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**TESTING, ACCOUNTABILITY
AND ACCREDITATION**

Submitted by:

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Metropolitan Educational Research Consortium (MERC)
Virginia Commonwealth University
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EXECUTIVE SUMMARY

TESTING, ACCOUNTABILITY AND ACCREDITATION

Standards-based education efforts began with the 1983 report of the National Commission on Excellence in Education, "A Nation at Risk: The Imperative for Educational Reform." It called for educational reform, accountability and standards for what students should know and be able to do. One effect of that effort was the development of assessment systems with statewide "high stakes" testing. Reform that relies on accountability and high-stakes tests reaches into the heart of the instructional process, affecting teacher behavior, student experiences, and the nature of subject matter that is taught.

Implications of Reform

Experts believe that efforts to reform must include the perceptions of teachers, because it is only by building on those perceptions that learning can be improved. Teachers work from an intricate conceptualization of education, seeing each child as unique and regarding the curriculum as structured by content. While assuring that well-established skills are learned by students, a curriculum that is heavily fact and detail oriented, driven by external tests, may remove opportunity for innovation by effective teachers. Standardization of the curriculum, by attending to the so-called "basics," with correspondingly less emphasis of a deep understanding of topics, is seen by some experts as antithetical to empowering teachers and strengthening the educational system. It has been well established that a major factor related to increased student learning is teacher expertise, including teacher preparation and experience. If the standards movement is to

successfully result in greater achievement of more students, attention must be given to the development of teachers with regard to a deep understanding of the subject matter, knowing different approaches by which students learn, and using diverse teaching strategies.

Local Implementation of Accountability

In the central region of Virginia, represented by the Metropolitan Educational Research Consortium (MERC), seven schools were selected for case a study of the implementation of the state accountability efforts. The schools were chosen to represent the broad spectrum of school and community types, as well as all school levels. Interviews of all school superintendents were analyzed in making the final selection of the schools. Superintendents were optimistic that the state accountability efforts will result in higher student achievement because schools would accept greater responsibility for student learning. Expressed concerns focused on the effects of content areas not tested, students with disabilities, dropout rate, and funding of other priorities. Some questioned the feasibility of the state standards for all schools and whether of this state effort would be longstanding. These elementary schools, two middle schools, and two high schools were selected for intrusive case study. In-depth interviews were conducted with principals, teachers and staff, and on -site observations were recorded.

Findings and Recommendations

Curricula are becoming more aligned to universal standards and teachers are more highly motivated to increase student learning through coordination of instruction across

the grades, school levels, and content areas. At the same time, there is concern among teachers about the pressure to raise test scores by simply covering more content, especially if that means a reduction in more creative teaching and fewer enrichment opportunities for students. There is also concern about how test scores are released to the public, particularly if the release reports scores by teacher. The high school math curriculum, in particular, has been influenced by a greater emphasis on high performance. Students with disabilities must pass the same six tests for a standard diploma, which may raise the standard higher than it was in the past for these students. Because of greater diploma requirements in the four core content areas, the number of students that take elective courses may decrease.

The Standards of Learning test results should not be publicly released with any specificity beyond grade level and school. A further recommendation is that SOL reporting categories within grade-level content areas be constituted or defined more specifically so they have greater instructional or diagnostic value. Some social science objectives are too broad for instructional planning, particularly the requirement to know about numerous early American explorers. There is wide consensus among parents and educators that "ancient civilization" is not a developmentally appropriate testing objective for 3rd-grade students. The Virginia history that has been part of the 4th grade curriculum for many years is not tested until the end of 5th grade.

Further recommendations relate to the need for teacher development of broad repertoires of instructional strategies to effect learning for widely diverse students. With the continual employment of new teachers, this need for teacher development will

continue for many years. Particular need exists in the 3-domain scoring of written themes, a skill that can improve the instruction of teachers in different content areas.

Research should be conducted to find instructional strategies that are most successful in different content areas. Studies should focus on schools with SOL results which do not correlate with the demographic factors of the school. Schools that have high SOL achievement with demographic characteristics that lead to substantially lower expectations should be investigated to identify the “success factors” of these schools. Conversely, schools with substantially lower SOL achievement than would be expected by the demographic characteristics of the schools should be the subject of further research.

It would be useful to conduct research on the extent to which curricula and teaching are stressing breadth of coverage rather than depth and whether enrichment activities for students have been curtailed.

Preface

On February 20, 1998, the Policy and Planning Council of the Metropolitan Educational Research Consortium (MERC) requested that a study group be established to investigate the effects of implementing the new Virginia Standards of Learning (SOL) and the associated SOL criterion-testing program.

The overarching research question that guided this research study was the following:

How have the Virginia Standards of Learning (SOL) been implemented in the public schools of seven school systems represented in the MERC membership?

The sub-questions that provided more specific guidance for this study were the following:

- What has research shown about the effects of setting standards for teaching and learning with the implementation of high-stakes accountability programs?
- What differences exist between schools of different levels and schools representing different types of communities with the implementation of standards and accountability?
- What are the unintended consequences of the standards?

This project was designed and implemented by Sanford D. Snider, initially with the assistance of Daryl Workman, a doctoral student. Guidance was provided by a study group of educators from all of the seven school systems in the MERC membership.

Members of the study group were the following:

- Bruce Gillespi - Chesterfield County Public Schools
- Beverly Cook - Colonial Heights Public Schools
- Beth Gordon - Hanover County Public Schools
- Vince D'Agostino - Hanover County Public Schools
- Carole Urbansok-Eads - Hanover County Public Schools
- Catherine Nolte-Davis - Henrico County Public Schools
- Steve Lapinski - Henrico County Public Schools
- Gayle Keith - Hopewell City Public Schools
- Linda Hyslop - Hopewell City Public Schools
- Yvonne Smith-Jones - Hopewell City Public Schools
- Brian Binggeli - Henrico County Public Schools
- Ann Allen - Richmond City Public Schools
- Ruth Miles - Richmond City Public Schools
- Ken Irby - Powhatan County Public Schools

Testing, Accountability and Accreditation

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TESTING, ACCOUNTABILITY AND ACCREDITATION

Introduction

A complaint often voiced by employers is that high school graduates do not possess certain basic competencies. “They can’t even write a complete sentence” or “They cannot do the math to make change in a retail establishment” is the complaint of more than one employer. State boards of education have attempted to respond to such criticisms by creating statewide performance standards that all graduates must achieve, regardless of the school they attend. Since the responsibility for learning is shared by both students and educators, boards of education have attempted to motivate both parties by applying factors that result in higher student performance.

Need for the Study

In September 1997, the Virginia Board of Education approved regulations establishing *Standards for Accrediting Public Schools in Virginia* (1997) with broad implications for achievement of the Standards of Learning (SOL). As stated in this document for the Standards of Accreditation (SOA), “Higher student achievement is the goal of the Virginia Board of Education’s efforts to improve public education. What matters most to the public are *results* and *accountability*” (Forward).

Public schools in Virginia had been accustomed to state standards for students, beginning with the Basic Learning Skills in the late 1970s. Early in the 1980s, graduation standards beyond high school course requirements were first established. Statewide minimum competency tests in reading and mathematics were administered, but

as a result of the standards being minimum, these tests prevented few students from graduating. In the late 1980s, the Literacy Passport Testing program was established, with the first administration in grade six. Students needed to meet passing levels in reading, math and writing in order to enter high school. Some low-achieving students, transfer students, or those for whom English was a second language, did not meet the requirements by the end of grade eight. Arrangements were made to allow students who had met other promotion requirements to take high school courses for credit, but they needed to pass all three Literacy Passport Tests to participate in any interscholastic competitive activities and to graduate from high school. As with the Minimum Competency Tests, very few students were prevented from high school graduation by the sixth-grade level Literacy Passport Tests.

In response to the 1983 report of the National Commission on Excellence in Education, "A Nation at Risk: The Imperative for Educational Reform," educators began setting standards for student achievement in what is now known as standards-based education (Buttram & Waters, 1997). In 1995, the Virginia Board of Education adopted new Standards of Learning in four core academic areas: English, social science, mathematics, and science for public school students in grades kindergarten through twelve (technology standards were to be achieved by the end of grades five and eight). These standards had been selected and recommended by committees made up of teachers, curriculum specialists and parents throughout Virginia.

