

Linking Classroom and School Improvement

Through their Learning Consortium, four school districts and two higher education institutions in the greater Toronto area created a framework that drives their efforts to support the sustained development of educators.

Educators have learned a great deal about classroom and school improvement recently, and this new knowledge has provided us with much valuable information to make more informed decisions. Yet the amount and complexity of that information is raining down on our heads so hard that it is very difficult to understand and implement what we know about classroom and school improvement.

We need a powerful framework to assist our efforts to achieve lasting and substantial change—one like the framework we derived from our work in the Learning Consortium. This three-year experiment began in February 1988 as a partnership among four major school districts and two higher education institutions in the greater Toronto area.¹ The four districts are large, ranging in size from 45,000 students (90 schools) to 60,000 students (150 schools).

The Learning Consortium brings together teachers, administrators, and professors in a collegial partnership that focuses on the sustained development of educators. This, in turn, is directed at improving students' experiences and learning. All activities undertaken by the Learning Consortium are invested with the spirit of inquiry.

We make use of previous research and produce new research findings of our own in our "living laboratory" environment. Two of our most important concerns include curriculum and instruction priorities of school boards and issues pertaining to the management of change. We work with the assumption that classroom improvement, teacher development, and school improvement must be systematically linked if substantial progress is to be achieved.

Systemic and cultural change in schools as workplaces and in teaching as a profession are intimately linked; and these links represent a powerful route to educational reform.

Creating an Action Framework for Better Schools

Specifically, we are interested in the question of how classroom and school improvement might be linked.² The framework evolving from our attempts to make sense of and guide our improvement efforts in the Consortium is shown in Figure 1. A word is necessary about the imagery of gears and cogs.³ Taken literally, this imagery is misleading—teaching is not mechanistic, and one cog does not necessarily start another. Nor do the framework's components simply move in one direction or the other. Different and contradictory initiatives affect different parts, moving them in different directions at the same time—indeed, this is part of the complexity.

Nonetheless, the overall metaphor of movement is important and useful. The different elements of classroom and school development do affect one another, and in effective schools they do work together in the same direction in an interactive, dynamic way. The diagram in Figure 1 can also serve as an "advance organizer," illustrating how ideas are interrelated. Although the purpose of the framework is not to indicate where to start, it does assist educators to inquire into the current condition of their school or classroom

situation and predict what factors might need consideration. For example, before a staff decides to implement a process that breaks down norms of isolation and builds norms of collaboration—perhaps through a peer coaching or mentoring program—teachers and administrators might consider what factors in the classroom and school will support or militate against such programs. The framework, in other words, points to the main components of improvement—all of which must be addressed.

We did not develop the framework and then apply it in the Learning Consortium. Over a number of years we had been working separately on different parts of this schematic in other activities. The Consortium provided us with an opportunity to work together on developing a more comprehensive conceptual framework. Our goal has become to understand classroom improvement on the one hand, school improvement on the other, and then to identify systematic links between the two.

For classroom improvement, we and others have found that teachers work simultaneously (but not at the same pace) on all four inner cogs: content, classroom management, instructional skills, and instructional

strategies. For both teachers and students, the capacity to integrate these four components is essential. *Content* encapsulates areas such as the teacher's knowledge of curriculum, child development, and learning styles. *Classroom management* includes what teachers do to prevent and respond to student misbehavior. *Instructional skills* are less complex teacher behaviors such as providing wait time after asking a question and framing questions at different levels of complexity. Although less complex than instructional strategies, they are essential behaviors in a teacher's instructional repertoire. *Instructional strategies*, such as concept attainment and cooperative learning, are more complex processes of teaching that are based on models of learning. When all four of these inner cogs function in partnership, the chances of designing a classroom environment that promotes student learning are dramatically increased.

The inner cogs at the far right of Figure 1 relate to school improvement. The basic features of school improvement (as distinct from a list of effective schools characteristics) are these: shared purpose, norms of collegiality, norms of continuous improvement, and structures representing the

Innovations should be seen as points of departure or catalysts, rather than as things to be implemented.

organizational conditions necessary for significant improvement (Little 1989, Rosenholtz 1989).

Shared purpose includes vision, mission, goals, objectives, and unity of purpose. It refers to the shared sense of purposeful direction of the school relative to major educational goals. Shared purpose is, of course, not static and does not arise by itself. The other three cogs in interaction constantly generate and (re)shape purpose.

