This paper reports on the experiences of schools that are attempting to change into dynamic, responsive, data-driven organizations that allow for learning at all levels. It identifies aspects of leadership that appear to be significant and discusses the problems the schools encountered. The sample for the study, conducted from 1995 to 1997, was composed of 13 schools with 312 teachers from 3 school districts in Newfoundland (Canada). The schools included high schools, all-grade schools, junior-high schools, and elementary schools, ranging in size from 185 to 870 students. All the schools were reorganizing at the school level. A quantitative and qualitative methodology was used. Findings show that each school's leadership approach either positively correlated with, or explained a significant amount of, the variance of the learning-organization disciplines. It can be assumed that the leadership approaches and practices that were consistent with emerging models of team leaders accounted for significant variance in selected learning-organization characteristics. The principal and vice-principal were recognized as the primary sources of leadership; the whole school staff were seen as important, as well. However, results suggest that researchers cannot be certain that all educators endorse team leadership as a means to successful change. Contains 43 references. (RJM)
LEADERSHIP, ORGANIZATIONAL LEARNING, AND CLASSROOM CHANGE

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Leadership, Organizational Learning, and Classroom Change

Although there is a consistent call for strong leadership in education, there is generally a lack of precision and understanding of that elusive concept within the larger society. Despite this fact, certain images and concepts have emerged in the educational leadership research conducted in the 1990s. Most writers and researchers acknowledge that the organizational structures of schools and school systems must change. King (1999), writing in the ASDC Yearbook, *Preparing Our Schools for the 21st Century*, illustrates current expectations held by many:

The work of schools in the 21st century will be to create systems that are characterized by continuous improvement. The concept is not a new one; making it a reality, however, will require a different kind of organization. School systems will have to be much more dynamic, data-driven organizations that can be immediately responsive and that allow for learning at all levels. In the past, we boasted about our five-year strategic plans. In the context of uncertainty and rapid change that defines our era, those plans may be outdated before they are complete. Therefore, we must be prepared for continuous examination of our strategies. As educational leaders, we must help our organizations find stability and growth amidst enormous change. (p. 165)

Images of educational leadership for “continuous improvement”, that “allow for learning at all levels”, that are “dynamic, data-driven” and “responsive”, are rare. This study reports on the experiences of 13 schools who are attempting to change into the type of organization King describes. It identifies aspects of the leadership which appear to be significant, and as well discusses the problems the schools encountered.

Conceptional Framework

The theoretical framework for our research grew out of three main research strands: transformational leadership, classroom practices and change theory, and schools as learning organizations. We integrated these three strands as we sought to understand the leadership for change occurring in the thirteen different schools.

Transformational Leadership

The starting point for our study on leadership was Leithwood’s work on transformational leadership (Brown, 1994; Leithwood, 1992, 1994, 1995a; Sheppard, 1995). Components of such leadership have been identified by Leithwood, and the variables which we used as indicators included leadership which was: democratic, participatory, decentralized, inclusive, visionary, change oriented, visible, supportive, intellectually stimulating, collaborative, goal oriented, and which held high expectations for members of the organization. The leadership practices that were measured grows out of these variables: develops shared vision, builds consensus on school goals, holds high expectations, models behavior, provides individualized support, provides intellectual stimulation, strengthens school culture, and builds collaborative structures. We assumed that transformational leadership occurred at all levels, and that teachers, including department heads, play significant roles in leadership for change (Brown, 1994). We also assumed that teachers, as
leaders in the change process, must be critical-reflective action oriented professionals working in an environment of collaboration where they are committed to making a difference to teaching and learning (Calhoun, 1994; Fullan, 1995; O'Neil, 1995a; Sagor, 1992). Despite such studies supporting this model of leadership noted above, there exists little evidence that collaborative leadership can be developed; nor is there much evidence connecting such leadership to classroom practices (Fullan, 1995, 1993; Khattri & Miles, 1995; Krug, Ahadi, & Scott, 1990; Leithwood, 1996). For the sake of clarity and to reduce the misconceptions in schools surrounding terms such as "transformational leadership" and "collaborative leadership", we decided to use the term "team leadership" in discussing this emerging model of leadership.

Classroom Practices and Change Theory

Research throughout the 1990s suggests that many attempted reforms have not resulted in changes in classroom practices that have been anticipated (Beer & Eisenstat, 1996; Cranston, 1994; Fullan, 1993; Murphy & Hallinger, 1993; Sarason, 1990; Sergiovanni, 1995). For example, Murphy and Hallinger (1993) note that "at neither the theoretical nor the conceptual levels was there much evidence to link ... restructuring efforts [such as, school-based management] with changes in classrooms, relationships between teachers and students, and/or student outcomes" (p. 254). Similarly, Cranston (1994) contends that "at the classroom level at least, it is frequently a case of business as usual, with the changes greeted in some instances somewhat without enthusiasm, together with cynicism, antagonism and a deal of resistance" (p.23). Marsh (1999), herself a social studies teacher, concludes: "Whatever fascinating discussions are taking place at other levels, decades of reform efforts and debates have not meaningfully changed the life of the average teacher in the United States" (p. 192).

Sergiovanni (1995) cautions that even if schools adopt innovations, there is no assurance that they adopt more than just the name. He states, "Schools frequently adopt innovations that are not implemented or, if implemented, innovations are shaped to the way things were to the point that the 'change is hardly noticeable' " . Khattri and Miles (1995) conclude that “essentially, people doing restructuring are sometimes not wholly clear about what they want their redesigned school to look like, or how they are going to get there, [and that, deeply-held systems of beliefs and assumptions] are a significant influence on how learning centered a school can become” (p. 279).