After piloting test items statewide in the spring of 1997 and the fall of 1998, the first tests based on the Standards of Learning were administered in the spring of 1998 to Virginia students in grades 3, 5, and 8 and in selected high school courses. Detailed

analysis and scaling of the test results provided information for the Board, which approved score ranges for passing and advanced levels in October and November 1998. It was becoming clear to Virginia educators that the new standards had great potential for consequences that reached much farther than any previous standards in Virginia.

Purpose of the Study

The primary purpose of this case study was to describe the implementation of the Virginia Standards of Learning in seven public school systems in the Richmond, Virginia metropolitan area. Implementation includes the application of the grade level and subject objectives to daily classroom instruction, organization of instruction, and preparation of students for administration of the tests.

The Metropolitan Educational Research Consortium (MERC) is made up of Virginia Commonwealth University and seven school systems in the vicinity of Richmond. A Policy and Planning Council, which governs the consortium, is made up of the school superintendents, a representative member of each school board, the consortium director, and other administrators/faculty from the university and the seven school systems that comprise the MERC membership. In February, 1998, the Policy and Planning Council requested that a study group be established to investigate the effects of implementing the Virginia Standards of Learning and the associated criterion-testing program. In December 1998, the MERC Policy and Planning Council approved the recommendation of the study group to conduct this research. It was anticipated that the results of this research would provide the impetus for instructional decisions needed to achieve higher levels of student performance on the Standards of Learning.

As described by Creswell (1998), this case study is “an exploration of a ‘bounded system’ ...through detailed, in-depth data collection involving multiple sources of information rich in context...bounded by time and place” (p. 61). The bounds of this multi-case study do not permit inclusion of approximately two hundred schools that comprise these seven districts; therefore, a purposeful sampling of one school from each school system was appropriate after input from the school superintendents with regard to balancing school levels and community types. The study is further bounded by the timeline beginning with the project approval in December 1998 and ending with the report in the fall of 1999. Practical factors of time and budget required the limitation of categories of persons from which to seek information and perspectives; therefore, direct input of students and parents was not sought. Because of the many activities that occur near the end of the school year, the data collection was limited primarily to February and March, 1999.

Research Questions

The overarching research question that guided this multi-case study was the following:

How have the Virginia Standards of Learning (SOL) been implemented in the public schools of seven school systems represented in the MERC membership?

The sub-questions that provided more specific guidance for this study were the following:

- What has research shown about the effects of setting standards for teaching and learning with the implementation of high-stakes accountability programs?

- What differences exist between schools of different levels and schools representing different types of communities with the implementation of standards and accountability?
- What are the unintended consequences of the standards?

Review of the Literature

The major purpose of standards-based education is to accelerate the learning of all students, especially those who have been low achieving. Lengthening the school day or the school year, requiring more homework, or other measures of intensification, will not result in the desired effects. Alternatives must be found to the intensification of the predominant approaches to instruction that are currently in use. Also needed are significant changes in the uses of time, talent, and technology.

In this context, the literature reflects mostly opinions about the direction of standards-based reform that will result in improved student learning. For example, according to Cross and Joftus (1997), the standards movement is at a crucial time, the outcome of which will make a decisive difference for better or worse. A great deal of progress has been made, yet some of the standards-driven reforms represent significant perceived threats to students, principals and teachers. The authors state, "Despite the threats posed by sanctions and the need for significant changes in the ways in which principals and teachers work, academic standards and related reforms represent a tremendous opportunity to create rich learning environments and raise student

achievement. To make the opportunity a reality, principals must play an active role in ensuring that standards take center stage in all their schools' practices" (p. 20).

In consideration of standards-based education, Wiggins (1997) argues that improvements in curricula and student learning must be built upon "worthy and authentic tasks that provide a rationale for content, skills and modes of instruction" (p. 56).

Content standards such as "what should students know and be able to do?" and performance standards such as "how well must students do their work?" are insufficient, according to Wiggins. To achieve worthy and authentic tasks, courses must be designed "backwards" from complex tasks and authentic demands rather than "forward" from a logic based on the arrangement of textbooks and analytic adult views of the subject matter. In other words, "the organization of a course would be driven by the logic of learning, not the abstract order of the topics" (p. 56). When selecting content for instructional and assessment design, Wiggins recommends asking "what knowledge will equip and enable students to do worthy work by course's end?" (p. 57). When designing tasks, ensure that work and performance requirements equip students with core knowledge and skill so that they can address questions, topics and texts that are deemed important.

McLaughlin (1991) sums up several articles on educational reform, high-stakes testing and its consequences with the conclusion that the process must "go slow." She states that, reform which relies on accountability and high-stakes testing reaches into the heart of education, "into what Theodore Sizer calls the 'stuff' of schooling, the interaction of teachers, students and subject matter. Tests could benefit and support these interactions, but the technology is not ready yet. Paradoxically, moving ahead with

testing schemes that depend on existing technologies will send us backward. We know more about curricula and testing than can be reflected in test-based accountability schemes in the short run... Testing certainly is not and cannot be the main engine of school reform” (p.251).

Stake (1999) concludes from his analysis of research that the most obvious consequence of the increased emphasis on assessment is that teachers will increase the time they spend preparing students for test taking. He continues by stating that “student test scores are only weakly related to the quality of schooling” (p. 668). Stake asserts that the items used for standardized testing are tasks that merely rank the students rather than tell us how educated they are. Assessment techniques that focus on easily measured skills may improve the predictive validity, increase the assessment precision, and show the most immediate improvement, but these techniques discourage efforts to include problem solving experiences in schools. He proffers that the state has a stake in what every child is learning, but the state is poorly served if every child is taught identical content and tested on the same items. This approach may be less costly, but he believes it is not a service to the diverse society of this country.

Cooley (1991) addresses accountability from the perspective that the major purpose of statewide testing should be to inform state policy, reform curriculum and promote accountability. He views statewide accountability as an assessment system that makes it possible to hold districts accountable for student outcomes. This type of accountability would enable state departments of education to shift their emphasis from enforcing compliance with state rules and regulations to promoting research and service. A sound state assessment system should help to identify districts that need assistance. He

maintains that a state department staffed with people who know how to help districts could help states achieve the task for which they are constitutionally accountable, that is, maintaining a thorough and efficient system of public education.

Smith and Rottenberg (1991) address some consequences of measurement-driven instruction, based on an extensive research study about external achievement tests in elementary schools which affect decisions about what to teach, how to teach, and how to organize schools. The authors concluded that teachers take more time for test preparation, align instruction closely with test content and format, and redefine problem solving as the operations necessary to solve word problems on tests. These foci are contrasted with extracting meaning from text, disciplined inquiry, integration of knowledge, and such valuable skills as critical thinking and civic participation. The authors assert that the curriculum is increasingly packed and geared to external tests, leaving little time or opportunity for innovation, divergence, and adaptation to local circumstances and needs. The reforms based on testing have often produced the intended consequences of higher test scores, but Smith and Rottenberg (1991) believe the consequences “are both problematic and contrary to the general goal of improving schools” (p.11).

Darling-Hammond (1991) reviews past testing policies and their implications for the future. She states that “...by and large, these testing policies have not had many of the positive effects that were intended for them. Indeed, they have had many negative consequences for the quality of American schooling and for the equitable allocation of school opportunities. These negative effects stem partly from the nature of American

tests and partly from the ways in which the tests have been used for educational decision making” (p.220).

Test score pollution (Urduan & Paris, 1994; Allen & Miles, 1997) is another identified problem associated with the use of high-stakes tests. As high-stakes tests shift the focus of measurement from the individual student to the performance of teachers, schools, and districts, pressures to increase test performance result in undesirable practices. Appropriately called 'test score pollution,' this phenomenon threatens the validity of high-stakes tests when “educators engage in activities, ethical or otherwise, designed to help students do well on standardized tests. The net result is that the test scores obtained in this manner are no longer a ‘true’ measure of student achievement. Rather, the scores have been artificially ‘polluted’ by the test preparation activities (Allen and Miles, 1997).