Norms of collegiality refers to ways in which mutual sharing, assistance, and joint effort among teachers is valued and honored in the school. However, as Little (1989) has stressed, there is nothing particularly virtuous about collaboration *per se*: It can serve to block change or put down students, or it can elevate learning. Thus, collegiality must be linked to *norms of continuous improvement* and experimentation in which teachers are constantly seeking and assessing potentially better practices inside and outside their own schools (and contributing to other people's practice through dissemination).

Structure refers to organizational arrangements, roles, and formal policies which explicitly create working conditions that support and inspire movement in the other cogs. Examples of school-level structural changes that are conducive to improvement in-

Photograph by Carol Rolibeuer-Bernett



University of Toronto preservice teachers (from left to right) Mary Loree, Cathy Bernatt, Brad Boebmer, and Diane Bakarich prepare to work in classrooms of Summer Institute participants, who will help train them in cooperative learning techniques.

clude creating time for joint planning, developing joint teaching arrangements and staff development policies, establishing new roles such as the mentor function, and establishing school improvement procedures. (Restructuring, of course, has much to do with this cog, although no single component by itself can make much of a difference.)

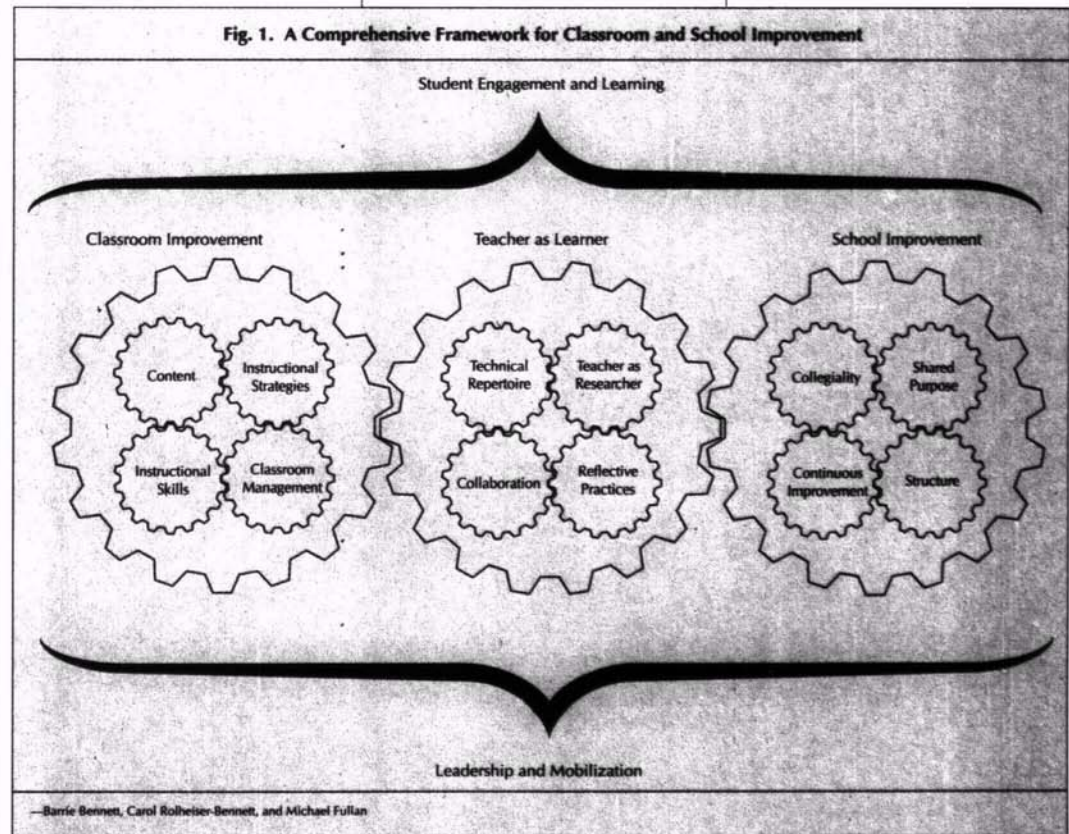
The teacher-as-learner concept is the centerpiece linking classroom and school improvement. In this instance the term includes anybody at the school level who is a professional educator, for example, classroom teachers, teacher leaders, head teachers, vice-principals, and principals.

The teacher-as-learner centerpiece serves two critical uses. The first concerns the four aspects of teacher as learner—the technical, the reflective, the research, and the collaborative. The mastery of a *technical repertoire* increases instructional certainty; *reflective practice* enhances clarity, meaning, and coherence; *research* fosters investigation and exploration; *collaboration* enables one to receive and give ideas and assistance. Each aspect has its separate tradition of research and practice, and each has made important contributions in its own right. The important question is how to integrate and establish the strengths of each of these four traditions in the individual

teacher as learner. Rarely have all four received intensive attention in the same setting.