These findings that efforts at school reform and school improvement have had little impact on classroom practices suggest that the following observation may also apply to schools:

Everything in our culture is about the management of impressions and appearances....Company CEO’s spend 90% of their lives making companies look good for investors, not being good. Managers spend their lives making little departments look good, not working for the good of the company. (Senge cited in Dumaine, p. 150)

We approached this study with the view that school improvement efforts, to be meaningful, must be more than “window dressing”; that if schools are to improve student outcomes, changes must
first occur in classroom practices. Our intent was to determine the relationship between classroom practices, leadership approach and organizational learning at the school level. Because we had no control of the change initiative undertaken by each school, we decided that the study of specific classroom practices should be avoided. Our measurement of classroom practices is determined by the extent to which there exists a school focus on classroom practices and the extent to which such practices are perceived to be innovative and improvement oriented.

Schools as Learning Organizations

To analyze and interpret what we observed happened in the 13 schools, we adopted the framework of schools as “learning organizations” as defined by Senge (1990). This concept defines learning organizations as:

Organizations where people continually expend their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. (p.3)

Such organizations practice five "disciplines", as defined by Senge, Roberts, Ross, Smith, & Kleiner (1994):

- Personal mastery — learning to expand our personal capacity to create the results we most desire, and creating an organizational environment which encourages all its members to develop themselves toward the goals and purposes they choose.
- Mental models — reflecting upon, continually clarifying, and improving our internal pictures of the world, and seeing how they shape our actions and decisions.
- Shared vision — building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there.
- Team learning — transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual members' talents.
- Systems thinking — a way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behavior of systems. This discipline helps us to see how to change systems more effectively, and to act more in tune with the larger processes of the natural and economic world. (p.6)

There is considerable support from outside education for organizations to become learning organizations. Handy (1994) argues that,

In an uncertain world, where all we know for sure is that nothing is sure, we are going to need organizations that are continually renewing themselves, reinventing themselves, reinvigorating themselves. These are the learning organizations, the ones with the learning
habit. Without the habit of learning, they will not dream the dream, let alone have any hope of managing it. (p. 45)

While the concept of the learning organization has developed outside of the school setting, research within education (Fullan, 1993; Leithwood, Dart, Jantzi & Steinbach, 1993; Louis, 1994; Sheppard & Brown, 1996a, 1996b) supports its meaningfulness in the school context. Fullan (1993) sees this as "the new work of the principal and the teacher" (p. 66) and further contends that if we are to succeed in bringing about meaningful improvement "schools must become learning organizations" (Fullan, 1995, p.234). In spite of such support, the relevance of this learning organization concept to education requires empirical study (Fullan, 1995; O'Neil, 1995b). The intent of our research is to provide such study, and to contribute to the development of a theory of "learning organization" in schools. We are aware that prior to Senge’s popular work (1990), there were research studies on organizational learning or how members of organizations learn both individually and collectively1. Throughout this paper, "organizational learning" and "professional learning" are use interchangeably and refer to the process of “becoming a learning organization”. Use of these terms is consistent with Kofman and Senge’s (1993) perspective that:

There is no such thing as a ‘learning organization’...We are taking a stand for a vision, for creating a type of organization we would truly like to work within and which can thrive in a world of increasing interdependency and change. It is not what the vision is, but what the vision does that matters. (p. 16)

Methodology

The sample for this study, conducted from 1995 to 1997, was composed of thirteen schools with 312 teachers from three school districts in Newfoundland. See Table 1. The schools were chosen to be representative of different types: high schools, all-grade schools, junior high schools, and elementary schools. School size ranged from 185 to 870 students, with schools located in both rural and urban centres. All schools were engaged in efforts to bring about change at the school level. Specific initiatives and the length of involvement varied from school to school. Some schools had been engaged in a particular initiative for 3-4 years and were recognized for their success, while others were just beginning the process after a school team had completed a summer institute in team leadership.

INSERT TABLE 1 ABOUT HERE

1In particular the work of C. Argyris, such as: Reasoning, Learning and Action: Individual and Organizational (1982) and D. Schon (1983) The Reflective Practitioner: How Professionals Think in Action.
We employed both quantitative and qualitative methodology. The decision to combine these methodologies was based on the requirement imposed by the study of schools as learning organizations. Garvin (1993) proposes that organizational learning can be measured through three stages:

The first step is cognitive. Members of the organization are exposed to new ideas, expand their knowledge, and begin to think differently. The second step is behavioural. Employees begin to internalize new insights and alter their behaviour. And the third step is performance improvement, with changes in behaviour leading to measurable improvements in results. Because cognitive and behavioural changes typically precede improvements in performance, a complete learning audit must include all three. Surveys, questionnaires, and interviews are useful for this purpose. At the cognitive level, they would focus on attitudes and depth of understanding. To assess behavioural changes, surveys and questionnaires must be supplemented by direct observation; here the proof is in the doing. Finally, a comprehensive learning audit also measures performance...for ensuring that cognitive and behavioural changes have actually produced results. (p. 90)

In order to measure all three stages of organizational learning, we used three survey instruments: a modified version of the School Leadership Survey (Leithwood, 1995b), a modified version of the Process of Professional Learning Survey (Leithwood, 1995c), and the Classroom Practices Survey developed for this study. Also, we availed of interviews, document analysis, observations, and teacher journals which we conducted or collected at each school.

