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Instructional Leadership: An Essential Ingredient for Improving Student Learning

by Charles E. Ruebling, Shirley B. Stow, Frances A. Kayona, and Nancy A. Clarke

Abstract

Student achievement of the curriculum is the school's reason for being. This research, however, suggests that the behavior of school leaders is not effective in accomplishing four critical outcomes of curriculum development: (1) the creation of well-written documents that use a common framework; (2) curriculum that is aligned with state and national standards; (3) an understanding and teaching of the curriculum by teachers; and (4) all students successfully learning the curriculum. Leaders must orchestrate multiple changes that provide opportunities for teachers to work in teams, focus resources effectively on implementing the curriculum, and establish accountability for results.

Many schools continue to be challenged with the task of achieving satisfactory learning results. Passage of the federal No Child Left Behind Act increases the pressure for enhanced performance by schools and students. This article suggests that a necessary, but missing, ingredient for satisfactorily achieving learning results, is effective leadership behavior related specifically to developing and monitoring the implementation of curriculum.

After a more detailed statement of this problem, the curriculum development work that was done with a number of school organizations nationwide is described. Then, the methodology and results of a follow-up study to determine the quality and extent to which the newly developed curriculum was actually being implemented is discussed. Finally, recommendations for needed improvements in school leadership behavior are proposed, including the training of future leaders as well as those already in the field.

The Purpose of Schools

The purpose of a school organization is to achieve learning results with its students. Hoy and Hoy (2002, 1) phrased it this way: "The centrality of student learning in the school is irrefutable." The curriculum establishes the primary goals, as well as the specific objectives, for learning. As Danielson (2002, 77) stated, "The curriculum is the defining characteristic of the school's program." The fact that many students continue to be "left behind" with respect to important learning goals requires that educators work to improve learning results. To do this, Fiore (2004) suggested that school leaders place greater emphasis on nurturing the instructional environment—in essence, becoming *curriculum leaders.*

Desired Outcomes/Results of Curriculum Development

Research increasingly affirms that the key to school improvement and student achievement is for school leaders to focus on the academic program (namely the written curriculum), the use of assessment data, and professional development (Hoy and Hoy 2002; Cawelti 1999; DuFour 2002; English and Larson 1996; Hoyle, English, and Steffy 1998; Fiore 2004). Schmidt, McKnight, and Raizen (1997) stated that reform initiatives that do not address curriculum, instruction, and professional preparedness will have no impact on results. Through processes of curriculum development, the curriculum is kept up-to-date and relevant to changing times. When curriculum is revised or rewritten, four outcomes / results are expected:

1. Curriculum documents follow a framework and are well written.
2. The contents of the curriculum documents align with state and national standards and with the needs of students for successful work and personal / social lives.
3. Teachers understand and implement (teach) the new curriculum.
4. Students successfully learn to use the skills and concepts of the new curriculum.

Unfortunately, these expectations are not being adequately met. In many school organizations, curriculum documents do not exist. Where they do, they don't follow a specified framework, are poorly written, are not up-to-date, and are generally ignored by teachers and school leaders.

English and Larson (1996) agreed with this conclusion, asserting that many curricula are developed but remain on a dusty shelf in the teacher's closet or storage bin. Marzano (2003), in his discussion of opportunity to learn, reviewed extensive research showing that the written curriculum and the implemented curriculum are frequently not the same.

The School Improvement Model (SIM) Center at Iowa State University was established in 1980 with a mission of helping school organizations improve teacher performance and student achievement. In the late 1980s, based on research showing that *what* teachers teach is more important in student achievement than *how* teachers teach, the Center developed a framework for creating well-written curriculum documents that align with state and national standards as well as with locally identified needs. Since then, the SIM Center has provided curriculum development training in school organizations across the nation to help them meet their goals for improving student achievement.

During the 2000–2001 academic year, staff members from the Center undertook a follow-up study in nine school organizations that had used the framework for curriculum development to investigate two areas: the extent to which the new curriculum was actually being used and its quality. School organizations in Arizona, Florida, Georgia, Indiana, and New York that had completed the SIM curriculum development process for mathematics and language arts between 1996 and 1998 were selected. These school organizations had at least two years to implement new curricula. The purpose of the study was to determine the quality and extent to which the newly developed curricula in language arts and mathematics were being implemented. Student assessment data were not collected for this study, but the implementation of aligned assessments was addressed.