In large-scale studies in Texas and New York, Darling-Hammond and Falk (1997) reported that the single most important measurable factor related to increased student learning was “teacher expertise, including teachers’ preparation and experience levels” (p.193). The effects were so substantial that the disparities in achievement between black and white students in the samples were almost completely accounted for by differences in the qualifications of the teachers. Achieving the new performance standards will require increased knowledge and skills by teachers. In order to lead students to achieve the standards, teachers need a deep understanding of the subject matter, approaches to student learning, and diverse teaching strategies. In schools that have met high standards and maintained low grade retention rates with diverse student populations, teachers have been skillful at providing students challenging, interesting activities and materials for

learning that foster thinking, creativity and productivity. They used a variety of routes to learning that accommodated different student learning styles, and they allowed students to make choices of some learning experiences. The effective teachers focused on reasoning and problem solving and fostered peer collaboration and extensive interaction between students and teachers, stimulating internal rather than external motivation. Building close and sustained relationships between students and effective teachers results in greater learning.

In summary, the literature on standards-based reform and accountability suggests many potential barriers to effective implementation. Despite the threats represented in the need for significant changes in the ways in which principals and teachers work, academic standards and related reforms represent a tremendous opportunity to create rich learning environments and raise student achievement. The state has a stake in what every child is learning, and an assessment system that makes it possible to hold districts accountable for student outcomes is desirable. Reform that relies on accountability and high-stakes testing reaches into the heart of education, the interaction of teachers, students and subject matter. Tests could benefit and support these interactions. However, many educational leaders question the readiness of current technology and assessment techniques to provide needed support.

The effectiveness of high-stakes accountability measures depends on an accompanying effort to develop the understanding and teaching strategies of teachers. The enormity of the task leads to the conclusion that real progress will take time.

Methodology

As with any qualitative research, researcher reflections cannot be divorced totally from the data gathered. As stated by Creswell (1998), it is important in a case study, that the reader know the background of the writer. The researcher involvement in this study came at the close of contractual obligations by retirement from one of the school systems involved in the study. It was necessary to re-orient thinking from that of an administrator in one of the school divisions to that of an “outside” researcher (as much as possible) who was asking fair questions of all districts. As a statistician and quantitative researcher by preference, the researcher was forced to seek qualitative perspectives and personal reflections with the MERC director and the study group.

Knowing that the school superintendents are a key part of the MERC governing body, which made the decision to pursue this study, it was recognized that these professionals were also “gatekeepers” of the school systems. Creswell (1998) stated that “gaining access through the gatekeeper and establishing rapport with the case being studied are important” (p. 117). It was necessary to individually interview all the superintendents early in the project timeline to seek their cooperation and to learn their expectations.

As part of the superintendent interviews, an overview of the study, as anticipated, was provided. Superintendents' perceptions of the topic and the names of schools in their system that they would like to be considered as candidates for the case study were obtained. The schools selected represented the broad spectrum of school and community types and all the school levels represented by the seven school systems. None of the schools would be identified in the report. Candidate schools recommended by the

superintendents ranged from one school in the district to practically any school.

Characteristics of the recommended schools were obtained from data available on the Virginia Department of Education's internet web site and from data available at the university. Factors that were evaluated for balance were the following:

- School system – one school was selected from each system/district
- School level – elementary, middle, high (Since the elementary schools are usually smaller and include more grade levels, three elementary schools were chosen along with two middle schools and two high schools. With very few exceptions in the seven school systems, elementary schools house grades K-5, middle schools house grades 6-8, and high schools house grades 9-12.)
- Size – student membership in the fall of 1998 was considered for balance of larger and smaller schools within each level
- Geographical location – the selected schools were spread around the entire MERC membership area with no adjacent or overlapping regions included in multiple schools or levels
- Socio-economic data – the only available data of this type, the percentage of students eligible for subsidized lunches, was evaluated to select a cross section of community types

The schools that were recommended by the superintendents were all considered in the purposeful sampling. To maintain anonymity, the Project Director worked alone with the MERC Director to make the selections. After determining the school sample, each chosen school was reviewed with the superintendent of the school system, and in most

cases the superintendent arranged for the initial contact with the school principal. The identity of the selected schools was not divulged except in a few cases where members of the study group conducted interviews.

Data for this study were collected through interviews with selected school system and school personnel, limited observations in the schools, and a review of documents. Questions that were part of the protocols for the interviews of the different groups of personnel are included in the Appendices.

Issues Identified by Superintendents

Interviews with the superintendents provided a consistently supportive view of the accountability efforts of the Virginia Board of Education. The superintendents believed that the new standards will improve student achievement, pushing schools and systems to achieve higher levels of performance from students. The new standards have shifted the focus from accountability to accepting responsibility for student achievement. Instead of an emphasis on making skills available for students to take (or leave), educators are accepting more responsibility for student learning.

The superintendents expressed several concerns about the Standards of Learning and the Standards of Accreditation that were similar, in part, to dangers described by Stake (1991) when teachers attend to the “so-called basics, ... [they focus less on] the deep understanding of even a few topics. The dangers in current school reform are several: over-standardization, over-simplification, over-reliance on statistics, student boredom, increased dropouts, a sacrifice of personal understanding, and most likely a diminution of the diversity of intellect among people” (p. 246).

The superintendents asked questions that expressed the following themes:

- In academic areas that are not tested, like foreign language and other content areas such as technical education and the arts, what will occur instructionally?
- What will happen with disabled students who are receiving special education and may not be able to meet the standards?
- Will the volume of testing and preparation actually decrease performance by robbing students and teachers of substantial instructional time?
- Are passing levels feasible for students who have been low achievers?
- Will the number of dropouts increase substantially with the standards that have been approved?
- Will funding be deprived from other worthy efforts because of increased student membership statewide with more students staying in school longer to meet higher graduation requirements?
- Will this accountability effort last long enough to make a difference or will it be phased out in a few years like previous state efforts?

Although the school systems have aligned their written curricula with the Standards of Learning (SOL) and the sequence of the SOL tests that are being given, implementing the changes requires much staff development. This began in some systems earlier than in others. Assuring that certain skills and topics are taught within the curriculum tested by the Standards of Learning in a sequence correlated with the test administration must be an ongoing process. In some content areas, the adopted text materials are organized much differently than the sequence of the SOL. In content areas with sequential skills, such as

mathematics, changes can take several years to be fully implemented. Another particular problem is with social sciences at the elementary school level, where understanding Virginia history is an expectation but instructional resources are few. New textbook adoptions are scheduled on a regular cycle and potential materials are evaluated and selected based on their correlation with the SOL, but this process takes a number of years to implement fully.

In-service education of existing teachers is essential to help them understand new expectations, acquire new content knowledge, and develop effective instructional strategies to teach the new content. At least one school system is adding two days to the teacher contract for staff development. Of important consideration is the pre-service education of new teachers who are presently completing their degree work. Several school systems are placing a high emphasis on staff development for school principals, believing that principals will take a stronger leadership role in the instruction of students if they are thoroughly familiar with the Standards of Learning and how they are best implemented. Principals will also be able to better hold teachers responsible for the instruction of their students.

All of the school systems are organizing portions of their staff development and staff assignment to provide for greater instructional communication, coordination, and articulation between school levels. It is very easy for middle and high school teachers to 'blame' weak student skills on inadequate instruction at lower school levels. Joint training experiences for teachers and administrators at all three levels are being used to assure that the curriculum is well-coordinated and that staff from one level can learn valuable information and perceptions from staff at the other levels.

All of the school systems have placed a high priority on new materials for use in teaching and reviewing skills necessary for success in the SOL tests. In some cases published materials have been purchased for use across the school system, including practice tests in the same format as the SOL tests. Other school systems have utilized their own staff members to create packages of materials for teachers in each school.

Superintendents reported that they believe current teachers were more interested now in aligning the curriculum and preparing students than they were prior to the first SOL test administration. Teacher attitudes about new initiatives can range from active cooperation and learning to more negative attitudes of “This too shall pass if we just wait” or “I will not change.” There may be a progression of administrator and teacher attitudes from “can’t do” to “can do,” the latter of which is perceived to positively influence the performance of students.

Student motivation to achieve their best on the Standards of Learning (SOL) tests is a major consideration. The *Standards for Accrediting Public Schools in Virginia* specify that “schools shall use the SOL test results as part of a multiple set of criteria for determining advancing or retaining students in grades 3, 5, and 8” (Virginia Department of Education, 1997, p 3). The use of SOL test results for high school credit is being phased in and the 7th grade class of 1998-99 (projected graduating class of 2003-04) is the first cohort to be affected by this new requirement. The actual methods by which SOL test results are factored into the promotion or retention decision, however, will be left to the individual school systems. High schools in several of the systems offer students an exemption from their final exams if they earn a passing score on the corresponding SOL test. This incentive is contingent, however, on receipt of the test

results by exam time. Giving the tests as late in the school year as possible is important for maximum instruction prior to testing, but it also jeopardizes the receipt of the results if there is any delay in the scoring and reporting process.