We adjusted the Process of Professional Learning Survey to measure five factors that are consistent with Senge's Five disciplines: shared vision, team learning, personal mastery, mental models, and systems thinking. We determined the reliability of each new scale by administering the survey to 142 teachers. The internal consistency reliability coefficients (Cronbach Alpha) for each of the five scales ranged from .67 to .89.

Minor wording changes were made to the School Leadership Survey to make it appropriate for the Newfoundland context. This instrument seeks the perceptions of respondents relative to sources of leadership, leadership approach, and leadership practices. The Internal consistency reliability coefficients range from .76 to .92.

We developed the Classroom Practices Survey for this study. The initial version was administered to 29 teachers. The resulting data were subjected to item analysis to identify items that reduced the alpha; to improve the internal consistency of each scale such items were either removed or rewritten. As a result of feedback from teachers, we also reworded a number of items to make them clearer. To improve the content validity of each construct, all constructs were reviewed by several practitioners who verified that the items fit in a particular category. Items that were questioned were removed or rewritten. Finally, we administered the revised instrument to 123 teachers to determine internal consistency reliability. The coefficients range from .73 to .90.
which meets the minimum standard of .70 set by Fraenkel and Wallen (1990). One construct, "innovative" is employed in this study (Cronbach Alpha, .88).

The model of research was one that dictated that the researchers were also critical friends. A critical friend is,

a trusted person who asks provocative questions, provides data to be examined through another lens, and offers critique of a person's work as a friend. A critical friend takes the time to fully understand the context of the work presented and the outcomes that the person or group is working toward. The friend is an advocate for the success of that work. (Costa & Kallick, 1993, cited in Stoll & Fink, p.194)

This role allowed the researchers special insight into the school. Teachers and administrators were more willing to share realities with us as we were often asked to assist in problem solving. This arrangement allowed us access to school and district documents, gave us higher than usual return rates for surveys (86% return rate), and gave us access to an on-site coordinator who acted as liaison with the schools and assisted in interpretation of data. The role of critical friend provided us with an unobstructed vantage point from which to view school culture as defined by Schein (1996):

Culture manifests itself at three levels: the level of deep tacit assumptions that are the essence of culture, the level of espoused values that often reflect what the group wishes ideally to be and the way it wants to present itself publicly, and the day-to-day behaviour that represents a complex compromise among the espoused values, the deeper assumptions, and the immediate requirements of the situation....To discover the basic elements of a culture, one must either observe behaviour for a very long time or get directly at the underlying values and assumptions that drive the perceptions and thoughts of the group members. (p. 11)

The unit of analysis for the quantitative aspect of this research was the individual teacher. The choice of the teacher as the unit of analysis appeared to be more appropriate than the school level since school level analysis would have required averaging across teachers thereby eliminating teacher variability and reducing sample size. Additionally, the choice of teacher is theoretically sound in that there is much research support for the claim that if leadership is to be effective it must be validated by the consent of individual followers. Data were analyzed using multiple regression analysis. Multiple regression allowed the researchers to examine the F test of linearity to determine if there were statistically significant relationships among selected variables and the Multiple R Square to determine the amount of variance of selected variables explained by other variables.

The focus for the qualitative aspect was the school. The qualitative angle allowed the researchers to focus on the models of leadership that were evident in schools; to develop images of the educators' experiences in attempts to shift their leadership models; and to identify links between
leadership practices, the theory of the learning organization, and classroom practice. Interviews, field notes, documents, and journals were transcribed and interpreted in the context of quantitative findings. Additionally, we employed all these data as well as the survey data in the development of a school report that we presented to a school leadership team or, in some cases, to the entire staff. During the report presentation sessions, school groups provided interpretative feedback that we employed in subsequent analysis. Each of the primary researchers conducted separate analyses of the qualitative data and through discussion of the preliminary interpretations, developed another interim perspective that was then shared with the site-coordinator who helped unravel some of the questions that had emerged to that point. Additional interpretations were developed in consultation with a research assistant, a school principal on study leave from his position in a k-9 rural school. Data analysis followed the steps outlined by Woods (1986). These are: (a) speculative analysis consisting of “tentative reflection, perhaps revealing major insights, that is done throughout the data collection” (p. 121); (b) classifying and categorizing, or the creation of major categories within the data; and (c) Concept formation, which Woods sees as involving the creation of models, typographies, and theory.

In our attempt to develop an understanding of the relationship between team leadership, organizational learning, and classroom practices, we sought to understand emerging models of team leadership. We asked: What do schools engaged in such activities look like? How are they doing it? What are their problems? These questions were primarily explored through qualitative analysis of interviews, principals’ and teachers’ sketches of leadership models, documents, and journals, but the survey data also provided insights into the extent team leadership were employed in the sample schools. We wanted to see if there was a relationship between team leadership and schools as learning organizations, and answers were provided through analysis of the survey data. In order to determine the amount of variance in organizational learning categories accounted for by these differing models of leadership, the survey data were subjected to multiple regression analysis. Also, correlation matrices were developed to determine what significant relationships exist between leadership approach and the organizational learning and between leadership practices and organizational learning. Since we believe that the impact on student learning, and therefore on classroom practices, is essential to any form of leadership, we looked for evidence that schools who were attempting to be learning organizations changed their approach to classroom practices. We did this qualitatively, through analysis of interviews, observations, journals, and documents, and through analysis of descriptive survey data for each school.
Findings

Two of the main findings from this study will be discussed in this paper. First, we will describe what the study revealed of the relationship between team leadership and each of the five disciplines in a learning organization, and as well identify the obstacles that these schools faced in attempting to become learning organizations. Secondly, we will provide evidence that those schools who are striving to become learning organizations are more focused on improving classroom practices.

