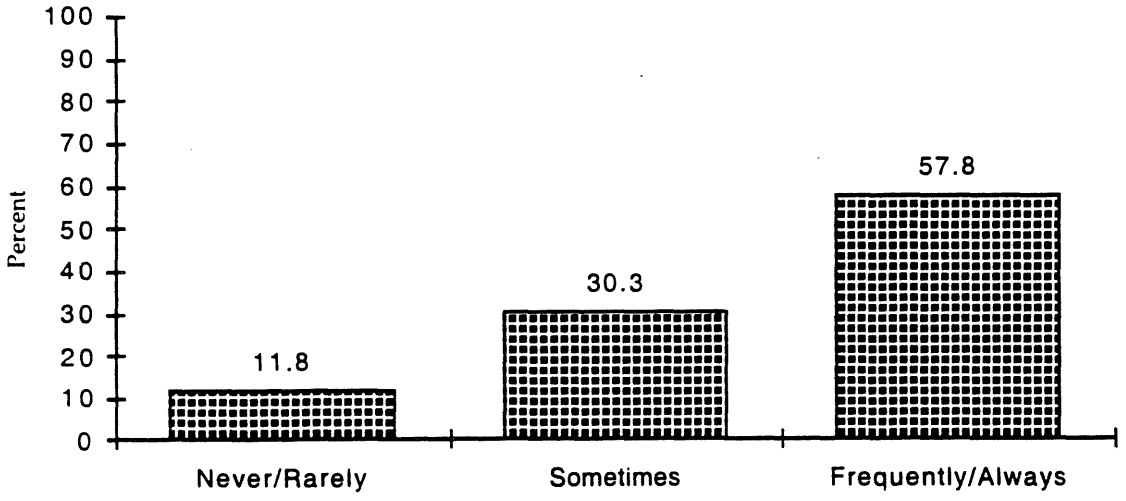
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1.7	7.9	19.0	60.3	11.1

Question 15: During the implementation of the package, I received useful suggestions from colleagues about the learning activities.



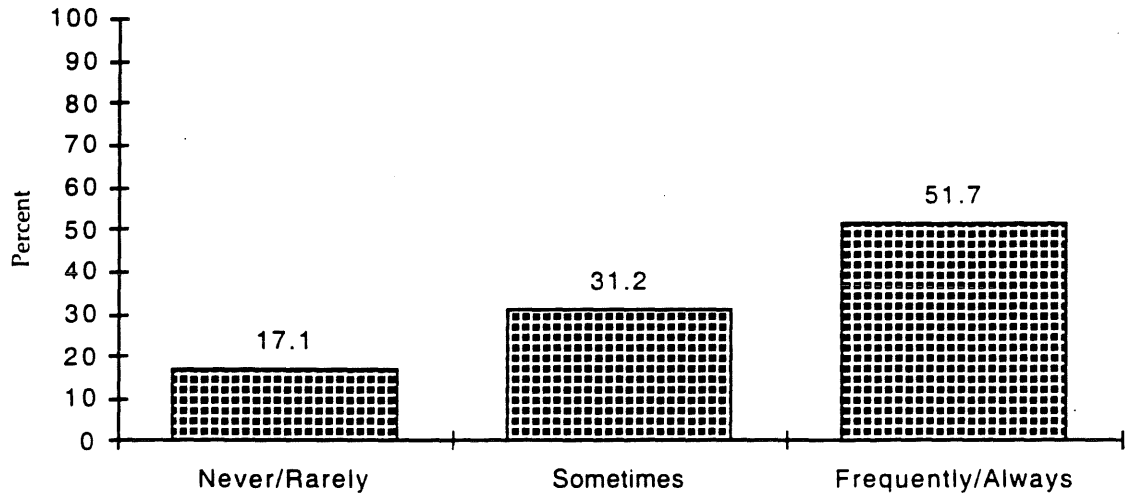
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
5.0	15.4	27.4	45.5	6.7

Question 16: In order to implement the standard in my classroom, I had conversations with colleagues about the development of new curriculum.



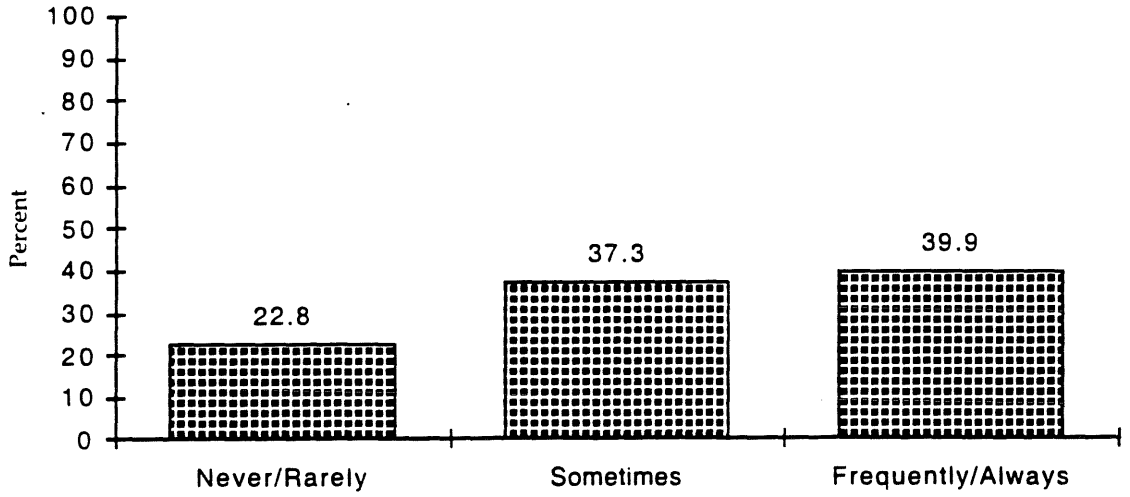
Never	Rarely	Sometimes	Frequently	Always
2.3	9.5	30.3	49.4	8.4

Question 17: In order to implement the standard in my classroom, I had conversations with colleagues about managing classroom activities.



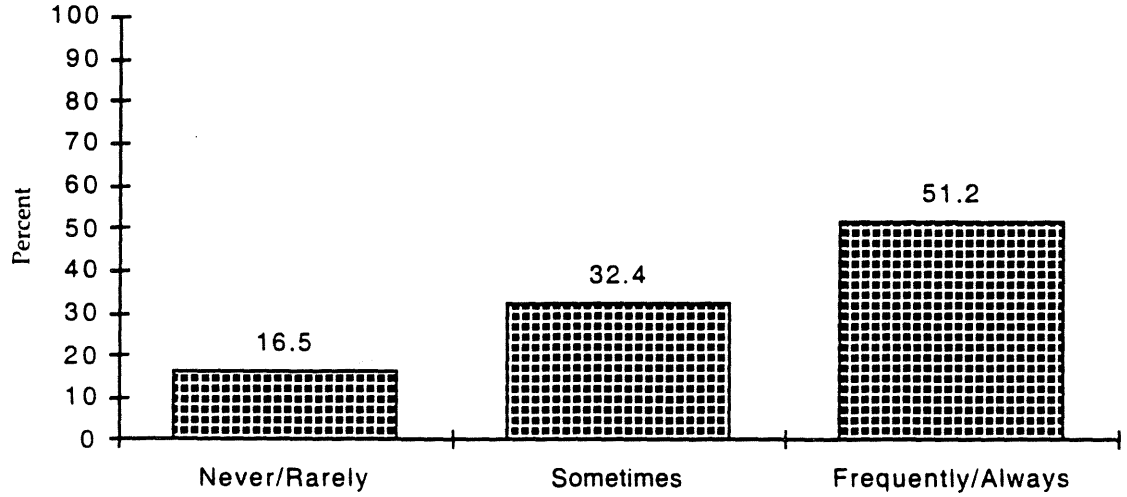
Never	Rarely	Sometimes	Frequently	Always
2.9	14.2	31.2	45.1	6.6

Question 18: In order to implement the standard in my classroom, I had conversations with colleagues about specific teaching behaviors.



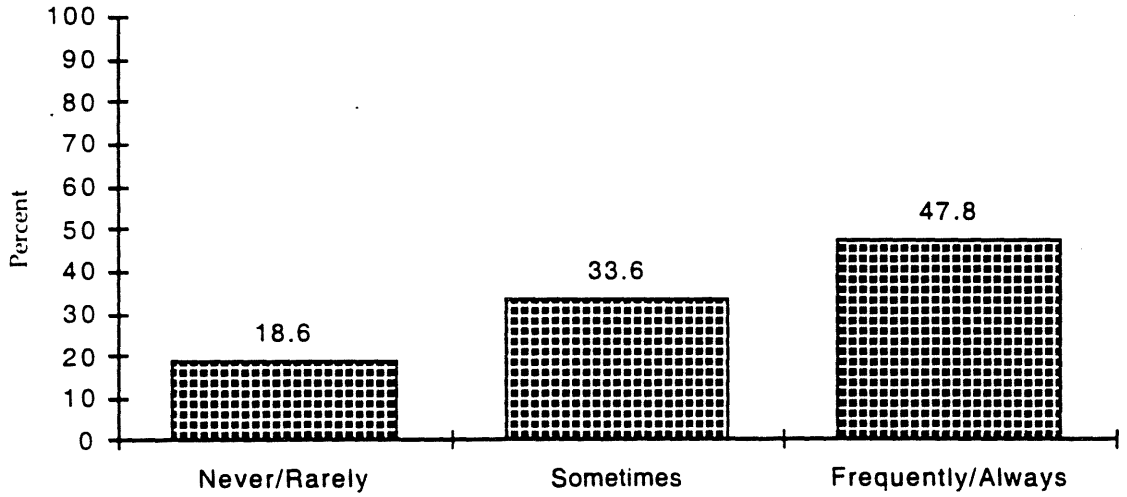
Never	Rarely	Sometimes	Frequently	Always
4.6	18.2	37.3	33.5	6.4

Question 19: In order to implement the standard in my classroom, I had conversations with colleagues about what helps students learn best.



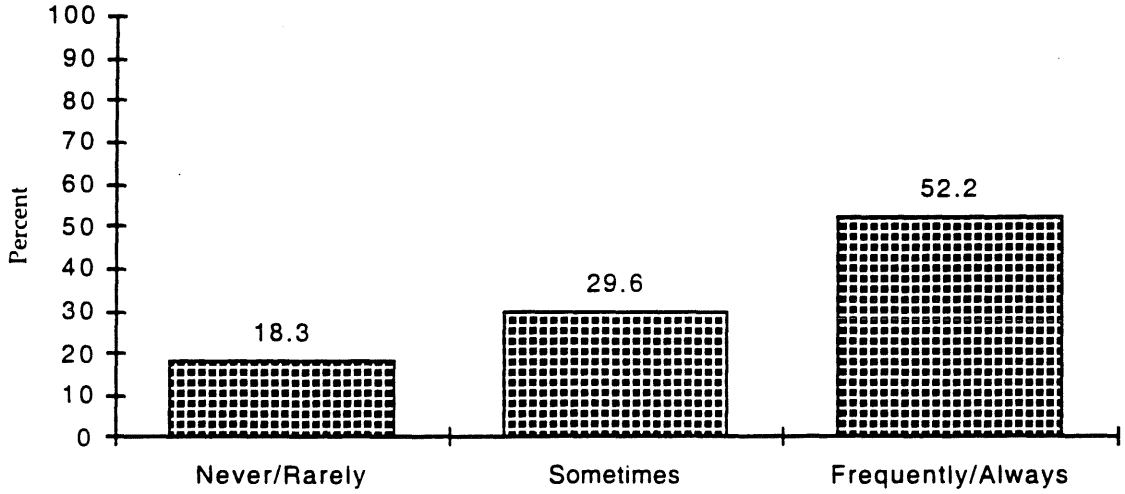
Never	Rarely	Sometimes	Frequently	Always
2.9	13.6	32.4	42.2	9.0

Question 20: In order to implement the standard in my classroom, I discussed with colleagues assumptions about teaching and learning.



Never	Rarely	Sometimes	Frequently	Always
4.7	13.9	33.6	41.7	6.1

Question 21: In order to implement the standard in my classroom, I had conversations with colleagues about goals of this school.



Never	Rarely	Sometimes	Frequently	Always
3.5	14.8	29.6	39.7	12.5

E. Special Education Students

Approximately three-quarters (74.3%) of the respondents reported having at least one special education student in the classroom in which they implemented a standard. Of those, a similar percentage (73.9%) acknowledged having sought resources or advice from special education regarding accommodations for assessment. A slightly smaller number (61.0%) actually used accommodations to assess the standard. Those who did so were asked if the accommodations were effective and just under half (46.3%) agreed that they were. Interestingly, almost as many (40.8%) neither agreed nor disagreed that they were effective, which may indicate that it was too soon for these teachers to know if this was the case.

Question 22: I have one or more identified special education students in my classroom where the standard is being implemented.