In an effort to publish SOL results as early as possible, some of the news media firms threatened legal action to obtain unofficial, summary results from schools and school systems before the scaling research and passing level decisions were made at the state level. As a result, the first scores to be released were raw scores, which were very confusing for the public. Despite the time invested by state and school system officials in educating media representatives about the nuances of the raw scores, considerable misunderstandings remained. The multiplicity of score types was confusing to educators and others alike. Re-education of school officials and the public in general was needed when the scaling was completed, a process which must continue for some time.

Superintendents reported that parents, business leaders, and other members of the community had a high degree of interest in the Standards of Learning efforts and results. However, the level of understanding was very low for many persons outside the public school systems. Some systems developed their own report card to supplement the forms provided by the state. In one case, parents were invited to attend meetings with teachers for an orientation to the SOL and SOA, which was helpful. Some parents were overwhelmed and frightened for the students whom they believe cannot meet the standards.

During the interviews, superintendents were asked to describe the desired results of this research project and a variety of ideas were given. It was hoped that the report of this project would be helpful to state decision-makers to give them a realistic picture of

the school situations. While all of the data are not presently available, there is need to assess the impact of the new standards as early as possible. There is a desire to know how to evaluate the effectiveness of instructional strategies and practices and the teachers' efficacy in teaching SOL-tested subjects. There are efforts to identify the "best instructional practices," which is helpful, but historical data from these tests are not yet sufficient to assess which strategies, statistically, are most effective.

Findings

While the superintendents made the first contact for many of the schools, establishing rapport with the principal of the school being studied was vital to gaining a complete understanding of the school and its implementation of the Standards of Learning. The descriptions begin with a discussion of certain characteristics of each school selected for the case study, followed by findings from that school. Every effort was made to keep these descriptions from being specific enough to reveal the actual identities of the schools or the school systems in which they are located. The schools are identified with pseudonyms that begin with E (elementary), M (middle) or H (high), followed by a number. The numbers were arbitrarily assigned and carry no other meaning than to distinguish one school from another at a particular level.

Some of the administrative and instructional staff members at the selected schools served on committees that were involved in the Standards of Learning (SOL) development or involved in reviewing, modifying, and approving SOL test items at different school levels and different content areas.

Case E1

Elementary School E1 began the 1998-99 school year with approximately 520 students of which about 65% were white and just under 20% were eligible for free/reduced price lunches. The school has a traditional building that has been in use many years and it is located in a residential neighborhood with a combination of apartments and single-family homes. The school accepts some students from other school communities by application but the school also has a number of special education classes that come from other school communities in the system. Individual interviews were held with two members of the administrative/instructional staff, both of whom have been in leadership at the school for about five years. They reported a fairly stable faculty and student membership. Focus group interviews were conducted with seven teachers, primarily from grades three and five. On the first set of SOL tests taken at School E1 in the spring of 1998, students achieved the minimum passing percentages in all grade 3 content areas and grade 5 English and science for state accreditation.

Implementation of the SOL and Perceived Effects

The Standards of Learning (SOL) objectives for teaching are perceived to be important and helpful. The teachers say they are highly motivated to organize their instruction to teach the SOL. There has been significant self-assessment, which has helped teachers make improvements to instruction. The curriculum in the school has been aligned well except for 5th grade social studies. The teachers understand the SOL objectives, and they know more about what they are expected to teach.

The implementation of the testing and accountability measures is more problematic. The implementation schedule for the Standards of Accreditation (SOA) has included too much publicly released information without providing adequate preparation time. Even though the tests are cumulative and include standards for the current and preceding grades, teachers of tested grades (3 and 5) feel the greatest pressure of the testing. The results must be organized so teachers of grades not being tested sense the same responsibility. The school system has asked each school to project its improvement in test results over the next five years.

The school system has provided some materials to assist in teaching the Standards of Learning (SOL), but teachers believe the materials are too few and they were not provided soon enough to organize their instruction prior to testing. Publishers indicated that the adopted texts match the SOL, but in some subject areas they lack adequate coverage of the curriculum. As a result, teachers have purchased many extra materials themselves to supplement those provided by the district. Many members of the administrative and instructional staff frequently do instructional preparation at the school on weekends.

Communication of School with Parents and Others

Most teachers at the school send parents a newsletter about classroom events and expectations, including SOL, on a weekly basis. Parents are interested in what the school is doing and they see the SOL as limiting teachers' flexibility. Staff members believe parents and others are making inaccurate judgements about the quality of the instructional program, in part due to inadequate or inaccurate publicity. The school has invited parents

to attend workshops for teachers, and many have done so, which has assisted in the communication process. In some cases, parents have effectively presented workshops for teachers and other parents. Parents of 3rd graders strongly believe the social studies standards are inappropriate, particularly the objectives related to ancient civilizations. They also fear that the SOL scores will be used to track students in ways that are inappropriate.

Recommendations to Increase Effectiveness of the SOL

Students and school personnel would benefit from a computerized management system to keep up with the achievement of students on the SOL objectives. This would be a welcome substitute to the lengthy cards provided by the school system on which the teachers are expected to record the level of performance for the student throughout the year.

Some meaningful workshops have provided teachers with helpful information and strategies. However, training time and effective workshops for teachers have been insufficient. New teachers coming from some teacher education programs are not very well informed about the SOL and how to teach them.

Some of the social studies standards are vague, and even the SOL blueprints do not sufficiently describe what will be tested, such as knowing about “early American explorers,” which could include many persons. The 5th grade social studies standards are better, but Virginia history has been part of the 4th grade curriculum for many years and it is not tested until the end of 5th grade. This requires much time for review in the 5th grade.

Test results from a class or school do not provide context information such as demographics, which lead to an incomplete picture of the instructional program at the school. Demographic changes resulting from school membership changes are also missing.

The tests should include more performance-based test items. Although the reading test includes short sections of text material with questions, the text does not provide enough context clues for students to select the correct response.

Case E2

Elementary School E2 had approximately 660 students at the beginning of the 1998-99 school year of which about 30% were white and just over 60% were eligible for free/reduced price lunches. The school has a fairly new building that seemed to be very functional. It is located in a residential neighborhood but it serves students from a combination of apartments and single-family homes. The school has a number of special education classes, including autistic and students with mental disabilities, that come from other school communities. Individual interviews were conducted with two members of the administrative staff, both of whom have been in leadership at the school for about two years, and they report a fairly stable faculty and student membership. While the administrative personnel have been in leadership at the school a relatively short time, they have been in the same school system in other positions for quite a number of years, prior to assignment at this school. Eight teachers representing grades K-5, plus a special education class and a resource teacher, were included in a focus group interview that was arranged by the principal. On the first set of SOL tests taken at School E2 in the spring

of 1998, students achieved the minimum passing percentages for state accreditation only in grade 3 science.

Implementation of the SOL and Perceived Effects

The school administrators believe the Standards of Learning (SOL) are intended to improve instruction and to equate the quality of instruction across the schools and systems of the state. Thus, the standards in the SOL are higher than most teachers have experienced. While students have not performed as well as teachers and administrators would like, the administrators expect that performance will rise as instruction is more coordinated with the SOL. The administrators believe that schools who seriously accept the SOL challenge will realize an improvement in student performance. The administrators believed that their teachers seem to have accepted the fact that the Standards of Learning are the 'game to play' now. Being told to teach the skills on the SOL tests is a different approach for many teachers who have been taught never to teach the test. Teachers are worried about how the performance of their students will affect their evaluation and job status. Concern exists over the fear that teachers may be identified publicly along with the SOL test scores of their classes. The students who are assigned to teachers vary from year to year, and throughout the year new children transfer to the school from outside the school system and outside the state. Teachers expressed the concern that a student's performance on a specific test represents only one day in the child's year. On that day, the child may or may not demonstrate what he/she knows.