Team Leadership and Organizational Learning

To determine the relationship between leadership approach (team learning) and the disciplines of the learning organization, we regressed each of the five disciplines on twelve leadership variables that were scored dichotomously: authoritarian—democratic, hierarchical—participatory, centralized—decentralized, cliquish—inclusive, stagnant—visionary, passive—change-oriented, laissez-faire—high expectations, invisible—visible, indifferent—supportive, intellectually unstimulating—intellectually stimulating, isolationist—collaborative, directionless—goal-oriented. Those variables that were considered inconsistent with the emerging model of leadership were scored as “1” and those considered as emerging were scored as “2”. Consequently, positive correlations and beta weights are to be interpreted as practices consistent with emerging models. As can be seen from the correlation matrix (Table 2), the following leadership approaches are significantly positively correlated (p<.01) with all five disciplines: democratic, decentralized, inclusive, visible, collaborative, and goal-oriented. When each of the five disciplines was regressed on the leadership variables the relationship was found to be significant and all betas were positive. The best-fitting models are presented in Table 3. Leadership that is goal-oriented, collaborative, inclusive, and democratic accounts for 39% of variance in shared vision. Three of these same leadership variables, goal-oriented, collaborative, and democratic, when combined with leadership that is viewed as decentralized accounts for 45% of the variance in team leadership. The extent to which teachers feel that challenging mental models is encouraged and supported is influenced by leadership that is change-oriented, goal-oriented, democratic, inclusive, participatory, and intellectually stimulating (39% of the variance is explained by this model). The leadership variable, “intellectually stimulating”, while not negatively correlated with mental models, appears as a negative beta weight in the best-fitting model. This suggests that this variable is acting as a suppressor variable when employed with the other variables, that is, it corrects for sources of error and can be interpreted to mean that the lower the level of intellectual stimulation that is occurring, the more variance in mental models is accounted for by the other leadership variables (Darlington, 1995). Four leadership variables account for 35% of the variance in systems thinking. These variables are goal-oriented, democratic, decentralized, and collaborative. Only two variables, goal-oriented and decentralized, account for significant variance (15%) in personal mastery.

INSERT TABLES 2 AND 3 ABOUT HERE
Global analysis of all the models reveals that goal-oriented leadership was common in all of the best fitting models. This was followed by democratic leadership that was common in models for all disciplines with the exception of personal mastery. Both decentralized and collaborative leadership are each included in three models. Leadership that is participatory, change-oriented, and intellectually stimulating are significant in the explanation of variance of only one learning organization characteristic, mental models. Supportiveness, visionary, and holding high expectations are significantly correlated (p<.05) with only one of the learning organization variables and was not found to explain any variance in any of the best-fitting models. Neither of these latter variables appear to be particularly robust.

The leadership practices that were measured are as follows: develops shared vision, builds consensus on school goals, holds high expectations, models behavior, provides individualized support, provides intellectual stimulation, strengthens school culture, and builds collaborative structures. All leadership practices are positively correlated with the learning organization disciplines (p<.01). When each of the variables representing the disciplines was regressed on the leadership practices, the best fitting leadership models accounted for 42% to 70% of the variance. Building consensus on school goals is particularly robust. It is included as a significant variable in four of the five models. The only other variable accounting for significant variance in more than one model is building collaborative structures that is included in the best fitting model for mental models and team learning. All other variables are included in just one model with the exception of support that is not included in either model. Even though all the leadership practices variables uniquely accounted for significant variance in each learning organization construct, because all variables were highly correlated, the amount of additional variance explained when another variable was entered in the model was most often not significant. As noted by Darlington (1990), this does not negate the importance of each variable in explaining variance related to each learning organization discipline.

In summary, each of the leadership approaches and practices variables is either significantly positively correlated with or explains a significant amount of the variance of the learning organization disciplines. Additionally, best-fitting models of leadership approaches and practices explain from 15% to 70% of the variance in these learning organization constructs. Consequently, it is reasonable to conclude that leadership approaches and practices that are consistent with emerging models of team leadership account for significant variance in selected learning organization characteristics.

INSERT TABLES 4 AND 5 ABOUT HERE

The problems encountered by the schools as they attempted to change to a model of team leadership were identified as falling into nine major categories: time restraints, school management concerns, limited perceptions of leadership, district interference, personnel changes, apathy toward change, dysfunctional school-community politics, difficulty with goal-setting, reduced professional development opportunities, and the principal’s unwillingness to share power. See Table 6.
Linking Classroom Practices

In an attempt to determine connections between classroom practices and schools that are striving to become learning organizations, the researchers focussed on those schools where teachers and administrators appear to be taking a stand to create places of learning where they want to work and where student learning opportunities will be enhanced. Three researchers independently reviewed all of the available data on each school and rated each school in respect to the degree to which it appeared to be working toward becoming a learning organization. While the specific ratings had some minor variations, all three raters were in agreement as to those schools that were engaged in organizational learning to a greater extent than others. The final list of schools selected is as follows: School 1, 3, 4, 5, 8, and 9. For the purposes of this analysis, these schools were designated as “select” schools, on the basis that were rated by all three raters to be engaged in organizational learning more than the others assessed. We posited that if the emphasis on improvement of classroom practices in each these schools was significantly different than in the other schools, it was reasonable to assume a relationship. While we made no attempt to study statistical relationships between classroom practices and “select” schools, the richness of the descriptive data accumulated for each school allowed us to develop rich images of connections between team leadership development, the learning organization, and classroom practices. Through these images, differences between “select” schools and the others regarding the emphasis on improvement of classroom practices were quite distinct in all cases. The sample comments below are representative of the differences displayed.