Yes	No
74.3	25.7

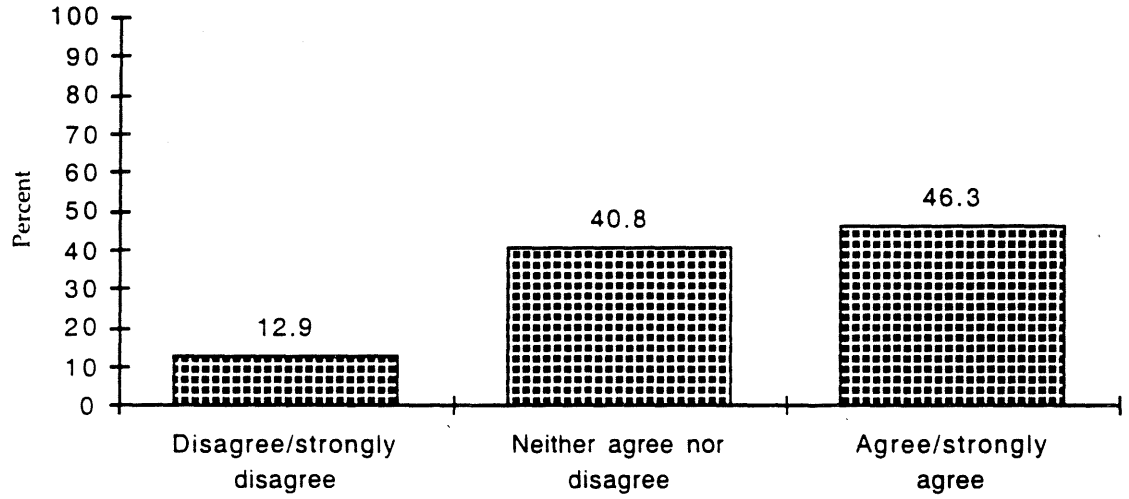
Question 23: If yes, I sought resources/advice from special education to identify accommodations for assessing the standard. (N=245)

Yes	No
73.9	26.1

Question 24: I used accommodations to assess the standard. (N=241)

Yes	No
61.0	39.0

Question 25: If yes, the accommodations I used to assess the standard were effective. (N=147)



Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
4.1	8.8	40.8	40.1	6.1

F. Limited English Proficiency (LEP) Students

Only one-quarter (27.7%) of the individuals responding had at least one LEP student in the classroom where the standard was implemented. Of those teachers, most (70.5%) stated that they had sought resources or advice regarding assessment accommodations. Just over half (55.7%) reported having used accommodations to assess the standard. Those who did so were then questioned regarding the effectiveness of the accommodations. Only 36.2% agreed that the accommodations had been effective, while 25.5% disagreed. It is important to note that this is significantly less agreement than had been generated regarding special education accommodations.

Question 26: I have one or more identified LEP students in my classroom where the standard is being implemented.

Yes	No
27.7	72.3

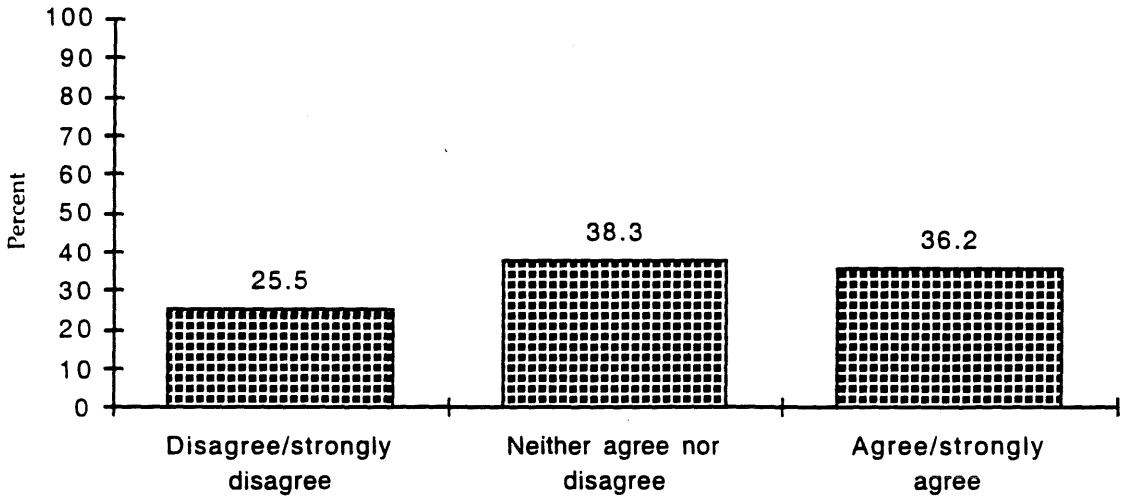
Question 27: If yes, I sought resources/advice to identify accommodations for assessing the standard. (N=88)

Yes	No
70.5	29.5

Question 28: I used accommodations to assess the standard. (N=88)

Yes	No
55.7	44.3

Question 29: If yes, the accommodations I used to assess the standard were effective. (N=47)

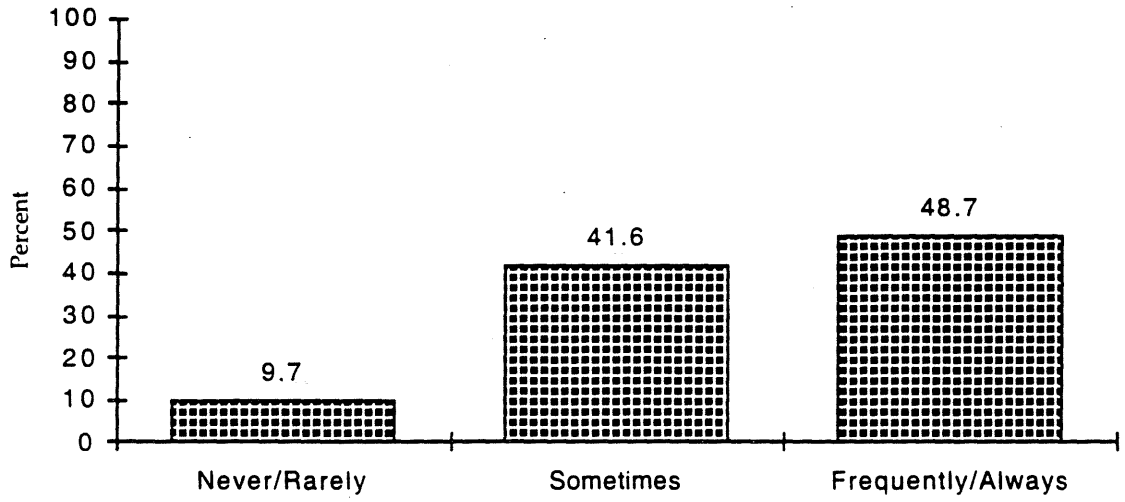


Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
4.3	21.3	38.3	34.0	2.1

G. General Practices

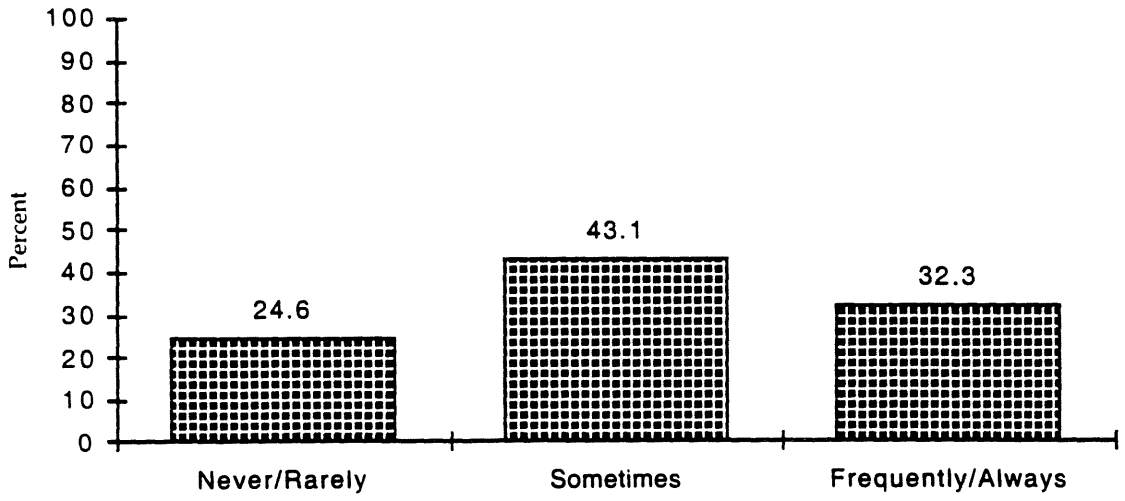
This section of the survey was included in order to ascertain the frequency with which teachers are incorporating standards into their practice. Upon analysis of these items, it is apparent that many of these individuals are not yet linking assessments to standards beyond their Phase II implementation plan (30.1% indicated that they *never* or *rarely* do this). However, the results also demonstrate that over 90% of teachers *sometimes, frequently,* or *always* modify curriculum content in order to implement standards and integrate assessment with instruction.

Question 30: In order to implement standards in my classroom, I modify the content of existing curriculum.



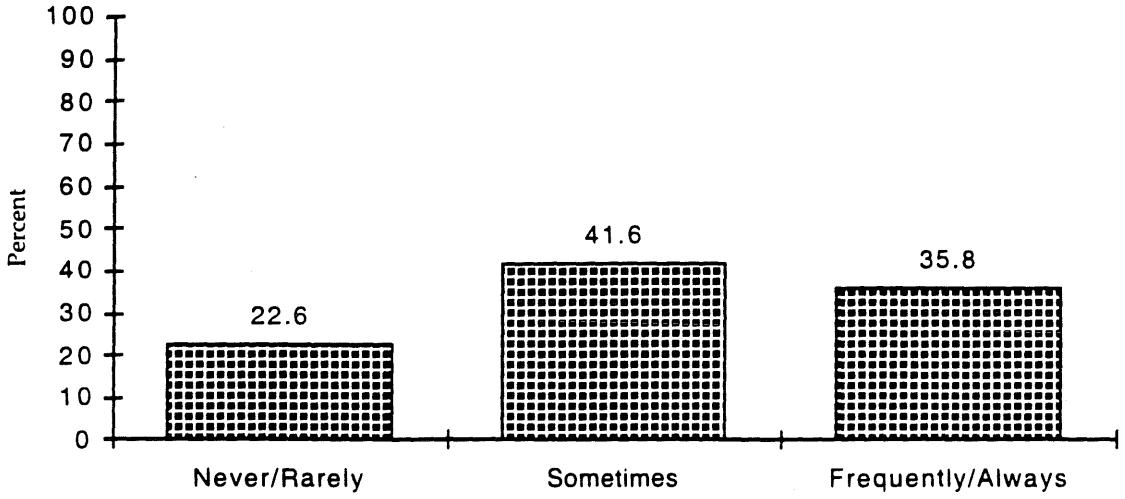
Never	Rarely	Sometimes	Frequently	Always
2.1	7.6	41.6	36.1	12.6

Question 31: Since my participation in implementing the graduation rule, I use standards to explain expectations to students.



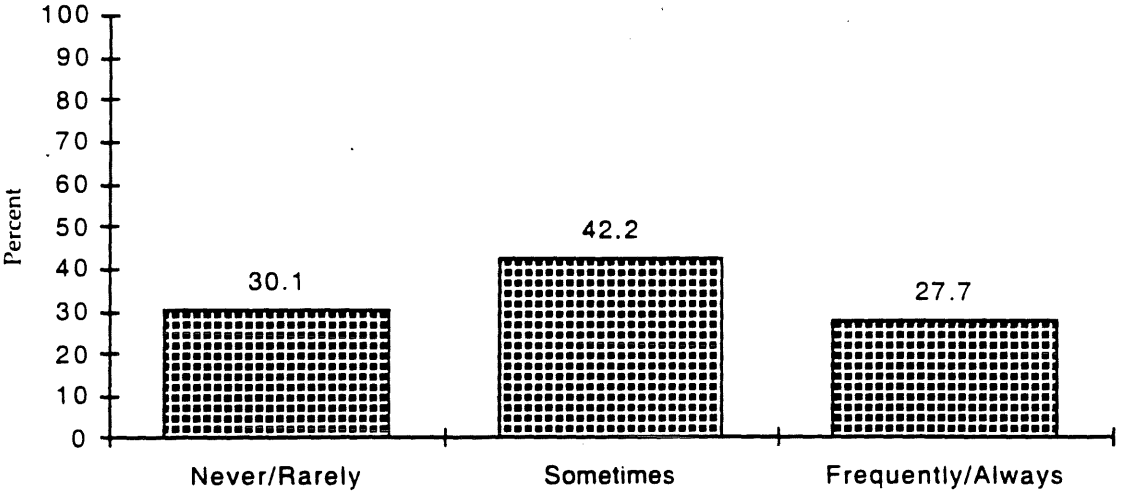
Never	Rarely	Sometimes	Frequently	Always
5.0	19.6	43.1	27.0	5.3

Question 32: I use standards as the basis for planning instructional activities.