The second critical use of the teacher-as-learner centerpiece is as a method to distinguish between specific and generic levels of the development of the teacher as learner. By *specific* we mean how particular improvements are experienced and designed. For example, in the Learning Consortium we began with a technical instructional innovation, cooperative learning, and found it had consequences for all four aspects of the teacher as learner. Similarly, others could begin with any of the other three inner cogs—an inquiry research

Fig. 1. A Comprehensive Framework for Classroom and School Improvement





Photograph by Norm Green

School administrator Don Real shares his plans for implementing the Summer Institute's cooperative learning and peer coaching model with participants in the seven-day retreat.

project, for example—and proceed to incorporate the development of the technical, reflective, and collaborative components. Or a group could try to work on all four aspects from the start.

It is, however, the generic point that is more fundamental; that is, teachers can come to develop their *generic capacities* in all four aspects. This would mean not just being good at cooperative learning, but at an array of instructional models; not just being involved in a reflective practice project, but being a reflective practitioner; not participating in a research investigation, but conducting constant inquiry; not being part of a peer coaching project, but being collaborative as a way of working. In short, teachers gradually internalize these ways of being so that it becomes second nature to be learners. The point is not that the four aspects are valuable separate elements of the teacher as learner, but that they must become part and parcel of a natural seamless fabric of what it means to be a professional educator.

Now, it is precisely when every teacher in the school develops this generic capacity that classroom improvement and school improvement entirely overlap. Such an ideal will rarely be achieved of course, but one can immediately deduce how power-

ful the bridge can become when a school experiences a significant increase in the proportion of staff who are learners.

Two other elements of the framework revolve around the issue of what drives the framework. One of these is the presence of student engagement and learning—a preoccupation that pervades the framework. In our model, impact on all students is central to each and every cog and to interrelationships among the cogs. Constant valuing of and attention to student engagement and learning is a powerful motivating force, the ultimate purpose of the efforts represented in Figure 1.

The second driving force for change is leadership and mobilization. We explicitly rejected the idea that leadership be a particular component of the framework. Leadership comes from different sources in different situations and from different sources in the same situation over time: the principal, key teachers, the superintendent, parents, trustees, curriculum consultants, governments, universities, and others. Further, once the model is fully functioning, leadership can and does come from multiple sources simultaneously. Certainly the principal, for example, is key, but leadership must be mobilized

on multiple fronts if development is to continue. Finally, we want to acknowledge that the framework is not intended to incorporate all variables that impinge on students, teachers, and schools. The teacher as learner, for example, is shaped by a variety of personality and career factors that make up "the total teacher" (Fullan and Hargreaves, forthcoming).

The comprehensive model just described is both guiding and emerging from the Learning Consortium's activities. Two major initiatives undertaken by the Learning Consortium since its inception are the Summer Institute and the Cadre of Trainers, both discussed below. Each of them seeks to link classroom and school improvement.

Initiatives of the Consortium

The Summer Institute. The first Summer Institute brought together approximately 90 educators from the Consortium's four school districts and two higher education institutions in the summer of 1988. Participants (the majority were teachers and principals or vice-principals, with a few central office administrators and professors) attended a seven-day residential workshop. The workshop emphasized cooperative learning and coaching and the management of the change process, including plans for follow-up implementation of the summer program.

The planning group chose cooperative learning because of the evidence that it stimulates *student* learning. Coaching and mentoring were emphasized as vehicles for sharing expertise and for encouraging collaboration in schools. And the concept and process of coaching and mentoring were also introduced in the training process because of their effect on stimulating *teacher* learning.


Participants spent the first four days learning about cooperative learning and peer coaching. Their training included learning the basic theory, observing and participating in live and videotaped demonstrations, and practicing in microteaching situations. Then they received three days of instruction on the variables that would affect implementation of the coopera-

tive learning model and peer coaching in their classrooms and schools. Videotapes, focused reading, small- and large-group instruction, and task-related implementation planning enabled individuals and groups to get started on their follow-up plans.

The districts had committed themselves to follow-up support in the classroom, but because of different agendas and limited time, they chose a range of support strategies—some participants worked alone, some with colleagues and administrators, and some received in-class support from the summer institute instructors.