At School 3, in response to the question, “What is the primary focus/emphasis this year?” the principal clearly connected the school’s primary focus with classroom practices:

To continue to develop skills and work with the social studies department to prepare them to fully integrate technology in their classes (when appropriate and necessary). Technology is only successful when students use it.

This focus on the classroom was confirmed by the teacher-librarian and the leadership team. The teacher-librarian stated:

We are worrying about the way we teach and we are also worrying about how to integrate technology. You can do both of it.

One member of the leadership team received endorsement for the expression of the following sentiment:

We have people here who have seen so much and learned so much and say “My God, here are five hundred things I can do in my course using technology”. Other poor souls, like myself, probably not so quick off the mark, have discovered three things that are going to take a lot of time to prepare.
At School 8, another “select” school, the principal indicated that the main focus in the school was, overall academic improvement, and the basics of reading and literacy, mathematics and science. The second one we identified...was computers—integrating computers into our classroom practice was that aim. I would say that's...the two big ones.

A member of the leadership team at School 4, noted the focus on classroom practice as well:

Everyone is really concerned with the results of CTBS [Canadian Test of Basic Skills]. We, as a school are very concerned and want to do something to help change the situation. From now on, all regular grade level Elementary meetings will be spent on objectives being recorded and then an analysis of results for specifics. An action plan will then be drawn up. It was also decided that we would get more of a commitment from parents to get more homework done in math. It was decided that there was not enough practice time in class.

In other “select” schools, teachers and principals were quite anxious to describe positive changes in classroom practices that have occurred as a result of their efforts. For example, the following comments from three teachers at School 9 regarding changes to the teaching-learning approach in their classrooms demonstrate the shift in classroom practices in that school:

students have the opportunity to engage in RBL units which requires sources other than the textbook.

We have moved away from a text oriented way of doing things—new social studies, new math.

Overall children are learning more now. They are not restricted by the textbook, rather objectives guide the instruction. Kids have access to more.

In School 1, one teacher commented:

it is exciting to see the shift over the last few years. The emphasis on academic achievement, homework, the development of advanced programs, and the integration of technology in various courses have led to a new academic climate in this school. Whereas a few years ago it was not cool to do well academically, now our best students are more self assured and more of them are quite proud to do well.

The principal of School 5 described the classroom focus in that school:

We've spent a lot of time in the past couple years on cooperative learning. We tried to get away from the lecture style and tried to have the student as a more active participant. We
spent a lot of time on that and I think it has gone fairly well. We are at a point now where I would like to take it a step further.

The following comment by the teacher-librarian verified the principal's perspective and revealed clearly that the focus in the school on classroom practices was one that was determined by the staff as a whole:

We've just come off a two to four year staff focus on cooperative learning. After our last in-service it was put to us where did we want to go from here. I think there was a major consensus, amongst the staff in terms of staff development and cooperative learning that the onus is on us now. I don't think any one could do any more in terms of presenting us with the skills or information, it is up to us now to practice the skills.

Interviews with teachers in the other schools that were not designated as “select” reveal contrasting images. Their efforts do not appear to be directed at improvements in classroom practices, and in several schools, teachers are somewhat frustrated that the teaching-learning environment has deteriorated. The principal of School 10 noted that,

Teachers express great frustration with discipline and academic performance. Incomplete assignments—work habits have deteriorated. For example, you might get 15 projects complete out of 35. It would be rather odd to have all assignment ever completed. This is different than my previous experience.

When two teachers in this school were asked to identify the primary focus in the school, they both had great difficulty. In response to that question, one teacher stated:

The primary need is to focus on the lack of student motivation and poor work ethic. Good students often hide good grades. Good performance is looked at as nerdy—some are mature enough to handle that, others are not. Students are not nearly as well prepared as they were. There is a growing frustration among all teachers regarding the poor work ethic and classroom discipline problems. Students sit and chat in class rather than complete work. When questioned, they respond that they will do it later. This “later” often does not come, as it is quite difficult to have assignments completed by the entire class. This response is common among good students as well as poor students—even in my senior physics class.

The other teacher commented:

There are differences from five years ago. The differences are negatives. In the 1980's standards were higher. Now an 80% is watered down. Students in the level 3 literature course cannot do what Grade 11 students could do before high school reorganization. The majority of students are probably no worse off, but the top students are.
At School 2, the following comment by the school principal, expressing frustrations with the lack of professional development opportunities, also reveals a school that has not taken ownership of the classroom problems identified, but have chosen to blame others instead:

The new spelling program in Grades 4, 5, and 6 would have reduced teacher workload because it was much more geared toward teaching spelling strategies, rather than the old approach to spelling where you give all the exercises and collect them in and mark them and whatever...[but teachers] have not adopted this program. They haven't had any inservicing and even though I have notified them and given them the materials, I don't believe a lot of them know what to do with it, and maybe are afraid to branch out and take a different approach to spelling because in their minds parents are geared to thinking what a spelling program is. And, you know, for the teacher who is uncertain about the new approach, for them to go to parents and justify why we are no longer giving the spelling list is beyond them right now.

She makes a similar comment regarding a health program:

The Comprehensive School Health program is not in place in this school. I said to teachers "How do you like the new program?" They say, "I haven't seen a difference from the old program." It's because they are not treating it any differently because they haven't been inserviced on it, and they don't understand what the comprehensive part of it is, which is really bringing the community into the school and using the resources that are out there.