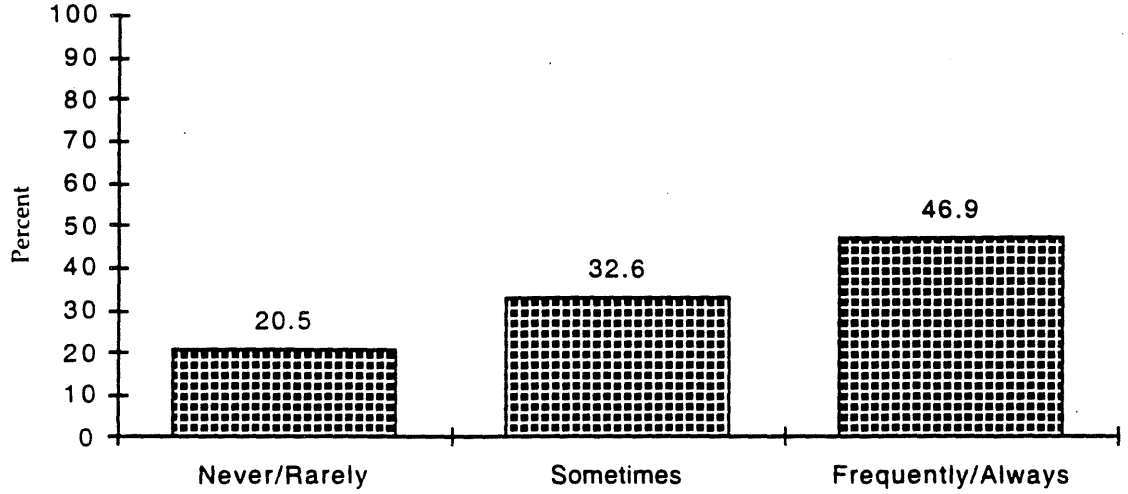
Never	Rarely	Sometimes	Frequently	Always
5.0	17.6	41.6	31.4	4.4

Question 33: Beyond the implementation plan I developed in Phase II, I link assessments to standards.



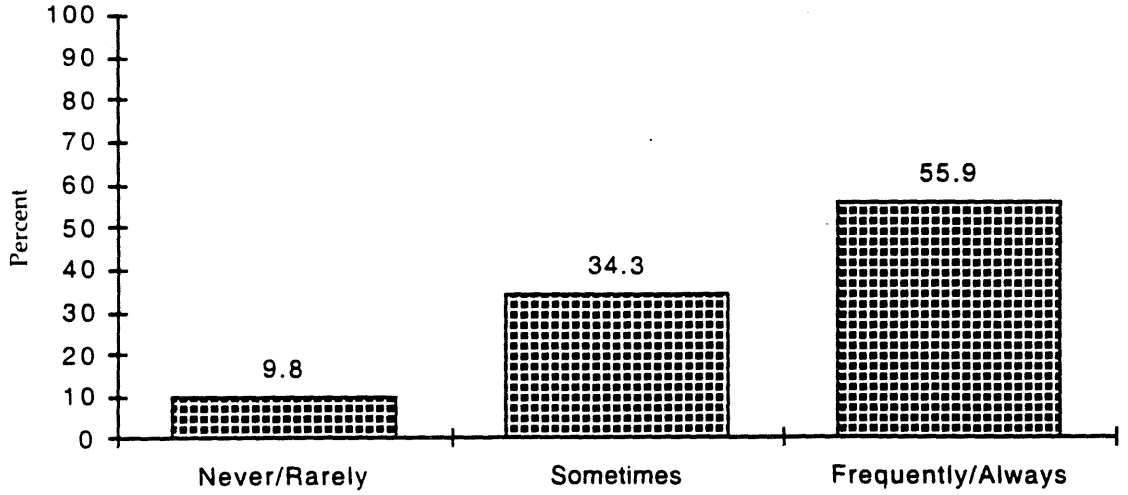
Never	Rarely	Sometimes	Frequently	Always
6.2	23.9	42.2	23.0	4.7

Question 34: I use checklists for evaluating performance-based products (e.g., papers, projects).



Never	Rarely	Sometimes	Frequently	Always
4.4	16.1	32.6	35.5	11.4

Question 35: I integrate assessment with instruction.



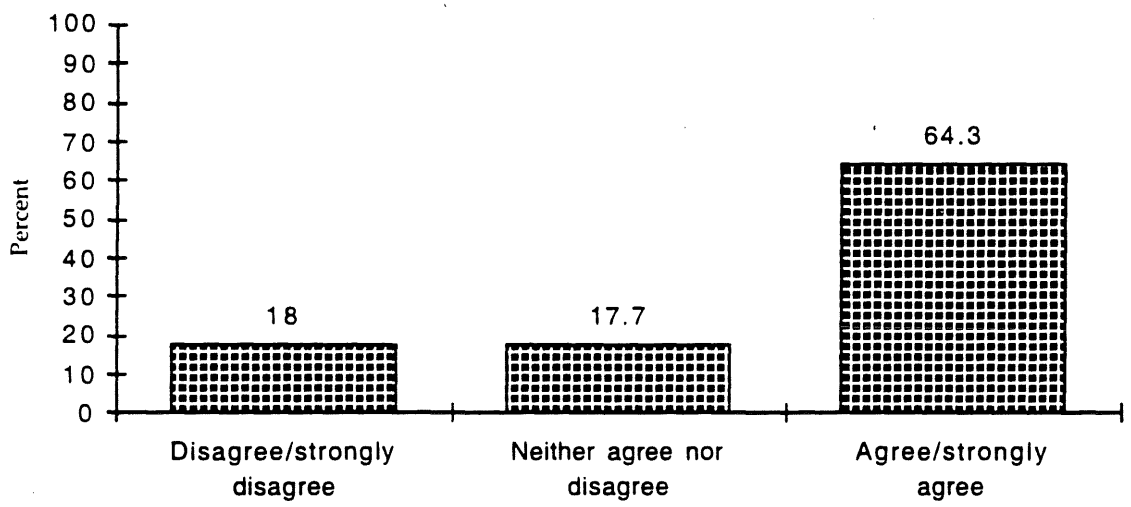
Never	Rarely	Sometimes	Frequently	Always
2.1	7.7	34.3	42.3	13.6

H. Needs

A large discrepancy was found in the responses to questions in this section of the survey. On the one hand, only 22.3% of these teachers agreed that staff development activities in their district have addressed the implementation of standards when working with students having special learning needs (50.4% disagreed that this was case).

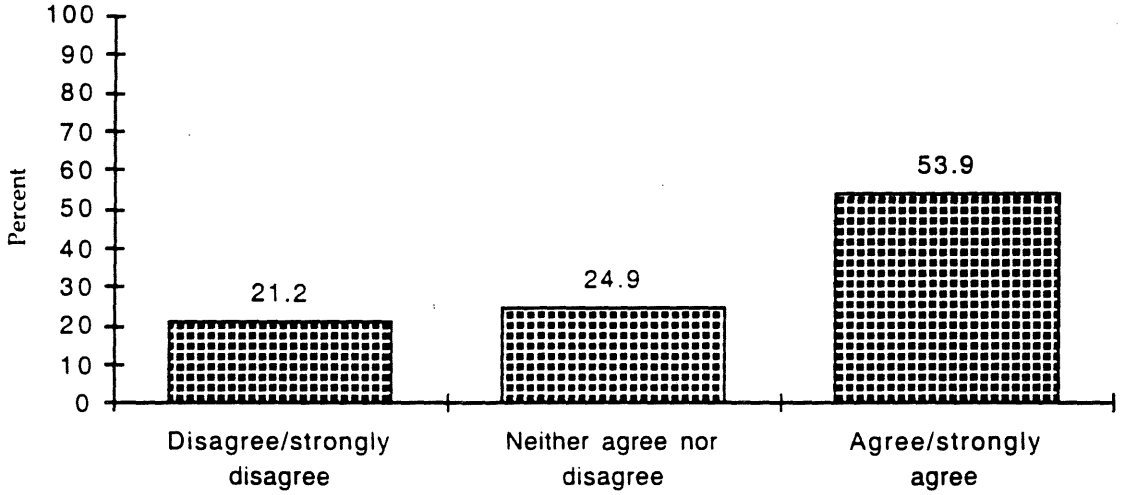
However, the other three items generated much more positive findings. For example, 53.9% noted that their district staff development activities are relevant to their learning about and using standards; 64.3% acknowledged that their district staff development policies support their learning about and using standards, and 73.5% agreed that their district administration supports their efforts to learn about and use standards.

Question 36: The policies in my school district for staff development support my learning about and using standards.



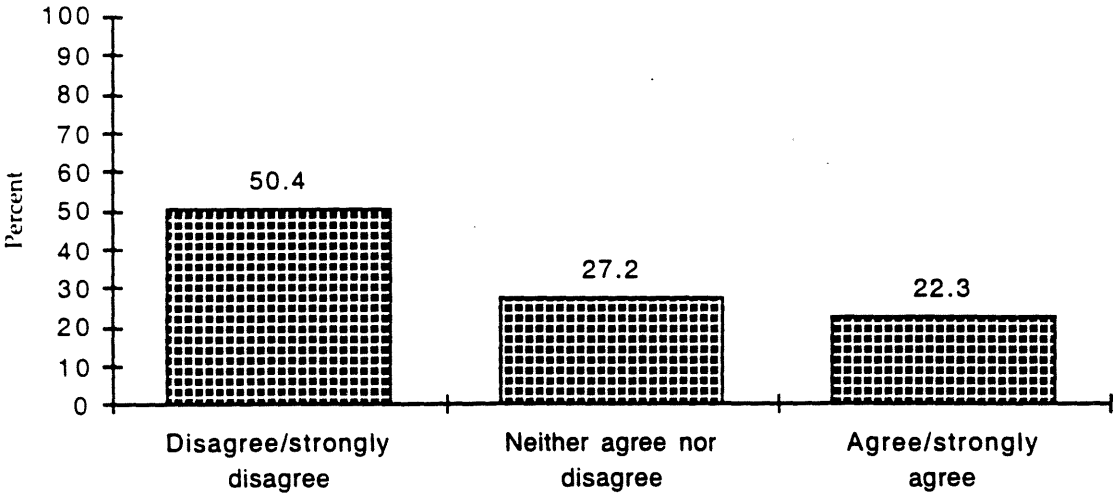
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
6.4	11.6	17.7	47.8	16.5

Question 37: District staff development activities available to me are relevant to my learning about and using standards.



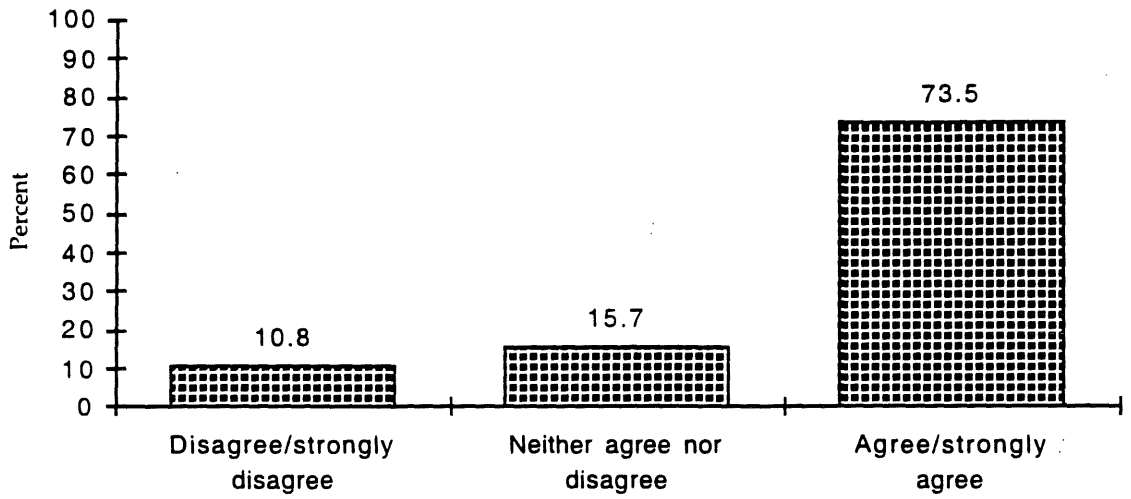
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
8.7	12.5	24.9	40.9	13.0

Question 38: District staff development activities have addressed the implementation of standards when working with students having special learning needs.



Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
17.5	33.0	27.2	19.5	2.9

Question 39: The administration in my school district supports my efforts to learn about and use standards.



Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
3.7	7.1	15.7	48.7	24.8

Question 40: What else do you need to know in order to successfully implement the graduation standards?

Question 41: Given limited resources, how can the state and regional networks best support your efforts?

Because respondents' answers to questions 40 and 41 covered the same themes, responses to these two items were analyzed together. A total of 435 valid responses were offered to these two questions, and it is this number upon which the following percentages are based.