To increase the chances that the teachers would successfully transfer their new learning to the classroom, we built the program to include certain elements. First, a powerful model of teaching was employed: cooperative learning (see Johnson et al. 1981, Johnson and Johnson 1989, Rolheiser-Bennett 1986, Sharan 1980, Slavin 1980, 1988). Second, we used an effective training strategy that provided follow-up support—the skill training model (see Bennett 1987, Joyce and Showers 1988, Joyce and Weil 1986). Third, we combined cooperative learning training with instruction on implementing change (see Fullan 1985, Fullan in press). And fourth, volunteer participants were selected to participate on the basis of their interest in instructional improvement. Subsequently, data collected from classroom visits, interviews and conversations, and analyses of videotapes of classroom practice showed that teachers did effectively implement the cooperative learning strategies.

During the first six months of follow-up, while the instructors, peers, and administrators supported and observed the teachers as they developed their thinking and their ability to apply that thinking to cooperative learning, we noticed development in two dimensions. One dimension was the movement toward fidelity to training content. Teachers' confidence in their ability to transfer their learning to the classroom increased, and we gained confidence that our staff development program was working. The other dimension, more fascinating because of



Sustained, cumulative improvements at the classroom and school level, by each and every teacher in the school, are required to meet the challenge of our collective vision of the potential of schools.

its richness and insight into a new and possibly powerful line of inquiry, was the variety of patterns of implementation, as well as the variety of learning outcomes reported by the teachers.

The Cadre of Trainers Program. One goal of the Consortium is to have school staffs assume responsibility for their professional development while concomitantly developing networks between and among schools and districts. The Cadre of Trainers Program was designed to facilitate this goal. Each school district and the faculty of education selected approximately 8 educators to attend 10 one-day workshops spaced 2–3 weeks apart from January to June 1989. Of these 40 participants, about one quarter had also attended the previous Summer Institute.

We developed the content of the program around both classroom teaching skills and training skills, so that participants could become workshop leaders for other educators. The teaching skills component included adding or refining classroom management skills, instructional skills, and instructional strategies to the cadre members' repertoires. The training component focused on ways to plan

and implement similar sessions back in the workplace.

Team members from each board attending the Cadre program were asked to practice the skills and strategies back in their district after each session. However, they were encouraged not to feel pressured to do any inservice work during the remainder of the school year, so that they could feel free to practice their skills and experiment with learning. The only inservice work required was that the teams meet back in their districts to practice thinking through and designing workshops that integrated the content and process of effective training sessions. Thus, the Cadre program focused on developing the capacity of the individuals and the districts to work more effectively with the components contained in the framework.

Growing into the Future

Other activities taking place and being planned by the Learning Consortium include:

- districtwide inservice led by Summer Institute and Cadre graduates;
 - a second Summer Institute held in 1989 with 100 participants, all of whom attended in teams, as well as a third Summer Institute to be held in 1990;
 - new field-based apprenticeship and preservice programs for student teachers in the one-year teacher certification program at the Faculty of Education, with Summer Institute and Cadre participants acting as mentors or providing inservice to mentors;
 - school leadership programs for principals and vice-principals on managerial improvements, the management of change, and the role of school leaders in establishing collaborative work cultures;
 - induction programs for first-year teachers;
 - the establishment of professional development schools.
- Some of these are formal programs of the Consortium, some involve two or three districts, others are individual district initiatives that build on Consortium activities. Each district in its own way is forging connections and achieving synergy of effort as one

activity supports or integrates with another. When integration does occur, we see powerful multiplier effects on classroom, school, and system development.

Only the Beginning

So ... where does one begin? We started with teachers and administrators learning an instructional strategy or model of teaching selected because of its effect on student learning. As we continued, we integrated that learning with other needs, such as classroom management and peer coaching. Then concepts related to the culture of the school and the management of change helped guide our efforts.

We do not know the best place for others to begin. Individual classroom, school, and district needs and conditions will generate a variety of options. But regardless of where they start, districts will find it helpful to attend to all the components in Figure 1. Systemic and cultural change in schools as workplaces and in teaching as a profession are intimately linked; and these links represent a powerful route to educational reform. We are striving to put innovations and reforms in proper perspective, which means day-to-day improvements in the work and learning lives of teachers and students. In this sense, innovations should be seen as points of departure or catalysts, rather than as things to be implemented. Moreover, fixing on particular innovations is less important than paying attention to the potential ways in which classrooms and schools can improve. Innovations, even major reforms, because they are by definition temporary, can be diversions rather than aids to fundamental, long-term change. The problem of seeking innovations as solutions is acute because decision makers are so vulnerable to "quick fixes," given the political and time pressures under which they work.