At School 11, the principal identified technology and student evaluation as the primary foci. In spite of this, neither she nor other teachers noted these as initiatives that influence classroom practices. Regarding student evaluation, she noted that,

The evaluation policy has been significant, but teachers have not really bought into it. It is difficult to implement when people do not see it as important.

The lack of a school-wide focus on improvement of classroom practices is evident from her comment:

They want to be left alone to teach, if someone is doing bad in their course they will deal with it.

While a teacher indicated that she has added cooperative learning to her repertoire of classroom strategies, she noted that this was something that was initiated by the district. It appears, as well, that little attention was given to implementation in the school; rather teachers either adopted it, or they did not.
Most change has been initiated by the district—someone from the outside. We have adopted and adapted these things—not swallowed them hook line and sinker. I use cooperative learning a lot and find it of benefit—I use pairs and groups of 3's, but not 4's.

At School 12, in a recent needs assessment, students and parents gave an unfavourable rating to classroom practices. On a scale of 1-4 (strongly disagree to strongly agree) the average rating of students was 2.43 for the statement “I like the way teachers teach in most of my classes.” As well, they gave a average rating of 2.31 for the statement “My teachers use a lot of different activities to teach their lessons.” A program coordinator who has been working quite closely with this staff, and has worked in several classes in the school, indicated that there was no school-wide focus on classroom practices:

Individual teachers try things out, but there is no focus on change in classroom practices. The science and mathematics departments are very traditional. Also, the language and social studies teachers are quite traditional. Then there is a group of younger teachers who try new things, but this group is not large enough to make major change.

School 6 has suffered from a lack of focus. We, with the site-coordinator, met with the leadership team and assisted in the planning for a staff development day that focussed on assessment of their needs and the development of action plans for growth. One of the researchers participated in this day. At the outset, the team expressed serious concerns about the formal leadership in the school and was quite clear about the lack of vision that existed. Discussions during the day confirmed many of the concerns that the team had expressed and revealed clearly that there had been little consideration of classroom practices or student achievement up to that point.

At School 7, a new principal has recently been appointed. His observations are that teachers in that school are quite traditional in their classroom practices and that there has been absolutely no collaboration. There has been no discussion regarding the need for change and no plan for growth exists. He stated:

While school improvement plans have been submitted to the school district over the course of a number of years, these plans have just been for appearances and have been primarily developed by the previous administration, rather than the staff as a whole. There has been no formal process directed at improvement.
CONCLUSIONS

Findings of this study support that leadership approaches and practices that are consistent with emerging models of leadership described in this paper are significantly positively related to and explain a significant amount of the variance in schools as learning organizations. In spite of these connections, the images throughout this paper suggest that we cannot be at all certain that all educators endorse team leadership as a means to successful change. Among the educators in this study perspectives varied. Furthermore, we cannot assume that those that are willing to accept that the model has potential will be able to make shifts in leadership approach without effort or difficulty. The ability of administration to make the shift is quite dependent upon their understanding of emerging leadership theories, the extent to which potential followers view this as an appropriate model, and the ability to deal with other contextual variables. In order for teachers to lead such a shift without the endorsement of the school principal, they will need considerable support from district administration. The obstacles identified in this study fall into nine major categories: time restraints, school management concerns, limited perceptions of leadership, district interference, personnel changes, apathy toward change, dysfunctional school-community politics, difficulty with goal-setting, reduced professional development opportunities, and the principal’s unwillingness to share power.

A positive finding of this research is that approaches and practices of leadership that are consistent with emerging models appear to be in widespread use. All schools included in this study appear to employ such models to some extent. While the principal and vice-principal were recognized as the primary sources of leadership, the whole school staff were seen as quite important as well. Additionally, many other internal and external sources were recognized as important in all schools. Leadership was viewed by most as visible, supportive, goal-oriented, visionary, change-oriented, collaborative, democratic, holding high expectations, intellectually stimulating, participatory, and inclusive; and leaders were perceived to promote high expectations, model behaviour, strengthen school culture, build collaborative structures, develop shared vision, and build consensus on school goals.

If we accept the findings of this study, it provides a rich starting point for further research and practice in this area. It suggests that we must provide professional development experiences related to emerging models of team leadership and organizational learning for educators at all levels of the system. These professional development experiences must be provided over an extended period of time, and support must be provided to all those at the district and school levels who wish to engage in the process of developing learning organizations. Additionally, in order for schools to continue to grow as learning organizations, they must be trained to engage in action research consistent with Sparks’ (1996) contention that “to become learning organizations schools must engage in organizational development activities...based on continual data collection, analysis, and feedback, focusing on the development of groups and individuals to improve group functioning” (p. 262).
References