By far the most common topic about which these individuals wrote was that of needing more **time**. Thirty-four percent (N=147) of the remarks dealt with this issue. Specifically, these teachers expressed the need for time:

- *"to develop my units."*
- *"to write my own package and tie it to the standards."*
- *"to work with other staff in developing an implementation plan."*
- *"to develop assessments and implement them."*
- *"to learn and explore assessment packages and graduation standards."*
- *"to use and experiment with material."*
- *"to work with my peers and establish a well-rounded all inclusive curriculum."*
- *"to meet with graduation standards technician."*

Examples of other comments regarding this topic include:

- *"I spent more time than I ever imagined trying to develop and assess student work."*
- *"What time is going to be given on an ongoing basis to help us do this?"*
- *"Mandate (including funding) time away from the children when teachers get together to plan curriculum. Our board thinks if we don't have children in our room, we are not working."*
- *"Give us a more reasonable timeline!"*
- *"The standards are a great way to ensure the students a quality education, but teachers have to work together to develop the best curriculum and we need time to do that."*

Sixty-six responses (15%) brought up the topic of **performance packages**. It is apparent that these teachers are concerned with the quality and availability of performance packages and that they are interested in learning how to develop their own packages. Some examples of their comments follow:

Quality
- *"The packages, at times, are weak."*
- *"The performance packages need to be more teacher friendly."*
- *"change the language in the packages so they are more student friendly."*
- *"The packages need to come to us 'student ready' so we don't have to do so much 'remodeling' and adapting."*
- *"They could develop packages that are more realistic in their time frames (one I used was to take 5 days - took 15 days)."*

Availability
- *"There need to be packages available to fit our grade level."*
- *"Provide more packages for primary (K-2)."*
- *"Provide approved performance packages that can be readily implemented."*
- *"Would like a clearing house of packages."*

Development
- *"Writing our own performance packages to meet standards would be a big help. Much of what we already do is aligned with the standards, but we are being forced to do packages we don't like or don't know how to improve."*
- *"More emphasis on writing own packages as adapting models is more time consuming than writing ones that fit specific curriculums."*
- *"Time to write packages that will be meaningful for my students yet fulfill the grad standards. All districts have their own uniqueness and challenges. I would much rather create than apply someone else's work that fits their district's/ students' needs."*

Comments about the ongoing need for **training** constituted 11% of the responses (N=47). As one teacher remarked, "If teachers don't get trained and

immersed, this will fail by its own weight." Specifically, respondents are seeking more staff development time devoted to implementation of the standards, as the following comments demonstrate:

- *"more training on how to write a package and satisfy a standard by writing one."*
- *"Have more workshops where we can get ideas and solutions from other teachers trying to implement the same standards."*
- *"Mandatory teacher in-service/reduced student contact time for one year (even 2 days would be great)."*
- *"Organize workshops between similarly sized schools within different departments. It does little good to compare notes between me where I am the entire department and St. Cloud where they have a set of specialists in each area."*
- *"Continue to send specialists out into the districts to help us."*

Forty-three remarks looked at the issue of **assessment**, which continues to confuse some of the Phase II participants. Their comments reflect their concerns:

- *"Another teacher teaches the same class and we talked at length about how we were to present the material and we couldn't agree on how to grade each task."*
- *"I need more on alternative assessments. I am also nervous about the 4, 3, 2, 1 scoring."*
- *"Something needs to be done in order to remove the subjectivity of the evaluation of the projects."*
- *"If this process is going to work, independent, non-biased evaluations of the grades teachers give to students will have to be implemented. If this doesn't happen this whole process will not have any significant impact on increasing student performance. Some teachers will give a lot of '4's; others won't. There won't be any consistency. We eventually will have 'grade inflation' in standard process.*

A slightly smaller number of respondents (N=41) indicated their desire for more opportunities to **share/exchange information** with others. Examples of their ideas and suggestions include:

- *"I would like to get together with other teachers who have implemented the same standard as I have and compare notes on how they did it and what their results were."*
- *"Let us have time to work with others from other schools to see how they are doing on the packages (we need a chance to learn from each other)."*
- *"Schedule small groups of people working on similar standards together for in-service as the sharing of ideas is both reassuring and invaluable."*
- *"Organize groups of teachers who have successfully done this so we can share ideas and actual plans."*

The issue of **money** was raised in 34 of the comments. Examples of statements made in this regard include:

- *"Give schools more money for materials, resources, and teaching training."*
- *"Money for more teachers to lower class sizes so the standards can be successfully implemented."*
- *"Provide funding to districts to allow for needed staff development and collaboration time as well as teacher training opportunities."*
- *"We need to feel confident the state is willing to fund this enormous project."*

In addition to time and money, 26 responses called for **other resources** that are necessary for the successful implementation of the graduation standards. These teachers made requests for:

- *"a computer (with internet access) in my classroom"*
- *"special equipment for my science class"*
- *"software, storage, etc."*
- *"computers, books, reference materials for research"*
- *"multimedia materials and equipment"*

Twenty-four respondents indicated that they would like to see more samples and **examples** of the various components involved in this process. Some of their comments follow:

- *"Good examples of packages implemented by Grade 4 teachers."*
- *"I want to see what other people have done; actual student work and how it has been assessed."*
- *"Examples of completed packages to see how written papers look, etc."*
- *"Give examples of student work in all areas so we can see if we are on the right track."*

Curricular issues were brought up by 23 individuals, most of whom are concerned with integrating the standards into their curriculum and/or what they will need to "leave out" in order to implement the standards. Examples of remarks in this regard include:

- *"I'm concerned how these standards are dictating the curriculum particularly in science."*
- *"What do we eliminate from our curriculum in order to add these Grad Standards? How can we expect students to do these when they don't have the basic knowledge to understand them?"*
- *"Our district has been slow to clarify in which courses various standards will be embedded, thus resulting in a delay in serious implementation by most teachers. These factors need to be decided clearly first, so that teachers can determine how to alter curriculum in content areas."*

Concern for the tenuous **status** of the Graduation Rule (at the time the survey was administered) was reflected in 22 of the comments. These teachers remarked:

- *"Is it for real? I'm putting everything on hold because it seems like the policy changes weekly."*
- *"Have a policy which doesn't change with every new workshop."*
- *"We need the standards set in place once and for all so we know they are here to stay so we can commit to the process."*

Twenty individuals need more information about the **record keeping** involved in this process. Following are some examples of where their concerns lie:

- *"How much documentation is needed and retained for each assessment package? How do we keep track of assessments on students in constant movement between districts?"*
- *"I would also like suggestions as to how to keep track of all the assessments for each student. That paperwork seems overwhelming."*
- *"Record keeping of assessments -- the state needs to design a program that will not be time consuming and will follow students when they transfer to a new district."*

Comments regarding these teachers' **roles and expectations** were made by 15 of the respondents. Specifically, these individuals want to know:

- *"As an elementary teacher I teach reading, English, social studies, science, math, health.... Do I personally need to be thoroughly familiar with all those standards and personally develop packages to meet them?"*
- *"I would like to be told in very simple terms what is expected of me to implement the standards."*
- *"Give me detailed plans of what I'm to do and when."*
- *"Exactly what standards I'm responsible for and what portion of the assessment packages I'm to do."*

Other issues that were raised included: the desire for a resource person/center who can give "straight answers" to questions (N=11); the need for more information on making accommodations for students with special needs (N=11); the need for the state to inform/educate the public as well as parents (N=5); and the need for support to be provided by district administration (N=5).

A variety of specific questions regarding the **logistics** of implementation were also asked by these teachers. Examples of these include:

- *"How can high ability students accelerate themselves through a mathematics department without missing standards on their way to graduation?"*

- *"When doing a performance package that spans several weeks, how can I get each student to complete it when they are absent; go to L.D.; speech; counseling; and gifted?"*
- *"What are small school districts with limited course electives to do to offer grad standard packages?"*
- *"How is it possible to cover standards in a combination classroom (2 grades)?"*

Not surprisingly, some individuals took this opportunity to share their **negative** views regarding the graduation standards. Complaints made by these teachers include:

- *"Packages have too much paper work and they take too much time away from other necessities."*
- *"I think that we would have more money applied in better ways if this whole idea were dropped!"*
- *"It is obvious to me that it is politically incorrect and professional suicide to be anything less than enthused about these Grad Standards."*

Positive remarks were made by these respondents as well. Examples of their favorable comments follow:

- *"Our grad. technician has been excellent in explaining and helping us to implement and become familiar with standards. So as of right now, I don't have any questions."*
- *"I feel that it was time that the whole state got on track and have students be able to meet certain standards in order to graduate."*
- *"As a special educator whose students have participated in a grad. package in the classroom, I have seen their success and an increase in the classroom teacher's respect for their performance."*

I. Further Analyses

Three of the most crucial questions on the survey were items 32, 33, and 35, which attempted to gather information regarding the frequency with which teachers are engaging in various practices utilizing the standards. As was shown in Part G of this section of the report, the results for these three questions were as follows:

Question	% of teachers who answered *sometimes, frequently,* or *always*
32. I use standards as the basis for planning instructional activities.	77.4%
33. I link assessments to standards	69.9%
35. I integrate assessment with instruction	90.2%

In order to determine which teachers were more likely to engage in the three behaviors measured by those items, we examined the relationship between the items and:

* teachers' *knowledge* of[1] and *attitudes* towards[2] the standards,
* perceived *support* for[3] and sense of *competency* in using[4] the standards for instruction and assessment,
* the extent to which they actually *used* the standards[5] to inform their curriculum and instruction,
* the frequency with which they had *conversations* with colleagues[6] regarding implementation, and
* whether they found it necessary to *modify the content* of the curriculum[7] in order to implement the standards.

In other words, we were curious about whether or not teachers who indicated a certain level of knowledge or a greater sense of competency, for example, would be more likely to agree with the behavior measured by questions 32, 33, and 35. Therefore, stepwise regression analyses were conducted using questions 32, 33, and 35 as the dependent variables, with the questions listed in the footnotes below as the independent variables.

Results

Question 32

Teachers most likely to *use the standards in planning their instructional activities* also (in order of decreasing importance):

- link assessments to standards,
- use the standards to explain expectations to students,
- have a more positive attitude toward the standards,
- modify the content of existing curriculum, and
- have conversations with colleagues about standards implementation.

Question 33

Teachers who *link assessments to standards* also:

- use standards as the basis for planning instructional activities,
- use the standards to explain expectations to students,
- feel competent with regards to implementation,
- integrate assessment with instruction,
- use checklists for evaluating performance-based products, and
- share activities with, and solicit input and receive useful suggestions from, colleagues.

Question 35

Teachers who *integrate assessment with instruction* are those who:

- use checklists for evaluating performance-based products,
- link assessments to standards,
- feel a sense of competency regarding implementation,
- have conversations with their colleagues about the implementation of standards, and
- modify the content of existing curriculum in order to implement standards into their classroom.

Discussion

Because each of these three items asked about the degree to which teachers are using standards to inform their practice, it is not surprising that the extent to which teachers are carrying out the activities in questions 32, 33, and 35 is related to the degree to which they are engaging in various other practices utilizing the standards. It also follows that teachers who are using standards feel competent about their ability to do so and are having discussions with and feel supported by their colleagues. What was somewhat surprising, however, was that their reported level of knowledge regarding standards did not appear to have any relationship to their use of standards in their practice.

[1] See questions 1 and 3
[2] See questions 5, 6, 7, and 8
[3] See questions 13, 14, and 15
[4] See questions 2 and 4
[5] See questions 31, 32, 33, and 34 (excluding the item which was being examined)
[6] See questions 16, 17, 18, 19, 20, and 21
[7] See question 30

Section III: Summative Conferences

This section describes the results of the observations and focus groups conducted at three summative conference sessions in two regions, as well as telephone interviews of Phase II teachers from a third region. For detailed information about the methods used, see Section I.

A. Observations

The following account is based on observations of teachers who were grouped based upon the performance package they had implemented in the 1997-98 school year. Group members represented grade levels from elementary through high school and came from both large and small schools.

Based on the number of survey respondents who indicated that they needed time to talk/network/share with other teachers (see Section II), it was not surprising that the groups of teachers that were observed engaged in almost nonstop dialogue. In fact, it was immediately apparent to the observers just how anxious these teachers were to share their stories and ask questions of one another. The issues that they discussed took precedence over actually beginning their task, which was to sort and score the examples of student work they had brought with them. One group, for example, spent the entire hour and 15 minutes that they had before lunch time discussing how they had implemented the package, as well as some of the difficulties and frustrations they had experienced, and therefore did not begin sorting/scoring the student work until after lunch.

Some of the **difficulties** these teachers discussed are as follows:

Different interpretations of the language in a standard

For example, one standard requires students to do an "in-depth study" and teachers in this group had various definitions for that term. Another group had a lengthy discussion about whether the pattern and symmetry required by their standard meant that a student's finished product needed to be entirely symmetrical or that there simply had to be symmetry somewhere in the pattern; this dilemma was not resolved during the course of the observation.

Student Attendance

One teacher talked of a student who had moved 11 times by second grade. Another noted that there had been no time for re-teaching students who had been out sick or on vacation during implementation of the package and thus these children did not complete the package.

Special needs students

The performance package entitled 'A Day in the Life' was implemented by one teacher during a time when no students were pulled out for Title I, ESL,

L.D., etc. and no aides were in the classroom. Successful completion of this package by all students was described as "impossible."

Lack of necessary resources/materials

It was noted by one teacher that the package she had used requires so many resources (e.g., library books) that not every teacher at her grade level can do it at the same time. Another individual lamented that many books in the school library were published prior to 1975. A final teacher commented that students in their school are not allowed on internet.

Isolation

Teachers who had been the only one in their building using a particular package pointed out how difficult it was not to have anyone with whom they could discuss specific problems they were experiencing, such as scoring.

Time to complete package

Several teachers expressed frustration with the amount of time it took to complete the packages, with many pointing out that they were not able to complete their package because of this. For example, one teacher worked on the package for two hours a day for three weeks and only partially met the standard. Another acknowledged that completion of the package took one and one half quarters.

Logistics of implementation

These teachers posed various logistical questions to their group members, such as:

- What if a student completes a standard in first grade at a '1' - do you stop there?
- Do you leave the 'low' kids in the room during a package, or pull them out to remediate the skills necessary for the package?
- How does it work when you can't score it until it's completed?
- How do you find time to sit individually with students? What are the other students doing?

Scoring

One group of teachers had such difficulty coming to a consensus on scoring student work, they decided to simplify the task by dividing the work into two piles, 'good' or 'poor.' However, even this proved to be challenging (partly because there was still disagreement over how to interpret the standard).

While these teachers did seem to welcome the opportunity to 'vent' some of their frustrations, it was the case that **positive** experiences were shared as well. For example, one teacher told her group, "I had seven L.D. students who really rose to the occasion. They did an awesome job." This teacher later told the evaluators, "I love it. I'd never go back to the old way of teaching. The kids did so well--they learned so much and are retaining it."