In the school system, curriculum maps (pacing guides) have been developed by grade level and month that are to be followed by each teacher. The consistency is helpful

to accommodate the transient nature of students among schools in the same system and around Virginia. Personnel are constantly searching for better materials to use for instruction. There is pressure on publishers to create materials (texts, activities, CDs) that are better correlated with the Virginia Standards of Learning. The school system provided packets and training workshops on economics. Previously this had not been a significant part of the 3rd grade curriculum, where it is now tested. In the last textbook adoption of the school system, the teachers voted on their choices of materials to provide guidance for the decision. Student reading is being encouraged and the "Accelerated Reader" provides one strategy. As an incentive, students who complete a book and obtain an acceptable performance on the test are given a ticket they can deposit in a box for periodic prize drawings. Some of the Accelerated Reader tests are a required part of a student's grade.

Teachers believe, "they can no longer do fun things with kids until the tests are over in May". All field trips must demonstrate a direct link to the teaching of the SOL or they will not be approved regardless of their educational significance. Summer school attendance is a requirement for low performers. Varied instructional resources and programs are used to enhance student performance including the following resources:

- "The Coach" series by Educational Design
- Edu-Test (Reactions of teachers were mixed regarding its effectiveness and ease of use.)
- System-developed writing prompts designed to simulate the SOL writing
- System-developed rubrics for scoring writing prompts
- Literature groups/circles

- "Saxon Phonics" incorporated into instruction
- "Reading Recovery" for students with special reading needs
- Title I math and reading programs and Even Start for low SES, at-risk populations
- PALS testing for kindergarten

Criterion-referenced pretests and posttests have been used for a number of years by schools to identify student learning needs and to monitor progress. The data are maintained for each student on spreadsheets by administrative personnel. In the grade levels tested by the state for the SOL, the posttests are given in the spring a month or more before the SOL tests to identify what students still need to learn before the state testing. In the school system, teachers have been requested to collect and compile test items for each course to be used for practice tests. While there may be advantages to the practice and diagnostic testing, the teachers reported that "it seems we now test more than we teach." The lesson plans of teachers are charted with computer software indicating the SOL objectives that are taught. A periodic report on the progress of instruction by each teacher is published within the school. Teachers report that increased record keeping for the Standards of Learning has just been added "on top of" an already heavy load of paper work and record keeping.

Much staff development has been focused on the SOL through in-service workshops, faculty meetings, and a school system computer network with e-mail facilities to encourage communication among teachers. A booster program, with funds

for special materials, includes tutoring for low achieving students after school and remediation that occurs during the school day.

Communication of School with Parents and Others

There is a general lack of awareness by parents and others outside the school system of the Standards of Learning (SOL) and their implications. Parent-teacher workshops have been conducted to help parents deal with needs surrounding the SOL. School meetings and town meetings for parents are also being held. The teachers believed that concern from parents is not yet at a peak, particularly for students in special education because direct consequences to students are not being experienced as yet. Support programs such as the Parent Resource Center have programs to show parents how to help their children academically. Parents have expressed concerns about retentions - what happens when students pass classes but fail the SOL tests or pass the SOL tests but fail the corresponding classes? The Homework Helpers Program, a community-based program where teachers go into public meeting places in communities on specific evenings (in locations where the needs are the greatest) and help students and parents with homework, has also been implemented. Reactions of students to the SOL vary with different groups. Older students sometimes feel overwhelmed by it, whereas lower elementary grades may not really understand what it is all about.

Recommendations to Increase Effectiveness of the SOL

A prevailing theme of teachers, expressed again and again during the interviews, was that, "There is too much to teach to classes that are too large with too little time to

teach it.” On the other hand, teachers recommended that the SOL tests be given earlier because students lose much motivation after spring break.

While technology can be used for keeping records, the task of recording data has increased with the SOL on top of an already heavy load of paper work. Social science standards are very broad. During interviews, teachers reported that “We do not know what to teach or where to focus.” For example, there are hundreds of early American explorers to teach and the test will cover only a few. “What if you spend your time teaching the wrong ones?” Students and parents come from varied backgrounds and help from home is needed, but it is not always reliable or practical. More parent responsibility and participation are needed.

Case E3

Elementary School E3 had a student membership of approximately 540 students to begin the 1998-99 school year, of which about 90% were white and just under 10% were eligible for free/reduced price lunches. The school is housed in a well-equipped building that is located in a residential neighborhood with nearly all single-family homes. The principal has been in leadership at the school for about two years, but has been an administrator in the same school system for several years prior to this assignment. The faculty consists of mostly experienced teachers. On the first set of SOL tests taken at School E3 in the spring of 1998, students achieved the minimum passing percentages in all grade 3 content areas and all grade 5 areas except social science, which was nearly at the required level for state accreditation. An individual interview with the principal was followed just over a week later by an interview with administrative/resource personnel.

Later, a focus group interview was held with ten teachers and a para-professional, primarily from grades three, four, and five. Also included were representatives from special education. Initially, the teachers were very reticent to talk until they were absolutely certain that their identities would not be revealed. They soon established rapport with the interviewer and expressed gratitude for the opportunity to express their views on the SOL at the end of the interview.

Implementation of the SOL and Perceived Effects

The principal believes the state accountability effort is beneficial for the individual child and the school. The current emphasis is at the school level, which should be changed to focus more on the student, particularly for diagnostic purposes. The curriculum for the school has been well aligned with the SOL, and there is a pacing guide for teachers to use. Staff development for the teachers is ongoing and the principal believes the teachers are well aware of the SOL program details. Use of the SOL for instruction is monitored by the administrators. Grade level teams of teachers work together in planning the curriculum application. There are now higher expectations for students, particularly for students with disabilities or disadvantages. Basic skills are emphasized, with a new focus on writing based on the three domains. SOL review packets in all tested subject areas have been recently provided by the school system. The teachers are happy for the materials, but the time for review replaces many other instructional units. In future years, when the whole curriculum is better correlated with the SOL across all grade levels, less review may be necessary. A tutoring program is provided at a nearby church by a group of retirees. The PTA has recently provided funds

for the school to purchase the books and computer software for the Accelerated Reader program.

Teachers struggle with the lack of curriculum choice and the amount to be covered as exemplified in the following quotes from their interviews:

“There is no opportunity to repeat anything. It’s ‘one-shot teaching.’ There should be more time.”

“In Virginia History, there is no time to study the Civil War.”

Not being able to use strategies that make learning interesting and fun is a strong concern. Many activities like field trips, units on foreign language, and special days are being eliminated or postponed until after the tests have been taken. However, some teachers like the direction and are active supporters of the SOL. The teachers work hard and want to do well, and they seem to be working more as a team to help each other. Some have expressed the concern of what will happen to them if their students do not do well. Teachers also question the long-term effects of so much testing. They also reported significant fatigue, lack of time for enrichment, and overwhelming stress. The following quotes from several teachers demonstrate the concern:

“I am never finished ... only skill and drill.”

“This has completely altered the way I teach.”

“I’m not creative—there is no divergence.”

“There is no casual, informal time to share—not even information about students.

I don’t feel like I have a bond with my kids—there is no time to.”

“SOLs consume our whole teaching perspective.”

“There is no time for current events anymore.”

The responsibility of curriculum alignment, new teaching strategies, and review for testing has created a very heavy load for teachers and students this year. “Gifted kids are sick of school.” The gifted students, who go to a center for gifted at another school, are not included in the school test results. On the other hand, transient students are at a disadvantage, particularly those who come from out-of-state just before testing, and have not studied the same topics such as Virginia history.

Communication of School with Parents and Others

Communication with parents indicates they feel the SOL tests focus on school skills but the school staff emphasizes that “the SOL is not a test of worthiness.” Parents have been interested and ask questions and the concerns most often relate to social science. There is concern that some standards do not correspond with the developmental stages of children, like ancient history for 3rd graders. There is concern about the extensive review process for the testing. Many of the parents are well educated and they hold diverse opinions. Some favor accountability but they believe that there is too much emphasis on testing. Teachers indicated that parents were concerned about the lack of enrichment, the content covered on the SOL tests and the problems of special education children as indicated by the following quotes:

“I’ve had parents come in with tears.”

“More than one parent has questioned the content on the test. They are tense and angry—with me! The parents are ‘coming at’ teachers.”

Recommendations to Increase Effectiveness of the SOL

More diagnostic assistance for each child is needed from the SOL testing. More instructional materials related to some of the SOL objectives are needed including maps and history materials as well as math manipulatives. Lead teachers in the school attend meetings outside the school and give feedback to other teachers. Videotapes and other materials are provided for use. However, the teachers are concerned that they have not had "hands-on" training sessions or staff development to help them learn how to implement new initiatives.