It was anticipated that teachers understood and were using the curricula, but this was not the case. The general finding was that teacher understanding and implementation of the new curricula and assessments were poor.

The Problem

When a school organization, or any organization or enterprise for that matter, is not successfully achieving its primary goals, the leadership behavior in that organization must be called into question. That is, when a school organization is not effectively implementing the curriculum required by state and local policy makers and the quality of student learning is questionable, the problem is leadership. Most educators do not seem to recognize the relationship of leadership to learning results. As Marzano (2003, 175) pointed out, "Unfortunately, it is somewhat rare in the research on leadership to find student achievement as the criterion for effectiveness."

Not only is leadership the problem, but leadership is also the solution. Leaders must take responsibility and be held accountable for poor results. Different leadership practices must be instituted.

The importance of leadership for successful educational change is well known (Fullan 2001). The purpose of this manuscript is not simply to point this out again. Rather, it is to note that despite *knowledge and awareness* of the leadership problem, it still exists! The aim here is to identify some aspects of missing leadership behavior with the hope of garnering support for efforts to improve this critical component for student success.

Begin with the Curriculum

The importance of "beginning with the ends in mind" (Covey 1989, 99) has become axiomatic for all organizations. In schools, the ends, both generally and specifically, are stated in the curriculum. Based on experiences with curriculum work in schools and in reviewing the literature on curriculum development, the SIM team developed a framework and process to help school organizations plan curriculum that aligns with state and national standards as well as local needs. The process begins with content area committees studying the expectations of the national and state standards. Through the process, representative committees for each content area must determine what students are

expected to know and be able to do at the end of the K–12 program. These expectations must be organized, sequenced across the grade levels and courses, written in meaningful terms, and placed in useful documents.

The SIM Curriculum, Assessment, and Instruction Framework

Though many existing curriculum frameworks are satisfactory and appropriate, the SIM Center established a new framework with the following components:

- philosophy statement—a set of beliefs about important ideas in a specific content area;
- strands—major themes of the content area;
- program goals—the general intents that guide students' work within each strand;
- scope and sequence—an outline of the skills / concepts and subskills / subconcepts for each program goal, and a matrix sequencing the skills / concepts across grade levels with identification of the learning level expected at each grade level;
- learner outcomes—statements that include expected behavior at the appropriate level of learning, the criterion for successful learning, and the conditions under which the student will learn and be assessed, with each learner outcome incorporating one subskill / subconcept;
- assessments—criterion-referenced measurement techniques that include multiple-choice items and performance assessments appropriate for each learner outcome;
- teaching units—groupings of learner outcomes within a grade level or course for teaching purposes; and
- teaching resources—time, human resources, materials, and activities that maximize the potential that students will successfully master the learner outcomes of a teaching unit.

Not only is leadership the problem, but leadership is also the solution. Leaders must take responsibility and be held accountable for poor results. Different leadership practices must be instituted.

SIM Training

The contracts between the SIM Center and school organizations stated that the SIM team would be on-site for 14 days to work with content area committees on the first six components. Content area committees were comprised of teacher representatives from all grade levels / courses and at least one principal or district administrator. In addition to sessions with the SIM team, committee and individual work frequently took place between sessions. The last two components were assigned to the school organization as a follow-up to the development of the curriculum documents and assessments.

Prewriting activities—including studying trends and issues from literature, reviewing national and state standards, reviewing past student assessment data on

required state and local assessments, and discussing information about other local issues and needs—were used to provide up-to-date background information and stimulate thinking. Each of the first six components of the curriculum development framework (philosophy, strands, program goals, scope and sequence, learner outcomes, and assessments) was drafted individually in sequence. The draft components then were reviewed and revised before approval and publication by the school organization. Though each component was developed separately, the six components were considered a whole product when prepared for publication.

Following development of the curriculum guides, the SIM team facilitated development of end-of-grade or course criteria-referenced assessments, both multiple-choice tests and performance assessments. Teachers were taught the skills for writing assessments so that they could prepare additional assessments in the future.