What we have described here is only our beginning.⁴ Progress cannot be sustained by individuals working alone no matter how energetic and skilled they may be. Systematic links must be made across classrooms. Progress cannot be measured by the

successful implementation of a valuable innovation or even by having a good year. Sustained, cumulative improvements at the classroom and school level, by each and every teacher in the school, are required to meet the challenge of our collective vision of the potential of schools. □

¹The Consortium's school districts include the Dufferin-Peel Roman Catholic Separate School Board, the Durham Board of Education, the Halton Board of Education, and the North York Board of Education. The two higher education institutions are the Faculty of Education, University of Toronto, and The Ontario Institute for Studies in Education.

²In this paper we concentrate on classroom and school improvement. In other work we are also examining the link between school improvement and school district coherence, as well as the impact of the partnership on the higher education institutions (Fullan and Watson, forthcoming). In our view, the greatest problem faced by school districts is not resistance to innovation, but the fragmentation, overload, and incoherence resulting from the uncritical acceptance of too many different innovations which are not coordinated.

³We use the term *cogs* instead of *gears* because we feel it more appropriately portrays the metaphor of movement and connection points.

⁴Future reports will document the various activities and results of the Consortium (see Fullan, Bennett, and Rolheiser-Bennett 1989, Watson et al 1989, and Fullan and Watson, forthcoming).

Authors' note We would like to thank our many academic and school-based colleagues who contributed to this article.

References

- Bennett, B. (1987). "The Effectiveness of Staff Development Training Practices: A Meta-Analysis." Doctoral diss., University of Oregon.
- Fullan, M. (1985). "Change Processes and Strategies at the Local Level." *The Elementary School Journal* 85, 3: 391-421.
- Fullan, M. (In press). *The Meaning of Educational Change*. 2nd ed. New York: Teachers College Press, Toronto: OISE Press.
- Fullan, M., B. Bennett, and C. Rolheiser-Bennett (1989). "Linking Classroom and School Improvement." Invited address to the American Educational Research Association.
- Fullan, M., and A. Hargreaves (Forthcoming). *What's Worth Fighting For in Your School*. Toronto: Ontario Public School Teachers' Federation.
- Fullan, M., and N. Watson. (Forthcoming). "Beyond School-University Partnerships." In *Teacher Development and Educational Change*, edited by M. Fullan and A. Hargreaves. United Kingdom: Falmer Press.
- Johnson, D.W., and R.T. Johnson (1989). *Leading the Cooperative School*. Edina, Minn.: Interaction Book Company.
- Johnson, D.W., G. Maruyama, R.T. Johnson, D. Nelson, and L. Skon. (1981). "Effects of Cooperative, Competitive, and Individualistic Goal Structures on Achievement: A Meta-Analysis." *Psychological Bulletin* 89, 1: 47-62.
- Joyce, B., and B. Showers. (1988). *Student Achievement Through Staff Development*. White Plains, N.Y.: Longman, Inc.
- Joyce, B., and M. Weil. (1986). *Models of Teaching*. Englewood Cliffs, N.J.: Prentice Hall.
- Little, J. (1989). "The Persistence of Privacy: Autonomy and Initiative in Teachers' Professional Relations." Paper presented at the annual meeting of the American Educational Research Association.
- Rolheiser-Bennett, C. (1986). "Four Models of Teaching: A Meta-Analysis of Student Outcomes." Doctoral diss., University of Oregon.
- Rosenholtz, S. (1989). *Teachers' Workplace: The Social Organization of Schools*. White Plains, N.Y.: Longman, Inc.
- Sharan, S. (1980). "Cooperative Learning in Small Groups: Recent Methods and Effects on Achievement, Attitudes, and Ethnic Relations." *Review of Educational Research* 50, 2: 241-271.
- Slavin, R.E. (1980). "Cooperative Learning." *Review of Educational Research* 50, 2: 315-342.
- Slavin, R.E. (1988). "Cooperative Learning and Student Achievement." *Educational Leadership* 46, 2: 31-33.
- Watson, N., C. Rolheiser-Bennett, B. Bennett, and D. Thiessen. (1989). *The Learning Consortium: Year 1 of a School/University Partnership*. Symposium presented at the Canadian Society for Studies in Education.

Michael G. Fullan is Dean, Faculty of Education, University of Toronto, 371 Bloor St. West, Toronto, Ontario M5S 2R7, Canada. **Barrie Bennett** is a researcher and consultant for the Learning Consortium, Toronto, Canada. **Carol Rolheiser-Bennett** is Assistant Professor, Education Dept., University of Toronto.

Copyright © 1990 by the Association for Supervision and Curriculum Development. All rights reserved.