While many of the SOL test items call for higher level thinking skills, the 3rd grade social science focuses too much on recall of memorized material. Economics, as 25% of the 3rd grade social science test, is too much emphasis.

Case M1

Middle School M1 had approximately 1,180 students at the beginning of the 1998-99 school year, of which about 80% were white and nearly 20% were eligible for free/ reduced price lunches. The school has a fairly new building that seemed to be very functional. It is located in a rural neighborhood but it serves students from a combination of rural and suburban communities. The principal, in leadership at the school for about two years, came there from another public school system in the state and demonstrated much enthusiasm about the school. The SOL tests were taken by 8th graders at School M1, in the spring of 1998. They achieved the minimum passing percentages for state accreditation in English and science and math nearly at the required level. An individual

interview was conducted with the principal and later with another one of the administrators.

Implementation of the SOL and Perceived Effects

The principal believes the Standards of Learning are good but the high-stakes effects of the testing have been implemented too quickly. More time was needed to develop understanding by school staff and the community. As a confidence building measure for teachers, who have felt much pressure, the principal has promoted the position that the tests are based on Standards of Learning, which are well known. Performance of the students is expected to rise after the first year just as the Literacy Passport Testing (LPT) scores did.

The Standards of Learning are being implemented as an integrated aspect of the school curriculum. It is part of a two-pronged effort with the Southern Association of Colleges and Schools (SACS) accreditation process. Committees of teachers have attended numerous workshops that dealt with curriculum, instructional strategies and best practices. They have established a SOL coaching atmosphere to help all teachers increase their understanding. Teachers submit to the administration their lesson plans by 3-week blocks showing the SOL they have taught. They have focused on integrating the SOL across the curriculum including content areas that are not tested. They have also attempted to use technology as a learning tool. They focus on what students learn, not just what students are taught.

The principal has encouraged teaching some of the SOL so the students learn them rather than skimming all of the SOL. To ease concerns of teachers, the belief has

been promoted that excellent teachers, doing a good job, will achieve high results. Communicating with teachers and other school staff members about the SOL implementation has been a high priority because they are more likely to accept ownership in the program if they understand it. For a few students the greatest challenge is to motivate them to learn and do well on the SOL tests.

The school has taken a developmental approach by focusing on how to make regular gains over several years. The administration asks teachers for 3-week plans including the SOL and then an evaluation of how far they have come in that time period.

There is a new 7th grade civics course that was designed to prepare students better for the 8th grade curriculum and testing.

Communication of School with Parents and Others

There has been confusion and concern among parents and others in the community. The middle school principal and the corresponding high school principal have visited the feeder elementary school parent meetings to help them understand the SOL and how all school levels are working together so students will achieve their best. Some parents have expressed concern, particularly in elementary schools, that some teachers have lost their flexibility to be creative and do the activities that make learning fun. Parents do not want to see a decrease in subjects like music and art as well as the opportunity for students to advance in content areas appropriate. Parents are concerned about the effectiveness of instruction toward the SOL and some question the validity of the SOL tests.

Recommendations to Increase Effectiveness of the SOL

The best students take some high school subjects like advanced math and social science in middle school, but the passing rate cannot count for the high school. The principal recommends that the passing rates for high school subjects be calculated so the middle school results also count for the corresponding high school.

Case M2

Middle School M2 began the 1998-99 school year with approximately 670 students, of which about 90% were white and just under 20% were eligible for free/reduced price lunch. The school was in an older building that was recently renovated, and is very functional. It is located in a residential neighborhood and serves students from a combination of apartments and single family homes. The principal has been in leadership at the school for quite a number of years after serving as a teacher at the same school. On the first set of Standards of Learning (SOL) tests taken at School M2 in the spring of 1998, students achieved the minimum passing percentages in all grade 8 content areas except history. The principal and one resource person were individually interviewed. Three teams of teachers (a total of twelve) participated in focus group interviews during their team planning period: two 8th grade groups and one 7th grade group.

Implementation of the SOL and Perceived Effects

The principal has a concern that the SOL tests are the primary data source for accreditation. Other factors that are part of high quality instruction are not included.

There is also a problem with testing material that is cumulative from previous grades when current teachers seem to be held most responsible.

The social studies curriculum of the school has been re-aligned with the SOL objectives and sequence. In-service sessions have included the SOL and the blueprints for the tests. Teachers have received training and encouragement to use classroom test items that are like the sample test items they received. They also use the Edu-Test computer software but it is loaded on computers in the only lab in the school so access is limited. Some faculty members are tired of hearing about the SOL and they were frustrated with results that were lower than they expected.

Communication of School with Parents and Others

There has not been much response from parents. At this point students and their parents do not seem to sense the full implications of the SOL testing. Information has been included in newsletters, and the last monthly brown bag lunch for parents was focused on the SOL testing.

About fifty parents attended a recent system-wide meeting about the SOL and SOA. They were quite hostile toward the proposal of the effects of failing the tests. It was being proposed that a student who fails the test would not receive credit for the course regardless of the grade earned. Parents also fear retention in grade level. The parents expressed concern that 3rd, 5th, 8th grade tests cover 2-3 years or more of objectives. The testing with such high stakes brought complaints that the tests are too high a requirement. Parents were upset that the implications of the testing are not yet decided.

The students seem to have a reasonable level of stress and they did well on writing in particular. Conscientious students are very concerned. They ask why they should be tested on something they learned two or three years ago.

Recommendations to Increase Effectiveness of the SOL

The results are hard to interpret to teachers so they can obtain diagnostic instructional information. The most specific results, the category scores, are not specific enough to use for planning different instructional approaches.

Teachers must include objectives in lesson plans, both the objective number and objective content. The sequence of the curriculum is evolving to the Standards of Learning test schedule throughout the school system. It would be easy to make the changes quickly but the students that are now in 8th grade have not studied all the previous content that could be included on the blueprint-based tests. The curriculum is being modified gradually so students that are being tested each year are more thoroughly prepared. They are now in the process of selecting new text series for math and English and congruence with the SOL sequence is an important selection criterion. Grammar was taught separately but now it is integrated with the rest of English, however, teachers are not sure how effective that will be.

The 8th grade teachers feel much pressure for their students to do well on the tests. They believe that too much data was released publicly too early, making an unfair situation. The SOL in elementary school should help identify students with needs earlier.

The Standards of Learning have promoted a positive setting where teachers do more cooperative work together, rather than just individually teaching their subject. On

the other hand, some of the more creative strategies they have used have been sacrificed because of the time required to teach the SOL.

The “SOL Coach” materials they are using are good but they do not cover all the subjects/grades yet. They would prefer end-of-course tests for middle school content rather than a test that includes objectives from 3 grades. More specificity is needed in the blueprints, particularly in subjects such as social studies and science. They also need training in the 3-domain process of scoring written themes.

Case H1

High School H1 began the 1998-99 school year with approximately 900 students, of which nearly 90% were white and just under 5% were eligible for free/reduced price lunches. It is located in a rural neighborhood but it serves students from a combination of rural and suburban communities. The principal has been in leadership at the school for quite a number of years. Of the 1998 graduates from High School H1, about 55% were planning to attend a 4-year college with an additional 30% headed for a 2-year college. High school students, regardless of grade level, take the SOL tests at the end of ten specified courses in four content areas. On the first set of SOL tests taken at School H1, in the spring of 1998, students achieved the minimum passing percentages in English and science courses. On the first visit the researcher had an extended interview with the principal. On a follow-up interview, several documents were obtained and representatives from guidance and two of the SOL Coordinators for the school system were interviewed. Most of the SOL Coordinators teach part time. The guidance department is responsible for coordinating the testing at the school, as well as organizing

and interpreting results to individual students. The SOL coordinators analyze the results by schools, grades and classes, and evaluate the results to make the needed curriculum and instructional changes.

Implementation of the SOL and Perceived Effects

The principal is in favor of knowing how well the students are doing, but the process has been a lot of work. It is recognized that current politics drive the accountability push. The teachers have been involved in aligning the curriculum for about two years. A coordinator has been appointed for the school system for each of the four major subject areas to focus on curriculum and best instructional practices related to the Standards of Learning. In some cases, they also teach some classes. As a High Schools that Work site, some of the funds are being used for staff development of teachers including SOL related topics. For SACS, the school is following the school renewal approach and the SOL alignment is one effort in that re-accreditation process. They have been developing test-taking strategies to help students do their best. Teachers are learning to develop test questions following prototypes that are used in the SOL tests. Interdisciplinary efforts include the use of academic skills in subjects like technical education and the use of communication skills in business courses. They have been developing "warm-up strategies" for use in non-academic classes to reinforce academic skills.