After the curricula and assessments were complete and approved by the school organization, school leaders were responsible for facilitating the effective implementation of the new curricula. Professional development sessions were to be planned to create understanding on the part of teachers who did not participate in the development process. Teaching units were to be written by teachers and resources assembled. All this was to be done under the guidance of the school leaders.

Follow-Up Study: Methodology

The purpose of the follow-up study was to determine the quality and extent to which the newly created K–12 curricula and assessments in language arts and mathematics were being implemented by the teaching staff. The study consisted of three components: interviewing administrators who were involved with curriculum and assessment; surveying selected teachers regarding the new curricula; and observing selected teachers for 20 minutes in classroom settings. In addition, the scope and sequence grids and learner outcomes written by the curriculum committees at each site served as important data sources because they set the expectations for classroom observations.

Follow-Up Study: Findings Related to Leadership Behavior Deficiencies

Looking at data from 143 classroom observations revealed that only a few teachers focused on the new curriculum and even fewer in a satisfactory manner. Fewer than one-third of the teachers observed had acceptable lesson plans. Other findings included:

- Only one-quarter of the teachers observed focused lessons on skills and concepts appropriate to the new curriculum's scope and sequence.
- Fewer than 40 percent of teachers effectively aligned teaching with the appropriate skill or concept.
- Fewer than 40 percent of teachers provided an appropriate setting for students to practice the skills or concepts.
- Fewer than one-third of the teachers properly aligned their teaching with the appropriate level of thinking in Bloom's taxonomy.
- Fewer than half of the teachers demonstrated satisfactory knowledge of subject matter.

Data from the teacher survey showed wide disagreement among teachers regarding issues important for curriculum implementation. Twenty-one statements were rated on a six-point Likert-type scale. The following issues showed ratings with the most variance:

- support of curriculum with instructional resources;
- use of a variety of assessment methods;
- existence of a district assessment plan;
- staff development for content areas;
- monitoring of curriculum implementation by administrators; and
- plans for reviewing / revising curriculum.

Widely differing perceptions by teachers suggest inconsistent attention to these issues by leaders and confusion about the issues among teachers.

Data from interviews with leaders in the school organizations showed the following leadership deficiencies:

- Teachers received no formal training in the format or content of the new curriculum.
- No formally established systems and processes existed for monitoring curriculum implementation.
- No formally established systems and processes existed for evaluation and revision of curriculum.
- Leaders were unable to discuss the results of student learning assessments.
- Leaders were unable to articulate how classroom instruction was different.
- No formally established systems and processes existed for leaders to use the results of assessments.
- Teachers were not expected to understand, use, or communicate the results of assessments.

Observations of leaders during the curriculum development process also were relevant and instructive. Though leaders were expected to be full partners in the development process, their participation was mostly passive. They routinely avoided hands-on writing and were subject to many distractions.

Given these findings, leadership behavior in these school organizations needs to change to improve learning results. Observations, along with the reports of others, suggest that the findings in these school organizations are not atypical. For example, English and Larson (1996) maintained that many principals do not insist or even think about insisting that teachers link the written curriculum to their daily teaching. Therefore, if principals monitor instruction at all, they do not monitor the teaching of the curriculum (what students are supposed to learn), but rather tend to focus only on teachers' instructional performance (what teachers do). The training, supervision, and performance of most principals related to motivating teachers to implement the approved curriculum are not satisfactory. Principals also lack conceptual planning and organizational and technical skills to deal with overall curriculum development and the monitoring of its implementation. Though Fiore (2004, 43) referred to the notion of "the principal as curriculum leader" as a contemporary one, he also reaffirmed the lack of principal preparation with respect to curriculum leadership. Fiore (2004) maintained that many school administra-

tors consider this assignment to be both impractical and impossible due to their lack of instructional expertise and curriculum training.

Leadership: The Solution

According to Fullan (2001), without guidance and support of principals, efforts to alter classroom practices have a greater likelihood of failure. "Only principals who are equipped to handle a complex, rapidly changing environment can implement the reforms that lead to sustained improvement of student achievement" (Fullan 2002, 16). Though principals are key players in assisting teachers with implementation of the curriculum, other leaders in school organizations must play their roles effectively as well.