Positive remarks were also heard regarding various media specialists. It was shared by one teacher that their media specialist was going through the standards and ordering relevant materials; another teacher agreed that this was the case at her school also. It was also volunteered that one school's media specialist had gathered a list of web sites relevant to the tasks involved with package and also gave students clues on searching the web.

Clearly, one of the most valuable aspects of these teachers' coming together was the fact that they were afforded an opportunity to **share** with one another. As various individuals discussed how they had implemented their packages, their group members leaned forward and appeared very interested in the conversation. They took notes, wrote down citations for books that had been successfully used, and made requests for copies of materials. When discussion turned to the obstacles that had been encountered, plenty of nodding and empathizing was noted by the observers. These teachers had numerous questions for one another, as well as words of encouragement, such as:

- *"That is neat."*
- *"That's a great idea."*
- *"That was a great way to organize that."*
- *"Could I get a copy of that?"*

The value of this experience of coming together was certainly appreciated by one participant, who reflected, "I'm probably going to teach this differently after listening to this conversation."

B. Focus Group and Interview Data

Because focus group participants and teachers interviewed by telephone were asked identical questions, their responses were analyzed, and thus will be reported, simultaneously. A list of the questions used can be found in Appendix B.

Collegial discussions

Questions 16 through 21 of the written survey asked teachers about the frequency with which they were having conversations with colleagues about such topics as the development of new curriculum, managing classroom behaviors, and what helps students learn best. Results indicated that these individuals are having such discussions frequently, yet it was not possible to ascertain whether this was a change from previous years, or if these conversations had always taken place to this extent. In order to clarify this issue, focus group and interview participants were asked to talk about their experiences in this vein. While some respondents alluded to building-level conversations having a negative tone, most agreed that implementation of the standards has led to an increase in their collegial discussions.

Negative

- *"In my building, I think the only conversations that it has generated have served to polarize the individual staff, that whatever talking we are doing has to do with pro or con standards."*

- *"Because [my colleagues] are older and have been there, they've seen OBE come and go, no matter what I do, I cannot convince them that this is a rule and that this is going to happen. I think they prefer not to hear about it.... The kids are real responsive to everything; however, the people in my department are not."*

Positive

- *"It's given teachers a common ground either to talk or argue about, I guess... but when we come together from different schools and get to talk, now we have a common ground... so it has spurred more conversation than I think there has been, whether good or bad."*

- *"[Previously], we were all in our own individual classrooms and not talking to each other because we were too busy to even have lunch together. Now, it's causing us to sit down and take a look at what we really need to have."*

- *"This year, I've talked more about curriculum issues than I ever have before."*

- *"I'd have to agree--interdepartmental, and then across other subjects, we're talking more."*

- *"There are definitely more conversations. We talk about what we can keep, what we can modify."*

- *"We tend to have generic conversations because we're a small school so people are implementing different standards, but we talk about things that work, things that don't work. I don't think we shared as many ideas before, even about things like classroom management."*

Student capacity for learning

Interviewees were also asked to help shed some light on the survey finding that approximately 75% of respondents indicated that their beliefs in the capacity for student learning had not changed (as opposed to having become more positive or more negative). Their hypotheses consisted of: 1) teachers' expectations have always been high (and therefore have not changed); 2) teachers are only beginning to implement the standards so it is too soon to have noticed a difference; and 3) there are negative attitudes regarding the standards in general.

High expectations

- *"The people who are out there trying it have always been more positive. I would say their beliefs have always been high."*

- *"I think the packages are already raising expectations... much harder than what we've been asking students to do."*

Standards not fully implemented

- *"When I talk to my colleagues, they say a lot of the things that they're doing is already grad. standards and they can already embed it.... I can't see that, so I guess I disagree."*

- *"I think it will be hard to tell for sure until we've done more of these with more kids."*

- *"I'm concerned that people think they're doing it when they're not. I don't know if they're really reading the packages. We are facilitators--we are not teachers anymore up in front. The fact is that my kids did more last year than they've ever done before (in 30 years of teaching)."*

Negative attitudes

- *"I think it's due to negativity surrounding grad. standards. I was positive about grad. standards and more open to seeing change."*

Some teachers were adamant that their beliefs about the capacity for student learning have become more positive. Examples of their comments include:

- *"I know I answered [question 11] with 'I think our kids are going higher than what they did before the standards.'"*

- *"They intentionally put L.D. students in my classes and I can't put it in words how well they did and what an experience it was for them. They never were pulled out, they never needed help with a test. Because they could use their other strengths and it wasn't just writing, because it was 'be the spokesman for the group' or whatever, they just did wonderful work. And it was so beneficial for them.... In fact, two of my exemplars I brought today were done by my L.D. kids."*

District graduation standards technician

While some of the individuals involved in the focus groups or telephone interviews were currently working as their district's technician, most were not. Nor, they asserted, would they want to play that role. One teacher revealed, *"That*

person almost becomes the enemy because people don't like them. There are naughty things said about the technicians, and really, they're just trying to do their job. If they had a team of people helping them, I think it would get across a lot better than just one person." Most agreed that having more than one technician (even one per building, depending on the district size) would be desirable, as the workload is so extensive. Discussion also included what the technician had done specifically that these teachers had found helpful.

Workload

- *"Now this new person is coming in who is also head of all technology in our district and I'm wondering how this person thinks they're going to do both."*

- *"Our grad. standards technician is the technology coordinator and the curriculum director. Excuse me, but that's three jobs. All she does is go from meeting to meeting to meeting.... What doesn't get done is the communicating with the people that have to deliver the goods."*

- *"What we've done in our school, and it's something the state is encouraging schools to do, is set up a committee that holds accountability for the district as far as the packages and that's helped take some of the pressure off the technician because now she has a group of people."*

Role

- *"She's been great. Anytime you're frustrated, she very much keeps her cool, keeps you focused, brings you back to the topic at hand. She's very positive and never upset about it. Very good about trying to move us forward and very approachable."*

- *"She has held our school board accountable and our superintendent and our administration accountable for us attending meetings. She had great communications with them and she's laid it on the line--this is what we need, this is what the state is asking.... I feel comfortable enough to go to her and ask her questions or call her at home."*

- *"She's very knowledgeable in the area that she teaches, so when we had individual curriculum questions, she wasn't able to answer them, but she would do best to find an answer for us."*

- *"I think as a technician, that person has to know the technical stuff of the grad. rule, but I think they're overstepping their bounds if they proclaim that they know content. [As a technician], I certainly can help other teachers to get through struggles."*

Ongoing needs

Focus group and telephone interview participants were asked what they needed in the way of support, given limited resources, from the state and regional networks (identical to question 41 on the survey). Their answers centered around the topics of materials for students, resources for themselves, and time for additional training and sharing with others.

Materials (for students)

- *"What I find very limiting is the amount of resources available. Until we get our media centers upgraded, get more time on computers, that's what I find limiting my kids."*

- *"Right now, what we're doing is we go to the public libraries and check out things and (this has happened many times) we lose the things because of kids checking them out and losing them and we pay for it."*

Resources (for teachers)

- *"Just having a person out there that I know to contact (names, numbers, a department)."*

- *"I wish there were more choices in packages. They say you can write your own, but I don't have time."*

- *"I would love, if I had the time, which I have every now and again, to get on the internet and go to that curriculum clearinghouse and go to Anoka-Hennepin or go to somewhere else and look at their curriculum."*

Training/sharing

- *"Training as far as what's new or what other schools or districts are doing, so that if they have something that works and we're struggling, we share that information so that our tasks become easier because of what we've learned from them."*

- *"I think we need to hear the general message of what's new, what's happening, that every person needs to hear, but as far as breaking up into small groups, I find that most beneficial."*

- *"I like the meeting today and I think we should do it again next summer."*

- *"There has to be a way for this discussion to go on or a chance for teachers to meet."*

- *"What I'd like to see is sharing between districts. We created some of our own packages, but we're not sure how rigorous they are."*

Frustrations

Teachers were asked in an open-ended fashion about frustrations they encountered with implementation. Not surprisingly, the issue of time emerged as an ongoing frustration for teachers. Other topics that were raised were the additional three days of student contact, the burden of training their colleagues, disappointment with some of the state performance packages, subjectivity of assessing student work, the state's lack of communication with parents, continual changes in the system, and student accountability.

Time

- *"The biggest frustration I sense is that people keep saying everyone keeps adding and no one takes anything away and it's impossible to do that.... There's just not enough time."*

- *"We want implementation, and if you want quality, when are we going to have time to do it?"*

- *"There is not enough time to do the prerequisite or the pre-teaching that is probably required to get those scores that I would like to make sure that my kids had 3's and 4's."*

Additional three days

- *"In our district, we had to add those three days, so what did they do, they took away three teacher workshop days, so now we have even three less days to get together and talk about how we're going to do this."*

- *"I just wish those three days had gone to teacher development time versus student contact time."*

Burden of training others

- *"Somehow I feel responsible to teach [colleagues] about the standard and I don't think that's fair. I think everybody should be responsible to gain that knowledge and they should be given the time and the money to do so."*

- *"I'm one of only two people in our entire building who went to Phase II training out of a faculty of about 80 people. So constantly, every time there's a staff development day or workshop day where we talk about it, the other gal and I are called on to do this. Now we're under the gun to train."*

Appropriateness of packages

- *"There are not enough primary packages and I believe that some of the things that they're asking students to do in the primary situation are not developmentally appropriate."*

- *"I think what I've found most dissatisfying is some of the state high standard packets as they came out. The personnel that had written those had very clearly put in issues and instruments and measurement tools that were not appropriate for [the package I implemented]."*

- *"I wasn't sure of part of the package; it was confusing. I had the kids evaluate it also and they had the same complaints."*

Subjectivity of assessment

- *"What I'm rating as a 3, somebody else might decide is barely a 2; what somebody else thinks is a 4, I might think is a two and a half. Even within one building, there is so much difference, so much of it is opinion-based, there is very little that's absolute.... There's a huge amount of discrepancy in how stringent people are, the ways that they'll interpret words like 'accurate.' Just the vagueness that there is in the descriptors and how you interpret the instructions provides so much leeway for so much subjectiveness in grading, so much range."*

Communication with parents

- *"I have serious concerns about [parent communication] because I have serious concerns about the support that grad. standards have from teachers and if we're leaving it up to individual teachers to educate parents, then we might not be getting a very positive message out there."*

- *"Our frustration right now is we have a highly multicultural population. We have no translation. For example, we have lots of Hmong families and a translation on paper is not what they need because most Hmong families do not read Hmong, they only speak it. I think for most of the urban schools, that's a big issue. Here we're sending this pamphlet out that is hard to read in English."*

Continual changes

- *"The information keeps changing."*

- *"And that's what is frustrating because I have information from two years ago and I don't know what to keep and what to throw."*

- *"They changed '1'. It used to mean that you did not complete part of it, now it says you've completed everything, but it's not very good."*

- *"Think of it, here we're the people who've been taking the training. I'm the point man and I'm so frustrated I could spit. When I go back and say, 'Well now, by the way, don't you dare give a 4-3-2-1 to a task,' people are going to say, 'I'm not even going to talk to you about this.'"*

- *"Almost two years ago, I came to my first meetings here. At that time, when we asked these kinds of questions (what about the 4-3-2-1, how about kids working together) the answer was always the same, it was, 'We don't know yet, as soon as we know, we'll let you know, we're working on it.' Last summer, when we did this training, all of a sudden it changed and now the answer to everything is, 'That's a district decision.'... The standards are good, I'm not arguing with the standards, the standards are great, it's just how to get to them. But they're making us make all the decisions. You decide how to keep track of it, you figure out what kind of software to use, you decide what kind of adaptations to make, you decide how to deal with special ed., PSEO, AP, the whole bit."*

- *"It's a top down reform trying to be clothed in a bottom up fashion."*

Student Accountability

The following account is an excerpt from a discussion that we did not feel could be summarized without losing some of the vital information contained therein. To maintain their anonymity, respondents are identified as Teacher #1, #2, and #3 (#1 and #2 teach high school; #3 teaches at the elementary level).

Teacher #1:

- *"We have no individual accountability. I had work that I know wasn't done by the student, I had projects that my students couldn't read back to me, they didn't know some of the words in them. I'm all in favor of the projects, but then let's not hang our high school diploma on it. If you give these open-ended kinds of projects where you get 161 different projects back and you have to re-do all the calculations for 161 five page projects, in the first place it'll take you, well, I wouldn't be done with my grades yet, that's the first problem. And if you do it so that everyone comes up with the same answer, if you tweak it, then there's absolutely no individual accountability. So we're not addressing kids working in groups or not working in groups, we're not addressing getting help from parents, we're not addressing which parents are architects and which parents are not. We're not addressing any of that, but then we're spending all this time going, 'What's a 4, what's a 3?' I'm opposed to that. I want to do the projects, have that be part of the learning, and not get so hung up on the grading because it's moot. We don't know who's doing it."*

Teacher #2:

- *"I'm going to jump in again on that. The 10th grade geometry projects that I did as part of pilots this year, I had exactly the same problems. The great bulk of the*

work was done outside of the classroom and I had no way to tell who did what part of it. It was all basically the same situation, so they were supposed to come up with the same numbers at every step along the way. Sure they did, because as soon as they walked out of the room, the brighter kids would get waylaid by the not so bright kids -- 'How are you doing this? How did you get that? Where did you get this number?' And as I would be going back through these things, I would look at two papers that would have absolutely identical layouts and identical mistakes all the way down the line and I knew they hadn't done the work individually and then, trying to talk with individual kids about their work, like you say, they had no clue what they were talking about, they couldn't explain how they'd gotten from step A to step B. The project itself was a real interesting one and I could envision ways to individualize it so they couldn't just get the answers from each other, but then, like you say, to try to grade it, I wouldn't be done now, I'd be working all summer on grading those projects, and that's just one project. We did three in the geometry class this year."