Table 1

A Description of Schools Included in this Study

<table>
<thead>
<tr>
<th>School</th>
<th>Type</th>
<th>Size</th>
<th>Location</th>
<th>Institute</th>
<th>Main Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Stu. (Teach.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>High School</td>
<td>861</td>
<td>Urban</td>
<td>No</td>
<td>R.B.L. Technology Achievement</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>520</td>
<td>Urban</td>
<td>Principal</td>
<td>Assessing Needs</td>
</tr>
<tr>
<td>3</td>
<td>High School</td>
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<td>Urban</td>
<td>No</td>
<td>Technology</td>
</tr>
<tr>
<td>4</td>
<td>Elementary</td>
<td>453</td>
<td>Urban</td>
<td>Team</td>
<td>Multiple</td>
</tr>
<tr>
<td>5</td>
<td>High School</td>
<td>451</td>
<td>Rural</td>
<td>Principal</td>
<td>Cooperative Learning</td>
</tr>
<tr>
<td>6</td>
<td>All Grade</td>
<td>204</td>
<td>Rural</td>
<td>Team</td>
<td>Assessing Needs</td>
</tr>
<tr>
<td>7</td>
<td>Jr. High School</td>
<td>224</td>
<td>Urban</td>
<td>No</td>
<td>Assessing Needs</td>
</tr>
<tr>
<td>8</td>
<td>Elementary</td>
<td>365</td>
<td>Urban</td>
<td>No</td>
<td>Technology Achievement</td>
</tr>
<tr>
<td>9</td>
<td>Elementary</td>
<td>170</td>
<td>Rural</td>
<td>Team</td>
<td>RBL Cooperative Learning</td>
</tr>
<tr>
<td>10</td>
<td>High School</td>
<td>337</td>
<td>Urban</td>
<td>Team</td>
<td>Status Quo</td>
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<tr>
<td>11</td>
<td>High School</td>
<td>218</td>
<td>Rural</td>
<td>Team</td>
<td>Student Evaluation</td>
</tr>
<tr>
<td>12</td>
<td>Jr. High School</td>
<td>484</td>
<td>Urban</td>
<td>No</td>
<td>Assessing Needs</td>
</tr>
<tr>
<td>13</td>
<td>Jr. High School</td>
<td>188</td>
<td>Urban</td>
<td>Team</td>
<td>Technology</td>
</tr>
</tbody>
</table>
Table 2

A Correlation Matrix of Leadership Approach and Learning Organization Disciplines

<table>
<thead>
<tr>
<th></th>
<th>Shared Vision</th>
<th>Team Learning</th>
<th>Mental Models</th>
<th>Systems Thinking</th>
<th>Personal Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td>De</td>
<td>.460**</td>
<td>.507**</td>
<td>.436**</td>
<td>.470**</td>
<td>.293**</td>
</tr>
<tr>
<td>Par</td>
<td>.025</td>
<td>.042</td>
<td>.181**</td>
<td>-.017</td>
<td>.017</td>
</tr>
<tr>
<td>Dec</td>
<td>.308**</td>
<td>.424**</td>
<td>.305**</td>
<td>.364**</td>
<td>.274**</td>
</tr>
<tr>
<td>Inc</td>
<td>.479**</td>
<td>.524**</td>
<td>.475**</td>
<td>.406**</td>
<td>.309**</td>
</tr>
<tr>
<td>Vis</td>
<td>.005</td>
<td>.084</td>
<td>.171**</td>
<td>.015</td>
<td>.040</td>
</tr>
<tr>
<td>CO</td>
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<td>.003</td>
<td>.132*</td>
<td>-.056</td>
<td>.006</td>
</tr>
<tr>
<td>HE</td>
<td>-.048</td>
<td>.038</td>
<td>.139*</td>
<td>-.042</td>
<td>.016</td>
</tr>
<tr>
<td>VL</td>
<td>.384**</td>
<td>.322**</td>
<td>.316**</td>
<td>.276**</td>
<td>.214**</td>
</tr>
<tr>
<td>Sup</td>
<td>.058</td>
<td>.062</td>
<td>.166**</td>
<td>.020</td>
<td>.101</td>
</tr>
<tr>
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<td>.021</td>
<td>.103</td>
<td>.088</td>
<td>.062</td>
<td>.062</td>
</tr>
<tr>
<td>Col</td>
<td>.522**</td>
<td>.543**</td>
<td>.450**</td>
<td>.465**</td>
<td>.288**</td>
</tr>
<tr>
<td>GO</td>
<td>.475**</td>
<td>.476**</td>
<td>.401**</td>
<td>.447**</td>
<td>.319**</td>
</tr>
</tbody>
</table>

De = Democratic  Vis = Visionary  Sup = Supportive
Par = Participatory  CO = Change Oriented  IS = Intellectually Stimulating
Dec = Decentralized  HE = High Expectations  Col = Collaborative
Inc = Inclusive    VL = Visible Leadership  GO = Goal Oriented

*Significant at p<.05 level  **Significant at p<.01 level.
### Table 3

**Regression Models of Leadership Approach and Variance in Discipline of a Learning Organization**

<table>
<thead>
<tr>
<th>Learning Organization Disciplines</th>
<th>Beta Scores for Leadership Approach*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Vision</td>
<td>DE</td>
<td>Par</td>
</tr>
<tr>
<td>R²=.39</td>
<td>.16</td>
<td>.17</td>
</tr>
<tr>
<td>F=31.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df=4/198</td>
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<td></td>
</tr>
<tr>
<td>p&lt;.0005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Learning</td>
<td>.20</td>
<td>.23</td>
</tr>
<tr>
<td>R²=.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F=41.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df=4/204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p&lt;.0005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Models</td>
<td>.26</td>
<td>.24</td>
</tr>
<tr>
<td>R²=.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F=21.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df=6/205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p&lt;.0005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems Thinking</td>
<td>.20</td>
<td>.18</td>
</tr>
<tr>
<td>R²=.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F=26.09</td>
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<td>p&lt;.0005</td>
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<tr>
<td>Personal Mastery</td>
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<td>.23</td>
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<tr>
<td>R²=.15</td>
<td></td>
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<td>F=17.89</td>
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<tr>
<td>df=2/202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p&lt;.0005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

De = Democratic  
Par = Participatory  
Dec = Decentralized  
Inc = Inclusive  
Vis = Visionary  
CO = Change Oriented  
HE = High Expectations  
VL = Visible Leadership  
IS = Intellectually Stimulating  
Col = Collaborative  
GO = Goal Oriented