There has been a renewed emphasis on teaching and learning the basic academics, which is good for both teachers and students. There has also been increased consistency in the curriculum that is taught in courses tested by the Standards of Learning.

Experienced teachers see it as another accountability effort like several the state has developed over the past two decades. Newer teachers show more apprehension for what the SOL testing will mean for them. Some feel "beat over the head" with the tests.

Communication of School with Parents and Others

There has been confusion among the parents and other members of the public. Parents who are active in the parent-teacher organization have been very interested in learning what the SOL are about and what the tests and the SOA regulations mean.

Previously the school was administering a standardized test to every high school grade level so the students were used to taking many tests. The SOL tests without high school level standardized tests actually represent an overall decrease in testing for the school. The school staff is aware of the needs to motivate students to do their best and they are assessing what approaches to take. Many of the students probably will have passed four of the six tests necessary for graduation by the end of their sophomore year. The only remaining tests will be the two in English 11. They have already begun offering exam exemptions for students who earn at least 70% correct on the SOL test for that subject. Some students have been complaining that they do not have enough time to learn the material because the teachers need to cover implementing the SOL.

The school system is still going through the process of curriculum alignment. While on paper the alignment is completed, it is not fully implemented in practice. The SOL implementation has forced a better alignment/mapping/sequencing of the curriculum across all grade levels K-12, but particularly for instruction at the high school level. Last spring, just before school was out, many student schedules needed to be

changed to correctly assign students to math courses in which they could achieve success. System-wide, there probably will be less emphasis on pupils taking algebra so early. More students are beginning to take algebra over two years.

The SOL efforts have raised the feelings of accountability and responsibility for teachers at all levels, and teachers are much more interested in working together. The elementary teachers seem to be most upset about the sequencing of the curriculum, particularly in the social sciences. Teaching ancient civilizations and economics in advance of the 3rd grade tests seems out of order for the development and previous practices of these teachers. While they have accepted the new accountability, the faculty members say they are tired of hearing about the SOL, even though they realize that it will not end any time soon. The Standards of Learning have forced teachers to leave their comfort zones. There is more acceptance of responsibility by other departments such as business teachers teaching more about grammar and writing as part of their keyboarding/word processing.

The core curriculum has been raised to higher importance than it had been recently compared with technical education and other electives. The Standards of Learning, which require that all students with handicapping conditions earn the same achievement to receive the same diploma, have forced a different approach to special education students. There will probably be an increased number of special education students who earn the special diploma because the standards for the regular diploma will have fewer exceptions.

Students are having a harder time getting in all the elective courses they want because of the new core requirements. Most likely, there will be fewer vocational

completers as a result of the increased course requirements under the new Standards of Accreditation (SOA). The school administers one SOL test per day in the morning, beginning with period one test the first day. With this format, absent students in a subject have a greater chance of taking the test with another class when they return. Most make-ups are the next day. Last year they offered exam exemptions for students who earned at least 70% on the corresponding test, and this they year will offer the same for passing the test.

Case H2

High School H2 had approximately 1,800 students at the beginning of the 1998-99 school year, of which about 65% were white and just under 20% were eligible for free/reduced price lunches. The principal, in the first year of leadership at the school, moved there from another public school system in the state. The principal demonstrated much enthusiasm about the school and had a long-range vision for the school. Of the 1998 graduates from High School H2, about 50% were planning to attend a 4-year college with over 20% more headed for a 2-year college. High school students, regardless of grade level, take the SOL tests at the end of ten specified courses in four content areas. On the first set of SOL tests taken at School H2 in the spring of 1998, students did not achieve the minimum passing percentages in any content area but English and science were nearly at the required levels.

Implementation of the SOL and Perceived Effects

The principal sees the SOL/SOA efforts as a "bold shift" in education. It has caused uncertainty and stress because of the unknowns. The principal strongly believes that educators need to "team up" to accept the challenges rather than to "freeze up." The key to success is to communicate fully within the school and with the public.

The school has developed a game plan to meet the challenge. Part of the school emphasis is enthusiasm to help the faculty/staff believe that success is possible. Numerous materials were provided during the interview that identified the game plan with all its aspects. The faculty and administration together have developed a set of targets that will bring their students to at least a 70% passing rate in all content areas by the year 2000-01 with many ideas of what will come after that. The action plan has numerous strategies for the 1998-99 school year with some strategies for future years. One document the principal provided is a detailed description of the methods outlining the activities in each of the eleven SOL test areas that are to be done to improve the performance of students.

Most of the instructional planning and goal setting have been done by the Testing Team, made up of the principal with all department heads and the SOL test coordinator from the guidance department. This team provides advice about the organization as well as conveys the implications to teachers in the departments. The writing test is administered during a narrow time window in the season that was interrupted several times in 1999 by weather problems. The school has difficulty finding space to securely store the twenty or more boxes of materials that must be maintained in a locked location.

The great amount of work with all the required testing prompted one staff to ask if something "must crash and burn" to get some relief from the workload. The teachers like the mid-May testing of 1999 better than late April as in 1998, but they feel crushed with the expectations. The weekly articles by the newspaper (*Richmond Times-Dispatch*) have added to the pressure of the SOL testing. The principal tries to alleviate fears of job security. With so much testing that is tied to specific curriculum, the teachers believe they are not able to plan the interesting activities that "turn kids on to learning."

Communication of School with Parents and Others

Students seem apprehensive about the SOL/SOA efforts and give comments such as "I'm glad I'm not in 7th grade" which is the first grade that will be required to have at least six verified credits (passing the SOL course tests) to graduate. The principal is working with the staff to develop more motivational strategies for students to be implemented next year. The most prominent motivation currently is that passing scores on the test will give an exam exemption. From the staff viewpoint, the kids are great. They have accepted the testing as well as possible. They like the offer of exam exemptions for passing scores if the results are received in time.

Recommendations to Increase Effectiveness of the SOL

The school system required that a school representative attend a Saturday session to sort out results and have them ready for scoring by the specified time. This was looked upon with much disfavor. In order to have shorter turn-around time for testing, the test company needs to have Virginia satellite points to scan test materials and print results.

This would reduce the transportation time requirements to and from San Antonio.

Members of the State Board of Education and legislators need to help out in schools with test material management to see the workload of the schools.

Conclusions

The 1983 report of the National Commission on Excellence in Education, “A Nation at Risk: The Imperative for Educational Reform,” called for educational reform and accountability and standards for what students should know and be able to do. This was the beginning of what we know as standards-based education efforts. The development of work standards, what counts as good performance, led to more focused teaching and learning. A further effect was the development of assessment systems that may make it possible to hold schools and districts accountable for student outcomes to enable state departments of education to shift their emphasis from enforcing compliance with state rules and regulations to promoting research and service. Testing is not an accountability system, but it can be part of a system that includes outcomes that are defined with well-developed incentives.

Implications of Reform

Reform that relies on accountability and high-stakes testing reaches into the heart of the instructional process, the interaction of teachers, students and subject matter. Tests could support these interactions, but some experts question the availability of the needed methodology and technology. Reform must give a central place to the perceptions of teachers, because it is only by building on those perceptions that learning can be improved. Teachers work from an intricate conceptualization of education, seeing each child as unique and regarding the curriculum as structured by content.

While assuring that well-established skills are learned by students, the curriculum must not be so packed with details and driven by external tests as to remove opportunity for innovation by effective teachers. Standardization of the curriculum, by attending to the so-called "basics," and less to the deep understanding of topics, is seen by some experts as antithetical to empowering teachers and strengthening the educational system. It has been well established that a major factor related to increased student learning is teacher expertise, including teacher preparation and experience. If the standards movement is to successfully result in greater achievement of more students, attention must be given to the development in teachers of a deep understanding of the subject matter, knowing different approaches by which students learn, and using diverse teaching strategies.

State Efforts

Most states have developed or are in the process of developing new standards for students in the public schools. Preliminary research has not provided the basis for strong conclusions about specific instructional methods that are most effective. However, research has yielded evidence that effective schools have certain common characteristics. On the other hand, statewide efforts are so monumental and complex, that broad conclusions from available research cannot be made yet. It will be important to monitor the research on the effectiveness of statewide programs in the future.