Teacher #3:

- *"Right, so then the frustration becomes, what is the performance package? Is it the assessment or is it the learning tool?... Maybe after coming up through the ranks and having experiences with performance packages, the kids will be better at it and won't have to be going to their neighbor or we'll be better at assessing or knowing how to assess certain aspects of each package."*

Teacher #2:

- *"One of the worries that came up in our math department at our high school was whether or not we should give their packages back to the students because we were fearful of the kids the following year taking those same packages and recopying them. We're also speculating that it won't be more than a couple years that there will be web sites that kids can download completed performance packages from. There again, it gets back to individualizing each package for each student and the amount of work. When you're talking 150-200 high school kids in a trimester, it's an extraordinary amount of work."*

Teacher #1:

- *"We've been joking in our district that we're going to open a storefront, 'Tasks R Us.' Because many of our students go to tutors anyway. We'll all quit, we'll make a lot more money, we'll tutor them through the packages. In fact, my counterpart at the other middle school in my district had tutors calling her saying, 'How do I do this task?' I'm not opposed to the process learning. If the packages are for process learning, that's great, then they can work together, they can use outside resources, that's wonderful, we should have been doing that all along anyway, but it's not for then sitting and agonizing for hours over whether Susie's dad gets a 4 or a 3. I don't want to spend my time like that and I resent the amount of time it took me this year when I was only piloting it, time I should have been spending being better prepared for my classroom, doing more with my students."*

Rewards

While teachers were asked directly about ways in which Phase II implementation had been rewarding, they also volunteered this information spontaneously during the focus groups and telephone interviews. Here are several positive comments offered by these individuals:

- *"It's been so exciting for me to teach [this package]."*
- *"It gets you to break your routine, gets you to do it a different way. It's a good change of pace."*
- *"The kids like the different activities, doing it--rather than going through a textbook."*
- *"The kids got into it and worked hard."*
- *"Finding out what the kids can do--exceeded my expectations. The kids can do more than we thought."*
- *"[As a result of completing a package, the students] got to the point where they knew they could do it. It wasn't being done by somebody else. Now they've got the cycle set up, they can apply it to other problems that they run into."*
- *"The exciting thing about it is I think it allows for process learning and I think that's what it's about instead of passing the chapter test and regurgitating information. This is a bigger picture of each individual student and I like that."*
- *"I really think it's a very positive way to assess students... because I think it's a lot better than scoring 90 or 80 percent on a test. It tells a lot more about the individual for sure."*
- *"I found my greatest reward to be the communicating part of it, that my students had to explain their thinking."*
- *"One of my excitements is that through this process, I've been able to talk to so many teachers and be involved in something that is new and exciting, whether it's frustrating or not, and to see so many different ways of doing supposedly the same thing and finding out better ways of doing the same thing. For me, that's been a joy, a great joy."*

Section IV: Summary and Reflections

The evaluation of Phase II for the on-going implementation of the High Standards in Minnesota's Graduation Rule reveals that teachers in Minnesota are continuing to incorporate standards into instruction. Exposure to standards-based education has begun with the teachers who have implemented one or more assessment packages. Embedded in the packages are expectations for teachers to explore the content of their curriculum, to engage in dialogue with their colleagues about instructional practices, and to become partners with the student in the learning process. Furthermore, the student now has many different ways to demonstrate knowledge and often discovers self-knowledge about a learning capacity that has previously been unknown.

To be able to reach the goals of a standards-based system requires educators to make changes in current practices and to alter somewhat beliefs about teaching and learning. The evaluation being reported here seeks to discover the degree to which those changes are taking place. Three of the most crucial questions on the written survey attempted to gather information regarding the frequency with which teachers are engaging in various practices utilizing the standards. As was shown in Part H of Section II of the report, the results for these three questions were as follows:

Question	% of teachers who answered *sometimes, frequently,* or *always*
32. I use standards as the basis for planning instructional activities.	77.4%
33. I link assessments to standards	69.9%
35. I integrate assessment with instruction	90.2%

In order to determine which teachers were more likely to engage in the three behaviors measured by those items, we examined the relationship between the items and other questions about conversations with colleagues, feelings of competency, and general knowledge about standards. The results reveal a strong relationship among most of the questions. It follows that teachers who are using standards feel competent about their ability to do so and are having discussions with and feel supported by their colleagues. What was somewhat surprising, however, was that their reported level of knowledge regarding standards did not appear to have any relationship to their use of standards in their practice.

This finding may indicate that merely having more knowledge about standards, per se, will not lead teachers to any greater application of them in their daily work. In fact, the lack of a relationship might give further credence to the notion that knowledge is generated through experience, and teachers have just begun to experience the outcomes of standards-based education with the implementation of performance assessment packages. More opportunities to infuse

performance assessment and standards into instruction may automatically lead to greater knowledge over time. For now, that knowledge appears to be perceived as somewhat limited.

The information gathered from all data sources shows a teaching force that is grappling with the facets of implementing a significant systemic reform. The continual need for additional resources such as time, support, and supplies is to be expected with the magnitude that the move to standards-based education is. Concerns about parity and relevance, accuracy in scoring, and some poorly-written packages are fair criticisms. The state will need to address those issues relatively soon before they unnecessarily negatively overwhelm the positive sentiment about the standards initiative.

The concept of having at least two summative conferences per year for teachers across the state involved in standards implementation is an excellent idea. It answered the need for teachers to get together to share ideas, and it provided a useful forum in which the MEEP regional coordinators could become the linking agent for "fresh" ideas to go back to the schools or take them back to the state. Even though those in attendance were a self-selected group, the tone of the meeting could have been as easily negative as it was positive. As it was, teachers seem to be still willing to grow along with the standards movement by providing honest feedback about a state-wide effort that, for some, has "changed for the better forever how [they] teach."

As it was intended, the Phase II training was modified to focus more heavily on the standards, and less on any specific performance packages. As a result, teachers looked at student work more from the point of view of achieving a standard than from "passing" a performance assessment. Minnesota teachers who have not yet participated in any of the Phase I-III trainings will likely not yet understand that difference. It is a key difference. Teachers and others who are discussing the continuance of standards-based education must keep that in mind.

In summary, the second-year efforts of MEEP to implement the standards on a state-wide scale have proceeded well. The various feedback loops available through the local district to state networks continue to provide vital information about outcomes and needs. The growth of teacher understanding is substantial from last year to the current time, and with understanding comes changes in practice. Minnesota teachers and students are, together, learning about learning. The Minnesota Educational Effectiveness Program is effectively facilitating that growth.

High Standards for Minnesota's Children

MINNESOTA DEPARTMENT OF Children, Families & Learning

It's not just what they know - it's what they can do.

What are the Minnesota Graduation Standards?

For more than a decade, parents, employers, and colleges have been asking for high statewide standards. Teachers, parents and community members designed the Graduation Standards to meet these requests. Minnesota's Graduation Standards have two components, the Basic Standards and the High Standards. The Basic Standards are a "safety net" to make sure that no student graduates without learning the basic skills needed to live and work in today's society. Students must pass tests in reading, mathematics and writing to show they meet the Basic Standards and in order to be eligible to graduate from a public high school. The High Standards define what students should *know*, *understand* and be able to *do* to demonstrate a high level of achievement.

Why has Minnesota shifted to a standards based system?

To meet the demands of the 21st Century, Minnesota is focusing on both the basics – the 3Rs of reading, writing, and arithmetic — and on the higher levels of information and skills that our students need to succeed in this changing world.

Past state graduation requirements focused on the time (x hours per credit) students spent in the classroom. The new standards focus on what students know and can do. In standards based education the instruction, assignments, and assessments of student achievement are squarely focused on what and how well students are learning. Teachers, students, and parents have clear expectations for student achievement.

Students need...

to be able to both KNOW and DO.

more science & math

technical reading & writing

public speaking & interpersonal communication

career exploration

technology

Basic Standards Tests

Reading and mathematics - first given in the 8th grade.

Written composition - first given in the 10th grade.

Students must pass to graduate from a public high school in Minnesota.

Schools must provide help to students who have difficulty passing.

The Basic Standards ensure that no student leaves high school without learning basic skills that every adult needs in order to live and work in today's society. Statewide tests are given to measure student achievement of the Basic Standards. The reading and mathematics tests are first given in the eighth grade and the written composition test is given in the tenth grade. Students scoring below the required passing level must retake the appropriate test subject. All students must pass Basic Standards tests in reading, mathematics and written composition in order to be eligible to graduate from a Minnesota public high school.

What does a student have to know to pass the mathematics test? Students must be able to solve problems involving numbers, shapes, and symbols commonly used in adult life. The test covers material that students are first introduced to before the sixth grade.

What does a student have to know to pass the reading test? Students must be able to demonstrate a reasonable understanding of factual information. Reading selections on the test are newspaper articles. Students must be able to:

- Identify the main idea
- Recognize supporting information
- Identify the meaning of words and phrases
- Recognize the author's point of view
- Draw logical conclusions
- Distinguish between fact and opinion

What does a student have to know to pass the written composition test? Students must write a clear message in English for an adult reader. Writing topics describe not only the task but include reminders of important things to include in the composition. Successful compositions must have:

- A clearly stated message
- Supporting ideas related to the message
- A clear connection among ideas
- A logical beginning, middle and end
- Correct use of grammar, spelling & punctuation

What are the Minnesota High Standards?

The High Standards define what students should *know*, *understand* and be able to *do* to demonstrate a high level of achievement. The High Standards are organized into ten learning areas. Preparatory Standards focus kindergarten through eighth grade learning opportunities on important concepts, skills and ideas needed to achieve the High Standards.

Public high school students from the class of 2002 and beyond must complete 24 of 48 possible standards from the ten learning areas. Some standards are required for all students, while in some learning areas students may choose the standards they wish to complete. For example, students choose two of five different science standards.

Ten Learning Areas

Read, Listen & View

Write & Speak

Arts & Literature

Mathematical Applications

Inquiry

Scientific Applications

People & Cultures

Decision Making

Resource Management

World Languages

What is a standard?

Standards are clearly defined expectations against which individual student achievement and progress may be judged. They outline what a student needs to both know and do in a particular subject. Complete copies of the standards are available on the Minnesota Department of Children, Families & Learning website at http://cfl.state.mn.us or by calling (651) 296-1447.

Here is an example of a complete standard from the Write and Speak learning area:

Academic Writing - High School Level

A student shall demonstrate the ability to write using grammar, language mechanics, and other conventions of standard written English for a variety of academic purposes and situations by writing original compositions that:

A. describe, narrate, or explain observations of human events or situations;

B. analyze patterns and relationships of ideas, topics, or themes;

C. construct support for a position, argument, plan, or idea; and

D. evaluate an idea, topic, or theme based on expressed criteria.

How do students complete standards?

Students complete a standard when they complete all of the work required in their local performance package for that standard. Student achievement of the High Standards is assessed by a locally designed "performance package." A performance package is made up of locally designed assignments that, taken together, show whether a student has learned and can apply the knowledge and skills outlined in the standard. These assignments ask students to apply their knowledge in real-world situations.

Most school districts are offering standards within specific courses. Twenty four standards does not necessarily mean 24 different classes. More than one standard can be completed in a course. For example, the Research Process and Academic Writing standards could be completed together as a student develops and uses research skills and presents the findings in written form.

Graduation Standards recognize that student learning also takes place outside of the classroom. Local school districts have policies and procedures to give students credit for standards achieved through extracurricular activities, and activities outside of school including community and work experiences.

How is student achievement graded?

Teachers assign students a score of 4, 3, 2, or 1 for each performance package a student completes. Teachers score performance packages by comparing a student's work with a description of the desired performance.

What impact do Graduation Standards have on K-8 students?

Preparation for high school graduation and life beyond school begins the first day children enter a classroom. During kindergarten through eighth grade, student work is measured against the Preparatory High Standards. Preparatory Standards strengthen the connection between K-8 learning and what is required of students in high school.

What do standards mean for students?

Students are involved in relevant hands on learning activities. Research in many fields shows that application or "hands on" activities are an excellent way to learn and remember what you have learned.

Graduation Standards require more math and science than former state requirements. They include public speaking, world languages, and they emphasize technology. Career exploration is also included. The new standards acknowledge that knowing and doing must go hand in hand.

Minnesota's new standards set high expectations for our students so that all of our public school students are challenged. The new standards are designed to allow all students to achieve their best. Students are required to achieve at higher content levels than before, and to demonstrate that they can apply what they have learned.

Complete copies of the standards are available on the CFL web site at http://cfl.state.mn.us or by calling (651) 296-1447.

State Graduation Requirements in the Ten Learning Areas of the High Standards for the Class of 2002 and Beyond

Read, Listen and View

Read, listen and view complex information in the English language.

Choose 1: Reading, Listening & Viewing Complex Information **or**
Technical Reading, Listening & Viewing

Write and Speak

Write and speak effectively in the English language.

Choose 1: Academic Writing **or**
Technical Writing
Choose 1: Public Speaking **or**
Interpersonal Communication

Arts and Literature

Apply and interpret artistic expression.