* All beta scores included are significant at the p<.05 level
Table 4

**A Correlation Matrix of Leadership Practices and Learning Organization Disciplines**

<table>
<thead>
<tr>
<th></th>
<th>Svision</th>
<th>Cgoal</th>
<th>HPExp</th>
<th>Model</th>
<th>Support</th>
<th>Stimultn</th>
<th>Culture</th>
<th>Collab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Vision</td>
<td>.802**</td>
<td>.829**</td>
<td>.713**</td>
<td>.737**</td>
<td>.652**</td>
<td>.750**</td>
<td>.772**</td>
<td>.704**</td>
</tr>
<tr>
<td>Team Learning</td>
<td>.677**</td>
<td>.722**</td>
<td>.631**</td>
<td>.721**</td>
<td>.684**</td>
<td>.725**</td>
<td>.747**</td>
<td>.734**</td>
</tr>
<tr>
<td>Mental Models</td>
<td>.547**</td>
<td>.578**</td>
<td>.498**</td>
<td>.635**</td>
<td>.573**</td>
<td>.609**</td>
<td>.605**</td>
<td>.606**</td>
</tr>
<tr>
<td>Systems Thinking</td>
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<td>.791**</td>
<td>.686**</td>
<td>.719**</td>
<td>.666**</td>
<td>.776**</td>
<td>.744**</td>
<td>.670**</td>
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<tr>
<td>Personal Mastery</td>
<td>.614**</td>
<td>.640**</td>
<td>.636**</td>
<td>.553**</td>
<td>.517**</td>
<td>.592**</td>
<td>.568**</td>
<td>.522**</td>
</tr>
</tbody>
</table>

Svision = Develops a widely shared vision for the school
Cgoal = Builds consensus about school goals and priorities
HPExp = Holds high performance expectations
Model = Models behaviour
Support = Provides individualized support
Stimultn = Provides intellectual stimulation
Culture = Strengthens school culture
Collab = Builds collaborative structures

**Significant at p<.01 level.
Table 5

Regression Models of Leadership Practices and Learning Organization Disciplines

<table>
<thead>
<tr>
<th>LO Disciplines</th>
<th>Svision(^2)</th>
<th>Cgoal</th>
<th>HPExp</th>
<th>Model</th>
<th>Support</th>
<th>Stimultn</th>
<th>Culture</th>
<th>Collab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Vision</td>
<td>.263</td>
<td>.588</td>
<td></td>
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<tr>
<td>R(^2)=.70</td>
<td>F=235.58</td>
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</tr>
<tr>
<td>df=2/203</td>
<td>p&lt;.0005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Learning</td>
<td>.247</td>
<td></td>
<td></td>
<td></td>
<td>.261</td>
<td>.307</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R(^2)=.60</td>
<td>F=100.40</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Models</td>
<td>.435</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.233</td>
<td></td>
</tr>
<tr>
<td>R(^2)=.42</td>
<td>F=75.60</td>
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<td></td>
<td></td>
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<tr>
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<td>p&lt;.0005</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Systems Thinking</td>
<td>.485</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.342</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R(^2)=.65</td>
<td>F=180.89</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>df=2/195</td>
<td>p&lt;.0005</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Mastery</td>
<td>.365</td>
<td>.345</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
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<td>F=84</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)All beta scores included are significant at p<.05 level.

\(^2\)Svision -- Develops a widely shared vision  
Cgoal -- Builds consensus about school goals  
HPExp -- Holds high performance expectations  
Model -- Models behaviour  
Support -- Provides individualized support  
Stimultn -- Provides intellectual stimulation  
Culture -- Strengthens school culture  
Collab -- Builds collaborative structures
Table 6

Obstacles to Developing Team Leadership in Schools

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time restraints</td>
<td>Lack of time perceived as major problem; experienced as increased workload; has led to distrust and suspicion of reform efforts.</td>
</tr>
<tr>
<td>School management</td>
<td>Several administrators felt overwhelmed by management issues, including leadership team development and student discipline.</td>
</tr>
<tr>
<td>Limited perception of leadership</td>
<td>Many administrators and teachers associated leadership with formal leadership roles.</td>
</tr>
<tr>
<td>District interference</td>
<td>In one district, a major district-wide initiative undermined local school improvement efforts.</td>
</tr>
<tr>
<td>Personnel changes</td>
<td>Staff turnover made it difficult to maintain organizational memory and continuity in change efforts.</td>
</tr>
<tr>
<td>Apathy</td>
<td>Some teachers were not convinced that they ought to be involved in any leadership activities outside their own classrooms.</td>
</tr>
<tr>
<td>Community politics</td>
<td>In one small rural school, dysfunctional community politics and family loyalty interfered with the building of trust within the school’s leadership team.</td>
</tr>
<tr>
<td>Difficulty in goal-setting</td>
<td>Some schools try to do too much, leading to loss of focus and shifting priorities.</td>
</tr>
<tr>
<td>Reduced professional development opportunities</td>
<td>Lack of professional development time led to lack of clarity about change initiatives and loss of vision in developing a leadership team.</td>
</tr>
<tr>
<td>Principals’ unwillingness to share power</td>
<td>Some principals talked of collaboration but could not engage in genuine collaboration. They remained in control as the ultimate decision makers.</td>
</tr>
</tbody>
</table>
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Organization/Address: [Faculty of Education, Memorial University of Newfoundland, St. John's, Newfoundland, A1B 3X8]
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Fax: [709-737-2345]
E-mail Address: [jbrown@mun.ca]
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