Missing Leadership Behaviors

In the follow-up study, the leadership behaviors listed in Table 1 were missing, which led to the indicated findings / results.

Table 1: Missing Leadership Behaviors

Behavior	*Findings/Results*
Leaders did not actively participate in, nor support, the curriculum and assessment development process.	Leaders did not understand the curriculum framework and missed opportunities to demonstrate their concern for, and focus on, the learning results of the organization.
Leaders did not focus on curriculum implementation.	Professional development did not clearly focus on the ends (learning goals). Teacher understanding of the curriculum was poor. There was no evidence of support for developing teaching units and organizing teaching resources necessary for effective implementation.
Leaders did not hold teachers accountable for implementing the curriculum policy.	Curriculum implementation varied from one project site to another. In many instances, the newly developed curriculum was not implemented.
Leaders lacked general knowledge about assessment and students' levels of performance.	Leaders did not have the assessment data to know where improvement was needed and, therefore, had no strategies for guiding and supporting teachers in improvement efforts.

Needed Leadership Behaviors

How do leaders ensure that the four expected outcomes of curriculum development are achieved? The first way that leaders can focus the school on the curriculum is to

participate actively in the development of the curriculum, ensuring that the curriculum documents follow an established framework and are well written. Leaders do this by understanding the framework and criteria for writing it. They monitor the writing of the curriculum and make certain that the contents are aligned with national and state standards and with identified local needs.

Their active participation not only helps to monitor the quality of the curriculum documents, but also communicates the importance of the curriculum to teachers. Lambert (2003) supported this conviction in her discussion of the prerequisites for building high leadership capacity. Lambert (2003, 119) stated, "The principal models, teaches, coaches, and provides leadership training to school staff members as they become skillful participants in leadership." Participation demonstrates that leaders are able to "write" curriculum using the framework and to provide other writers with high-quality feedback.

Once the curriculum guides and assessment documents are published and ready for implementation, leaders demonstrate their focus on the curriculum by providing opportunities, tools, and resources for all teachers to understand and use the new curriculum and assessment documents. This is a significant staff development effort. Effective leaders demonstrate the importance of this training by serving as instructors or facilitators. By doing this, leaders again demonstrate that their focus is the school's curriculum.

Leaders also organize the school's resources—human, facilities, budget, and material—around the curriculum and its implementation. Teams of teachers are specifically assigned blocks of time, curriculum, and groups of students. Teaching teams are responsible for the learning results described in their assigned curriculum. Facilities, materials, and budget are allocated in ways that facilitate the teaching of the curriculum.

Leaders hold teachers, students, and themselves accountable for achieving results. Critical to accountability is measurement of results. Leaders make sure that a required assessment program is established, which includes multiple, valid, and reliable measures, both objective and subjective. Teaching the curriculum and using the assessments are not negotiable. Leaders ensure that teachers are able to analyze, interpret, and use assessment data.

Evaluating the SIM Process

When desired outcomes are not fully achieved, it is necessary to look at *all* aspects of the processes used. Therefore, the strengths and weaknesses of the SIM training and development process, as well as past and future improvement efforts, are examined.

Strengths of the SIM Process

The SIM process has produced aligned curriculum documents that follow a common, comprehensive framework for K–12 schools in all subject areas. Teacher representatives, who would actually teach the curriculum, authored the documents. The documents aligned the school curriculum with required state standards, national standards,

and locally identified needs. Finally, the writing process and the concepts of technical writing were used to create user-friendly communications tools for the curriculum.

Weaknesses of the SIM Process

Time for training and development always seems to be in short supply in school organizations. This was true in the school organizations involved in the SIM process. Curriculum development was new to many participants. The most detailed components of the framework—learner outcomes and assessments—did not always meet the established quality standards. This was particularly true for learning at the application, analysis, synthesis, and evaluation levels. Though leaders were expected to be active participants, they were not. Taking a strategic view of educational development and school improvement was difficult to sell to some participants who were used to focusing on the day-to-day work of teaching.

Strengthening the SIM Process

To address the time and product quality issues, the training process was reviewed and revised to enhance the focus on document development. The amount of time for individual and group work with the SIM team between sessions was expanded. In addition, the amount of practice and writing time and the number of examples used in teaching was increased; the thinking processes were separated into smaller, more specific steps; and new tools to guide the participants' thinking process were developed. The frequency of feedback during the training and development process also was increased.