Two Required: Literary & Arts Creation & Performance **and**
Literature & Arts Analysis & Interpretation

Mathematical Applications

Solve problems by applying mathematics.

One Required: Space, Shape & Measurement
Choose 1: Discrete Mathematics **or**
Chance & Data Analysis
Choose 1: Algebraic Patterns **or**
Technical Applications

Inquiry

Conduct research and communicate findings.

Choose 1: Math Research
History of Science
History through Culture
History of the Arts
World History & Cultures
Recorders of History **or**
Issue Analysis
Choose 1: Research Process
Social Science Processes
Research & Create a Business Plan
Market Research
Case Study **or**
New Product Development

Scientific Applications

Understand and apply scientific concepts and methods.

Choose 2: Concepts in Biology
Concepts in Chemistry
Earth & Space Systems
Concepts in Physics **or**
Environmental Systems

People and Cultures

Understand interactions among people and cultures.

Three Required: Themes of U.S. History
U.S. Citizenship **and**
Diverse Perspectives
Choose 1: Human Geography
Institutions & Traditions in Society **or**
Community Interaction

Decision Making

Use information to make decisions.

Two Required: Individual & Community Health **and**
Physical Education & Fitness
Choose 1: Career Investigation **or**
Occupational Experience

Resource Management

Manage resources for a household, community or government.

One Required: Economic Systems
Choose 1: Natural & Managed Systems
Personal & Family Resource Management
Business Management
Financial Systems **or**
Technical Systems

World Languages

Communicate in a language other than English.

Optional

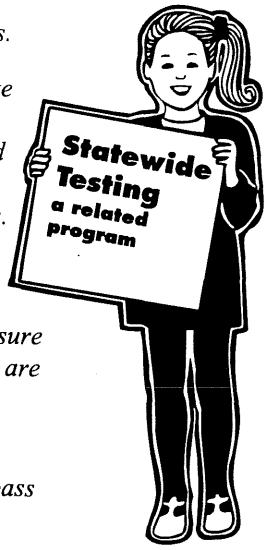
A Related Program: Statewide Testing

Third graders take reading and mathematics tests.

Fifth graders take reading, mathematics, and written composition tests.

Minnesota Comprehensive Assessments measure how well schools are teaching the High Standards.

Students do not pass or fail the MCAs.



The Minnesota Comprehensive Assessments are third and fifth grade tests that measure how well a student has mastered the math, reading, and writing standards as described in the High Standards. All third and fifth grade students are tested in reading and math. In addition, fifth graders take a written composition test. Students do not pass or fail these tests. These tests are part of a new educational accountability system in Minnesota. Schools will use these results to make curricular and instructional decisions for all students.

Each test has multiple-choice and short answer questions so districts will have information on the way students perform on both.

Mathematics

The mathematics tests include story problems solved by applying:

- shape space, and measurement
- number sense
- chance and data handling

Reading

The reading tests include both fiction and nonfiction selections such as:

- a poem
- a recipe
- a short story
- a set of directions
- a page from a grade level text book

Students are asked to answer questions about the main ideas or the authors intent, make logical conclusions based on the selections, or retell a story in their own words.

Writing

Fifth grade students also take a writing test. They will be asked to write about one topic such as:

- Describe a place to visit.
- Propose a solution to a problem in school.
- Describe a classroom.
- Write about something important.

Compositions are evaluated for clarity of ideas, organization, use of vocabulary, as well as correct grammar and spelling.

How will I find out about my child's test scores?

Approximately six to ten weeks after your child takes any statewide tests you will receive a letter with your child's individual test results and group information about how all children performed. You will also be provided with district information including the number of students who took the test and demographic information that allows you to compare the population of your district with other districts as you consider test scores.

Statewide, school district, and individual school building results are posted on the Minnesota Department of Children, Families & Learning website at http://cfl.state.mn.us.

Test Taking Tips to Help your Child

- *Be sure students are familiar with the directions and the test format.*
- *Find out if your school provides "test-taking practice".*
- *Be sure children get a good night's sleep and a nutritious breakfast before test taking.*
- *Encourage students to answer all the questions that they are sure of and to put a small mark by those that give them trouble. The test is not timed, so they can go back to the questions they marked.*
- *Review the test results together. You should receive a diagnostic report in the mail showing how your student did on each of the Basic Standards tests. The report identifies specific areas in which the student may have done poorly or excelled, such as fractions, ratios, estimation etc.*
- *Take the test results seriously and assume your share of responsibility for student success next year. Remember, nobody is a more important teacher for your child than you!*
- *Work with your school to provide experiences that will improve your child's achievement.*

Minnesota's K-12 High Standards

Learning Area Brief description of the ten learning areas in the High Standards	**Read, Listen and View**  Read, listen and view complex information in the English language	**Write and Speak** Write and speak effectively in the English language 
Grade Level *total number of standards required in the learning area* High Standards have been established for each of four different grade levels. The **High School** level covers grades 9-12. Public high school students must complete 24 of 48 possible High Standards as one graduation requirement. Student Choice Options • Name of standard • Complete copies of the High Standards are available at http://cfl.state.mn.us.	**High School** *one standard required* Choose 1 • Reading, Listening & Viewing Complex Information • Technical Reading, Listening & Viewing	**High School** *two standards required* Choose 1 • Academic Writing • Technical Writing Choose 1 • Public Speaking • Interpersonal Communication
Grade Level *all standards required at this grade level* The **Middle** level covers grades 6-8. • Name of standard • Complete copies of the High Standards are available at http://cfl.state.mn.us.	**Middle Level** *all standards required* • Non-Fiction • Fiction • Technical Reading	**Middle Level** *all standards required* • Writing • Interpersonal Communication
Grade Level *all standards required at this grade level* The **Intermediate** level covers grades 4-5. • Name of standard • Complete copies of the High Standards are available at http://cfl.state.mn.us.	**Intermediate Level** *all standards required* • Literal Comprehension • Interpretation & Evaluation	**Intermediate Level** *all standards required* • Writing • Speaking
Grade Level *all standards required at this grade level* The **Primary** level covers grades K-3. • Name of standard • Complete copies of the High Standards are available at http://cfl.state.mn.us.	**Primary Level** *all standards required* • Literal Comprehension • Interpretation & Evaluation	**Primary Level** *all standards required* • Writing & Speaking

Arts and Literature

Apply and interpret artistic expression

High School
two standards required

Required
- Literary & Arts Creation and Performance

(Must be completed in dance, music, theater, visual arts or media arts. May be completed in a different art for or in creative writing as an elective.)

Required
- Literature & Arts Analysis & Interpretation

(Must be completed in literature. This standard may be repeated in dance, music, theater, visual arts or media arts as an elective.)

Middle Level
all standards required

- Artistic Creativity & Performance
- Artistic Interpretation

Intermediate Level
all standards required

- Artistic Creativity, Performance & Expression

Primary Level
all standards required

- Artistic Creativity, Performance & Expression

Mathematical Applications

Solve problems by applying mathematics

High School
three standards required

Choose 1
- Discrete Mathematics
- Chance & Data Analysis

Choose 1
- Algebraic Patterns
- Technical Applications

Required
- Space, Shape & Measurement

Middle Level
all standards required

- Space, Shape & Measurement
- Number Sense
- Chance & Data Handling
- Patterns and Functions

Intermediate Level
all standards required

- Space, Shape & Measurement
- Number Sense
- Chance & Data Handling

Primary Level
all standards required

- Number Sense
- Space, Shape & Measurement

Inquiry

Conduct research and communicate findings

High School
two standards required

Choose 1
- Math Research
- History of Science
- History through Culture
- History of the Arts
- World History & Cultures
- Recorders of History
- Issue Analysis

Choose 1
- Research Process
- Social Science Processes
- Research & Create a Business Plan
- Market Research
- Case Study
- New Product Development

Middle Level
all standards required

- Direct Observation
- Accessing Information
- Controlled Experiments

Intermediate Level
all standards required

- Media, Observation & Investigation

Primary Level
all standards required

- Data Categorization, Classification & Recording

Scientific Applications

Understand and apply scientific concepts and methods

High School
two standards required

Choose 2
- Concepts in Biology
- Concepts in Chemistry
- Earth & Space Systems
- Concepts in Physics
- Environmental Systems

Middle Level
all standards required

- Living Systems
- Earth Systems
- Physical Systems

Intermediate Level
all standards required

- Living and Non-Living Systems

Primary Level
all standards required

- Direct Science Experience

People and Cultures

Understand interactions among people and cultures

High School
four standards required

Required
- Themes of US History

Required
- U.S. Citizenship

Required
- Diverse Perspectives

Choose 1
- Human Geography
- Institutions & Traditions in Society
- Community Interaction

Middle Level
all standards required

- Current Issue Analysis
- Geography & Culture
- History & Citizenship

Intermediate Level
all standards required

- Historical Events
- Geography & Citizenship

Primary Level
all standards required

- Family, School & Community

Decision Making

Use information to make decisions

High School
three standards required

Required
- Individual & Community Health

Required
- Physical Education & Fitness

Choose 1
- Career Investigation
- Occupational Experience

Middle Level
all standards required

- Personal Health
- Physical Education & Fitness
- Career Exploration

Intermediate Level
all standards required

- Personal Health & Nutrition
- Physical Education & Fitness

Primary Level
all standards required

- Personal Health & Fitness

Resource Management

Manage resources for a household, business or other organization

High School
two standards required

Required
- Economic Systems

Choose 1
- Natural & Managed Systems
- Personal & Family Resource Management
- Business Management
- Financial Systems
- Technical Systems

Middle Level
all standards required

- Personal Resources
- Group Resources
- Informed Consumerism
- Technology Applications

Intermediate Level
all standards required

- Technology Skills

Primary Level
all standards required

- Introduction to Technology

World Languages

Communicate in a language other than English

High School
optional for students

Optional
- World Language

Middle Level
optional for schools

- World Language

Intermediate Level
optional for schools

- World Language

Primary Level
optional for schools

- World Language

MINNESOTA DEPARTMENT OF

Children, Families & Learning

Complete copies of the High Standards are available at the Minnesota Department of Children, Families & Learning Web Site at http://cfl.state.mn.us.

October 1998

Graduation Standards Advisory Panel Report

REPORT OF THE GRADUATION STANDARDS ADVISORY PANEL
DECEMBER 30, 1998

Introduction:

The 1998 Legislature charged the commissioner to appoint a panel of 11 members to advise the governor and commissioner on the implementation of the Graduation Rule. The members included representatives from education organizations, business, higher education, parents, and an organization representing low-income communities and communities of color. The Graduation Standards Advisory Panel focused on reviewing implementation of the basic requirements and the Profile of Learning standards. Four meetings were held on September 24, October 22, November 19 and December 10, 1998. The committee reviewed background materials, including the Administrative Law Judge George Beck's report dated March 24, 1998. In addition, the panel heard presentations from various individuals.

Panel Members:

Chair: Duane Benson, Executive Director, Minnesota Business Partnership
Bill Blazar, Senior Vice President, Minnesota Chamber of Commerce
Glenn Dorfman, Administrator, Minnesota Association of Realtors
Claudia Fuentes, Education Program Officer, The Urban Coalition
Don Helmstetter, Superintendent, Spring Lake Park Public Schools
Leroy Koppendrayer, Commissioner, Public Utilities Commission and former state legislator
Stuart Lade, Teacher, Brainerd High School
Mary Mackbee, Principal, St. Paul Central High School
Mitchell Misialek, Teacher, Lakeview School District and representative, Education Minnesota
Representative Gene Pelowski, Teacher, Winona High School and Winona State University
Cathy Newman, School Board Member, Fergus Falls

Meetings:

September 24, 1998 Overview and Implementation Issues

Presenters: Robert J. Wedl, Commissioner, Department of Children, Families & Learning
Kate Trewick, Assistant Commissioner, Department of Children, Families & Learning
Linda Partridge, Curriculum Coordinator, Foley Public School District
Pete Ziegler, Curriculum Coordinator, Yellow Medicine East Public Schools
Bennice Young, Graduation Standards Coordinator, Minneapolis Public Schools

October 22, 1998 Paperwork and record keeping, number of standards and learning areas

Presenters: Representatives Bob Ness and Alice Seagren, report on local meetings
Bob Gross, Superintendent, Brainerd Public Schools
Earl Mathison, Superintendent, Wadena-Deer Creek Public Schools
Kate Trewick, Assistant Commissioner, report of Administrative Law Judge

November 19,1998 Technology and record keeping, number of standards and learning areas, clarity, content and rigor of the standards, scoring and auditing

Presenters: Mark Manning, Department of Children, Families & Learning
Marty Borg and Bob Peterson, Bloomington Public Schools
Charon Tierney, Graduation Standards Regional Coordinator
Les Gunderson, Teacher, Perham Public Schools and students
Tom Muchlinski, Wayzata Public Schools

December 10, 1998 General Discussion and voting on recommendations

Background of Development of the Graduation Standards:

In 1990 the State Board of Education established the Graduation Standards Committee, with an Executive Committee representing Minnesota's education, business, and citizen groups. In 1993 the Minnesota Legislature passed a law (Minn. Stat., section 121.11, subd. 7c.) requiring the State Board of Education and the Department of Education to develop a graduation rule based upon results. In 1995, the legislature expanded the statute and included a description of the comprehensive goals, Basic Standards and Profile of Learning.

In 1991, twenty-three public hearings and twenty public meetings were held to respond to first drafts of the graduation rules. Using the input gathered from those meetings, the State Board of Education began developing a two-tiered graduation rule featuring the Basic Standards and the Profile of Learning, or High Standards. The public also gave its input at hearings in 1993, 1994 and 1995. The final public hearing on the High Standards was held in February 1998.