Local Implementation of Accountability

In the central region of Virginia, represented by the Metropolitan Educational Research Consortium (MERC), seven schools were selected for case study of the implementation of the state accountability efforts. The schools were chosen to represent the broad spectrum of school and community types as well as all the school levels represented by the seven school systems. The superintendents of these seven school systems are the “gatekeepers” of the school systems and they constitute a key part of the MERC governing body. Interviews of all superintendents were analyzed before the final selection of the schools for case study, the approach chosen for this phase of the research. School superintendents were optimistic that the state accountability efforts will result in higher student achievement because schools will accept greater responsibility for student learning. Expressed concerns focused on the effects for content areas not tested, with disabilities, dropout rate, and funding of other priorities. Some questioned the feasibility of the state standards for all schools and the duration of this state effort.

Overall, school administrators strongly supported efforts to make comprehensive changes in their teachers and curriculum to improve student learning. This positive attitude established a serious climate that stressed the importance of the SOL reform. Curricula are definitely becoming more aligned to universal standards and teachers are more highly motivated to increase student learning through coordination of their instruction across the grades, school levels and content areas. It was clear that teachers are changing their instruction and working cooperatively in teams. The high school math curriculum, in particular, has been influenced by a greater emphasis on high performance with the requirement that all students seeking the standard diploma pass Algebra I or a

higher-level math test. Students with disabilities must pass the same six tests for a standard diploma, which may raise the standard higher than it was in the past. Because of greater diploma requirements in the four core content areas, the number of students that take elective courses may decrease.

The results also suggest that aligning the SOL with local curriculum is not nearly as problematic as the testing itself, and how test results are disseminated. There is concern that there is too much testing, and that when all SOLs are emphasized there is too much to cover, resulting in less creative lessons and fewer enrichment opportunities such as field trips.

Parental involvement was found to be mixed. In some schools parents were well informed and involved, while in others knowledge and involvement were minimal.

Teachers are at the heart of this reform effort. They feel pressure if scores are tied to teacher evaluation and understand the importance of adequate staff development. It is noteworthy that in some schools teachers expressed appreciation for being told to emphasize depth rather than breadth, and that the entire process will take years to effectively implement.

Recommendations

Based on the findings for the review of literature and case studies, the following recommendations are made to more effectively implement SOL-based reform.

- 1.) The Standards of Learning test results should not be publicly released with greater specificity than grade level and school. Classes within schools frequently do not include a representative sample of students in the school.

2.) SOL reporting categories within grade-level content areas should be constituted or defined more specifically so they have greater instructional or diagnostic value. Some social science objectives are too broad for instructional planning, particularly the requirement to know about numerous early American explorers. There is wide consensus among parents and educators that "ancient civilization" is not a developmentally appropriate testing objective for 3rd grade students. The Virginia history that has been part of the 4th grade curriculum for many years is not tested until the end of 5th grade.

3.) There is a need for teacher development of broad repertoires of instructional strategies to effect learning for widely diverse students. This staff-development effort should be adjusted regularly as research yields new conclusions about more effective instructional strategies. With the continual employment of new teachers, this need for teacher development will continue for many years. Particular need exists in the 3-domain scoring of written themes, a skill that can improve the instruction of teachers in different content areas.

4.) Further research should be conducted relative to the instructional strategies that are most successful in different content areas. It would be beneficial, to identify for further study, schools with SOL results which do not correlate with the demographic factors of the school. Schools that have high SOL achievement with demographic characteristics that lead to substantially lower expectations should be studied to identify the "success factors" of these schools. Conversely, schools with substantially lower SOL achievement than would be expected by the demographic characteristics of the schools should be the subject of further research. This type of research could be focused more

specifically on individual teachers and classrooms in which performance does not correlate with expectations.

5.) Identify effective tracking programs that will allow teachers greater efficiency in keeping records on SOL tested and passed with diagnostic assessments.

6.) Address directly the issue of depth vs. breadth in teaching content, as well as issues regarding enrichment activities and more creative approaches to teaching. Are we, in fact, promoting curricula that are too broad with insufficient depth? Are teachers, in fact, using less enrichment activities?

7.) Explore mechanics for meaningful parental involvement. As consumers and important sources of influence on student learning and motivation, parents should be actively involved in setting policy and procedures.

References

- Allen, Ann S. and Miles, Ruth R. (1997). Teachers' perceptions of standardized tests. Richmond, Virginia: Unpublished manuscript.
- Buttram, Joan and Waters, J. Timothy (1997). Improving America's schools through standards-based education. NAASP Bulletin, 81(590), 1-6.
- Cooley, William W. (1991). Statewide student assessment. Educational Measurement: Issues and Practice, 10(1), 3-5.
- Creswell, John W. (1998). Qualitative inquiry and research design, choosing among five traditions. Thousand Oaks, California: SAGE Publications, Inc.
- Cross, Christopher T. and Joftus, Scott (1997). Are academic standards a threat or an opportunity? NAASP Bulletin, 81(590), 12-20.
- Darling-Hammond, Linda (1991). The implications of testing policy for quality and equality. Phi Delta Kappan, 73(3), 220-225.
- Darling-Hammond, Linda and Falk, Beverly (1997). Using standards and assessments to support student learning. Phi Delta Kappan, 79(11), 190-199.
- McLaughlin, Milbrey W. (1991). Test-based accountability as a reform strategy. Phi Delta Kappan, 73(3), 248-251.
- Popham, W. James (1997). The standards movement and the emperor's new clothes. NAASP Bulletin, 81(590), 21-25.
- Smith, Mary Lee and Rottenberg, Claire (1991). Unintended consequences of external testing in elementary schools. Educational Measurement: Issues and Practice, 10, 7-11.
- Stake, Robert E. (1991). Test-based accountability as a reform strategy. Phi Delta Kappan 73(3), 243-247.
- Stake, Robert E. (1999). The goods on American education. Phi Delta Kappan 80(9), 668-672.
- Urduan, T.C. and Paris, S.G. (1994). Teachers' perceptions of standardized achievement tests. Educational Policy, 8(2), 137-156.
- Virginia Department of Education (1997). Regulations establishing Standards for Accrediting Public Schools in Virginia. Richmond, Virginia.
- Wiggins, Grant (1997). Work standards: Why we need standards for instructional and assessment design. NAASP Bulletin, 81(590), 56-61.

APPENDICES

SUPERINTENDENT INTERVIEW PROTOCOL

Name(s): _____

School System & Date: _____

System Study Group Representatives: _____

How do you view the accountability (SOL/SOA) efforts of the State Board of Education?

What system-wide efforts have been used for implementation of SOL/SOA?

What effects of SOL/SOA have you observed/found in the school to this point?

What public reactions to SOL/SOA have you heard?

What would you like to see as results from this MERC research project?

Which of your schools would you like considered for inclusion in the case studies?

PRINCIPAL INTERVIEW PROTOCOL

Name(s): _____

School & Date: _____

How do you view the accountability (SOL/SOA) efforts of the State Board of Education?

What school-wide efforts have been used for implementation of SOL/SOA?

What effects of SOL/SOA have you observed/found in the school to this point?

What public/parent reactions to SOL/SOA have you heard?

What reactions have you heard from your students about SOL/SOA?

What reactions have you heard from your faculty/staff about SOL/SOA?

What other persons in the school should be interviewed?

What settings could be used to have focus groups with teachers (planning periods, before/after school, etc.)?

What key documents could be available as part of this case study?

TEACHER SOL FOCUS GROUP PROTOCOL

School/Interviewer/Date: _____

Setting/No.Participants&Assignments: _____

What school-wide efforts have been used to implement the Standards of Learning?

What effects of SOLs/testing have you experienced?

What public/parent reactions to SOLs/testing have you heard?

What reactions have you heard from your students about the SOLs/testing?

What would be helpful to you as the SOLs are implemented?

SPECIALIST/ASSISTANT SOL INTERVIEW PROTOCOL

School/Name/Date: _____

Place/Setting/Time: _____

What is/have been your responsibilities to implement the Standards of Learning and the testing?

What effects of SOLs/testing have you experienced?

What reactions to SOLs/testing have you sensed from faculty/staff/students/others?

What efforts have been taken at your school that have (have not) seemed particularly effective?