To address the lack of active leader participation, special sessions were instituted in which input from district leaders was solicited. These sessions focused on the future expectations of leaders. The development of a "leaders' strand" has been initiated and will become part of the training.

To encourage participants to be more strategic in their thinking and focus on educational development and improvement, training activities focused on placing the work to be done in the context of the whole framework, "the big picture," and the need to communicate learning goals to *all* audiences. The need to improve the educational program to increase student-learning results was emphasized.

School Leadership

The results of the follow-up study support a conclusion made by Cawelti (1999, 65): "Leaders must help school staff members make multiple changes that together ensure that the daily instructional lives of children improve." The SIM team's responsibility was to help the school organization make one critical change—the curriculum. Changing the curriculum in isolation, however, will not lead to school improvement—specifically improved learning results. School vision and mission must be altered to incorporate this new development; leadership styles conducive to developing a professional learning community must be adopted; and knowledge about the change process must be applied. According to Calabrese (2001, 164), "Effective leadership is a power-driven core component that contributes to organizational

health." Effective leaders know that the ability to lead change in an organization is critical to its survival. Leaders have a responsibility to lead change that results in more effective and efficient educational practices.

The follow-up study confirmed a concern the SIM team frequently had while working in school organizations; namely, school leaders were not playing an active role in the process. This was true even though leaders were formal members of the content area committees, and additional efforts to involve them were made. Leaders frequently did not attend sessions, and when they were present, were not active participants. In most cases, school improvement seemed to be viewed by leaders as an isolated process, which they had delegated to the SIM team. What is needed is a more comprehensive approach to school improvement that includes curriculum, instruction, and professional development (Schmidt, McKnight, and Raizen 1997). Leaders are the ones to make this happen.

Schmoker (1996; 1999; 2001) has written extensively about critical components of school improvement. He identified effective teamwork, measurable goals, and performance data as key ingredients for school improvement. "Leadership should lead to results; if we wish to see a new generation of leaders who can truly lead us to better results, then we must adjust the system to facilitate such leadership" (Schmoker 1999, 113). The SIM team's leaders' strand—to be used parallel with the curriculum development strand—gives emphasis to the role and behavior needed from leaders to make reform and improvement efforts effective. Generally, the effective school leader creates and implements a school plan, for the curriculum required by the state and local district, that:

- focuses on achieving the learning results described in the curriculum documents;
- includes all students enrolled in the school;
- follows district policy;
- allocates staff, time, money, facilities, and other resources to support achievement of the curriculum;
- aligns all school systems (such as school scheduling, staff supervision, report cards, and budget) with achievement of the curriculum;
- uses an organizational structure that creates teaching teams with diverse and complementary expertise assigned to diverse groups of students;
- includes an assessment plan and a data-driven continuous improvement process; and
- addresses staff development needs.

To achieve school improvement, school leaders must help teachers and parents think beyond the strategies of reduced class size and traditional schools that have been organized around one classroom teacher in each classroom and many specialist teachers. This kind of change is not easy, but it is clear that old strategies have not satisfactorily improved learning results over the past several decades. Leaders must orchestrate multiple changes that provide opportunities for teachers to work in teams, focus resources effectively on curriculum development and implementation, and establish accountability for results.

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Charles E. Ruebling *is an educational consultant. His areas of educational specialization and research interests include curriculum, assessment, educational technology, personnel evaluation, staff development, organizational structure/development, and leadership.*

Shirley B. Stow *is Director of a field-based research center and Associate Professor in the College of Education at Iowa State University. Her areas of specialization and research interests are curriculum/assessment development, personnel evaluation, and staff development training.*

Frances A. Kayona *is Assistant Professor at St. Cloud State University's College of Education in the Department of Educational Leadership and Community Psychology. Her areas of specialization include development of curriculum, assessment, and performance appraisal systems; program evaluation; and school reform and change.*

Nancy A. Clarke *is an educational consultant working with the School Improvement Model (SIM) at Iowa State University. Her areas of specialization and research include curriculum/assessment development and educational leadership.*