The structure and content of the standards have evolved over time. The Basic Standards in reading and mathematics were adopted by the State Board of Education in March 1996 and the Basic Standards in written composition were adopted by the State Board of Education in February 1997. The final version of the High Standards was adopted by the State Board of Education in May of 1998.

Over the development years there have been adaptations made to reflect the concerns of the various stakeholders. The Basic Standards were reduced from seven to two subjects. Written composition was later returned to the Basic Standards. The 10 learning areas of the High Standards were originally 15. The number of high school level High Standards was reduced from

63 to 48. The actual content of the standards evolved as well. The high school level requirements changed several times over the development years. Task management skills were cut from the proposed rule to simplify the standards. The vision of the High Standards also changed over time. During 1993-95 the vision called for more rigid assessments of student achievement. Some envisioned state performance assessments where teachers chose what assessments to use from a menu of state produced performance tasks. That vision changed into a focus on content standards that outlined what students needed to know and be able to do and an assessment system that allowed teachers to develop their own assignments and tasks to measure student achievement of the standards. While pilot sites were required to use state sample performance packages so that these models could be tested, under the Graduation Rule local school districts are not required to use state sample performance assessments. They are encouraged to use their own assignments, tests and other assessments to measure student achievement against the standards.

In 1996 the Department of Children, Families & Learning provided training for a number of teachers from each school district across the state on one High Standards learning area. During the summer of 1997 teachers were trained in another five learning areas and training in the summer of 1998 focused on the remaining four learning areas. Each local school district has identified a Graduation Standards Technician to assist teachers in implementing the Graduation Standards. Each district has also been assigned a MEEP Regional Coordinator. In 1998 Implementation Support Team members were added to the growing list of professionals available to assist districts in implementation.

Graduation Standards Advisory Panel Recommendations

During the advisory panel's first three meetings it identified five primary issues surrounding implementation of the Graduation Rule. For each of the five issues separate recommendations were offered to resolve the various concerns. Below are the five issue areas and the subsequent recommendations.

Primary Issues Identified by the Panel:

1) Does the Graduation Rule result in excessive paperwork/recordkeeping;

2) Are there too many required (non-elective) standards and, are there too many Learning Areas;

3) Is the Graduation Rule too focused on instructional *processes* as opposed to academic *results*;

4) How can consistency of scoring of student achievement be improved on a statewide basis; and

5) Are there changes which could be made to improve the clarity and rigor of the rule?

Advisory Panel Positions and Recommendations:

1) **Paperwork/record keeping** - the Graduation Rule, at least initially, has resulted in increased paperwork for some teachers and schools. The performance assessment requirement frequently referred to as "performance packages" has resulted in increased paperwork and confusion and appears to be the major source of concern. Also, separate from the "paperwork issue" districts are not clear as to what student data should be maintained to reflect progress toward attaining the standards. In addition, districts have not adopted an electronic system for record keeping because the state only initiated piloting of electronic systems in the spring of 1998. Those pilots are now being implemented. It is critical that efforts be made to facilitate efficient and effective record keeping for teachers and schools.

Recommendation:

- Retain all of the standards identified in the Graduation Rule but eliminate references to the requirement of performance packages. Retain statewide third, fifth and eighth grade tests with a new 11th grade test which provides international comparisons of student achievement. (Passed on a voice vote with no opposition.)

Rationale:

- The state should establish rigorous academic standards defining what students should know. However, the establishment of standards should not dictate or influence how teachers teach. Repealing the mandate for performance packages does not mean teachers should not implement applied learning strategies if they or the local school board believe they are most effective. However, the rule should not require this practice for every teacher. In addition, by repealing the required use of performance packages and related student portfolios much of the concern related to the recordkeeping burden can be addressed.

2) **Number of standards/learning areas** - there may be too many required (non-elective) standards and learning areas in the high school and middle schools levels. There is concern that teachers will spend too much time exposing students to a broad range of academic and non-academic subjects and not enough time making sure that students have an in-depth understanding of learning in core subject areas.

Recommendation:

- Reduce the number of required learning areas from 10 to perhaps five (those representing the "core areas" of reading, writing, math, science and people and cultures/social studies). Implementation of the remaining learning areas would be left to local district discretion. (Passed on a voice vote.)

Rationale:

- The state should be responsible for identifying the expectations, or standards, in the "core" subject areas but should allow for local decision-making in the remaining areas.

3) Excessive focus on *process* over *results* - we should strike a balance that provides for consistency and clear expectations for student achievement from the state, while allowing for local discretion and accountability.

Recommendation:

- Rather than require performance assessment for successful completion of each standard, require each student to successfully complete locally approved performance assessments. in at least 10 standards, with at least one from each required Learning Area at any grade level. Note: The committee on an earlier vote reduced the total learning areas to five (Passed by a vote of 7-4.)

Rationale:

- This will provide a better balance for potentially phasing-in performance assessments than requiring them in all standards. This also clarifies that performance assessments are locally approved, as opposed to either being designed by the state or required to be similar to state models.

4) Consistency of Student Scoring - the public must have access to uniform and comparable data across all sites and districts in the state. This is important both for local and state accountability but even more so for program improvement purposes. The current Basic Skills Test is clear evidence of this in that the public knows and understands the current levels of student achievement across the state. In response some local school boards and districts have changed curriculum and instructional practices to raise student achievement.

Recommendation:

- The panel did not make specific recommendations on this as a single issue since its earlier recommendation to repeal state requirements for performance packages addressed this concern. In addition, the panel's recommendations on statewide testing provide a foundation for uniform data on student achievement.

5) Improve clarity and rigor - it is critical that the terminology used in the graduation standards be clear and understandable to teachers, parents and students. Each of the standards should be rigorous enough to truly challenge all students. Statewide testing should allow for direct national comparisons and compliment implementation of the standards.

Recommendation:

- Implement a statewide 11th grade test which allows for national and international comparisons of student achievement and is tied to the required Learning Areas. In addition, the legislature should determine a minimum score for student performance on the test which would be required for receipt of a high school diploma. (Passed on a voice vote with no opposition.)

Rationale:

- Assessment of successful student achievement relative to state standards is necessary to assure students are academically prepared for either the workplace or post-secondary education. In addition, because high school graduates will be competing in an increasingly global economy, the assessment must provide for international comparisons of student performance.

6) Other recommendations - In addition to the five major areas above, the panel also believed that the following action should be taken:

- The Commissioner should appoint a group to examine and make recommendations concerning the potentially significant number of students who may fail to meet expectations and who may choose not to continue with their education. (Passed on a voice vote with no opposition.)

  Rationale:

- Current indications, based on student performance on the Basic Skills Tests, are that some students may not receive a high school diploma. It is imperative to identify strategies which will enable these students to attain, at least the basic skill levels necessary to succeed after high school. In addition, strategies must also be identified to assure future students will have the academic skills needed to successfully complete the Basic Skills Tests.

Proposed Recommendations Considered but Not Adopted
(by issue area)

1) Paperwork/record keeping -

Recommendations Not Adopted:

- Identify status of statewide software project, make its development and implementation

a priority and examine whether districts may need additional time to implement the rule's components regarding record keeping until the project is available. Enable districts to use software that is comparable and compatible with the state's record keeping software.

- Repeal or amend 3501.0370, subpart 1, clause C. This provision requires districts to use a *checklist* to identify the work students must complete.

- Eliminate the reporting and scoring requirement or postpone the requirement until the pilot sites have had time to develop, test and find a valid, clear and concise system.

- Retain the standards as identified in the Graduation Rule, eliminate references to performance packages and replace them with locally approved performance assessments.

- Retain the standards as identified in the Graduation Rule, eliminate references to the requirement of performance packages, implement a statewide 11th grade test and create greater consequences for adults in "the system" if students fail to meet expectations.

2) Number of standards/learning areas -

Recommendations Not Adopted:

- For the high school level, reduce the number of non-elective standards from 21 to 18 or less, as suggested by Administrative Law Judge George A. Beck. The number of non-elective middle school standards should also be reduced.

- Consolidate the number of learning areas from 10 to a lesser number, with no more than four required standards in any area.

- Retain the number of required high school standards (24) but allow a phase-in (e.g. 15 by 2002, 18 by 2003, 21 by 2004 and 24 by 2005).

- Eliminate the Inquiry Learning Area and instead require the elements of that standard be met in other learning areas as determined by local districts. Examine whether standards included in other learning areas and whether other learning areas could be consolidated or eliminated completely.

- Retain and continue to fully implement the number of required high school standards (24) but phase-in the number required of students for graduation (e.g. student transcripts would reflect the following: 15 by 2002, 18 by 2003, 21 by 2004 and 24 by 2005).

- Reduce the graduation standards to three learning areas: inquiry, speaking and writing, listen and view that focus attention on mastery of basic skills (via testing) and critical thinking skills. Leave decisions about other learning areas and standards to local

districts.

3) Excessive focus on *process* over *results* -

Recommendations Not Adopted:

- Retain the academic standards contained in the Graduation Rule but repeal all references to required utilization of performance packages (e.g. retain standards but do not influence instructional practice).

- Retain the standards contained in the Graduation Rule, repeal all references to required utilization of performance packages and replace them with locally approved performance assessments.

4) Improve consistency of scoring -

Recommendations Not Adopted:

- Establish a regional auditing process to ensure scoring of student achievement is consistent. This system could/should be expanded to a uniform statewide approach.

5) Improve clarity and rigor -

Recommendations Not Adopted:

- Raise expectations for student achievement on the Basic Skills Test, without changing its format.

- Implement a rigorous statewide high school test which allows for direct national comparisons of student performance and determine the extent to which part or all of the test should compliment the Graduation Standards.

- Remove references to the Profile of Learning and replace them with references to Graduation Standards or High Standards.

- Establish a task force to review the standards for clarity, consistency and content and make recommendations for improvement. The task force should also carefully review the language of the Graduation Rule for consistency and clarity and make recommendations concerning consolidation where appropriate. The task force's membership should include teachers and other "stakeholders" from around the state and report to the legislature and public.

Other Recommendations Not Adopted:

- Postpone changes to the graduation standards for one year and allow districts and schools to work on implementation. Focus on providing technical assistance and training to facilitate implementation of the standards.

MINORITY REPORT

We believe the Graduation Standards describe a system that contains multiple opportunities for students to achieve. The rule provides consistency, safeguards and adaptations to ensure all students the opportunity to meet standards. From that perspective, we agree with the panel on establishing a group to examine the needs of students who may fail. Appointing a representative group to look at the reasons some students might fail is important; the Graduation Rule may have helped facilitate this conversation, but the problem isn't new.

We make the following recommendations in difference to the majority opinion:

- The panel's suggestion of reducing the ten learning areas to five "core areas" does not simplify the rule. The learning areas group the content standards; to reduce the learning areas without changing the content standards will have little effect. We recommend the number of required content standards be reduced at the high school level. There are too many content standards placed at the middle and intermediate levels. This will be more effective than reducing the learning areas.

- There must be a statewide standard of rigor and accountability. The panel's recommendation to have locally approved performance assessments in 10 standards will lead to inconsistent measures of student achievement. Appropriate assessment of each content standard is essential to effectively measure progress for all students, including high mobility students.

- We support a statewide testing system. It is an important piece of the assessment process. Tests must align with standards and ensure valid, reliable and unbiased results. The panel's suggested internationally normed tests are biased and costly. The state tests must reflect current research and be selected by educators.

- State mandated record keeping of "tasks and packages" must be set aside until there is a consistent electronic, statewide record keeping system in place. Recording is unmanageable until a system is available to all school districts.

To suggest a significant alteration of the Graduation Standards would negate the substantial public process that went into its creation. There was broad participation by Minnesota's citizens, including education and business leaders, policy makers, parents and community members at 23 public meetings and 20 public hearings. To modify the essence of the rule would be premature.

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MEMORANDUM

TO: Susan Heegaard, On Behalf of the Graduation Standards Implementation Advisory Committee

FROM: Don Helmstetter, Superintendent

RE: Final Input On December 10 Recommendations

DATE: December 16, 1998

Thank you for allowing members of the Committee the opportunity to submit final comments and suggestions. I am sure that we have our own "package" solution to the concerns raised by the Graduation Rule, and this provides us the opportunity to address the issues as a whole rather than one at a time, as we did at our December 10 meeting.

Here then is my overall list of suggestions:

1. Retain the ten learning areas and the 48 high school standards but with no State requirements. Rather, allow each local school district the discretion to establish its own requirements for graduation.

2. Require performance assessments from at least ten standards. Grading and record keeping is left to the local district's discretion.

3. As recommended by the Committee, implement a statewide eleventh grade internationally comparable test based on the core learning areas and tied at some date in the future to the graduation requirements. However, it should be one sit-down test that is practical and acceptable as a part of that requirement; it should not be a battery of tests.

4. Provide opportunity, support, and even incentives for districts to research, develop, utilize, and validate performance assessments to meet the standards.

5. Fully fund or remove the three days of additional class time that were legislated. Those days must be restored for staff in-service and training.

6. Finally, I want to re-emphasize the Committee's recommendation that a group be appointed to examine and make recommendations concerning the potentially significant number of students who may fail to meet expectations and who may choose not to continue with their education.

MINNESOTA
DEPARTMENT OF

Children, Families & Learning

MISSION

"Increasing the capacity of

Minnesota communities to

measurably improve the well being

of children and families."

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