

TEACHERS' PROFESSIONAL DEVELOPMENT FOR VITAL MIDDLE SCHOOLS: WHAT DO WE KNOW AND WHERE SHOULD WE GO?

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INTRODUCTION: LAPSING INTO CLAMS

The wife, the clams...I mean maybe it's not the most exciting choice, but it works,' the clam-truck driver explained. "I wanted my own trucking business...I didn't want to drive for nobody else. I used to haul lots of things—other stuff. But it was complicated. When I saw I could make with just the clams, it was easier. I kind of lapsed into clams, you might say." (Irving, p 181)

John Irving's protagonist Eddie, muses over this tortured analogy, encountered on a ferry ride in New England, and reflects that his own life is similar but not quite as bad as lapsing into clams. In this paper I will argue that we have also lapsed into constrained, but easy, thinking about how to make middle schools a reality through teacher development. This has occurred not because the specific goals are wrong, or even the short-term strategies, but because we have not considered all of the larger implications.

Over the last decade the challenges to educators, both from within and outside the profession, have been numerous and often conflicting. Much of the time the difficulties appear overwhelming, as schools are confronted with seemingly endless challenges such as changing demographics, a sense that student engagement and faith in education is declining, and problems of attracting and retaining high quality faculty and administrators to work in an embattled professional setting. Yet, this is a time when there are serious opportunities for reforming the existing system. Much energy has gone into a wide range

of commission and research reports that delineate the problems and provide clear images of excellence. There is strong motivation to act on these reports at national, regional and local levels, and many countries—not only the U.S.— are enacting educational reform efforts that demand improvement. Moreover, we are well past the stage of good intentions: There are a substantial batch of tools in the form of well document and research-based staff development programs based on the 'effective schools' and 'effective teaching' programs, as well as other research-based efforts at major reform.

Much of what we know from research about how to change schools falls into a paradigm that might be best called *managed change*, whether it involves engineering a planning process, an organization chart, people or power. The main focus of research and research-to-practice writing is on identifying factors that improve the probability that an innovation, such as reformed middle schools, will be successfully implemented and maintained, more-or-less as intended by an agreed upon vision. This paper will argue that we *do* know a lot about how to provide good professional development to support changes in schools for young adolescents. It will also argue that we have not yet put these pieces together in ways that sustain the broad changes that are demanded. While it is premature to come up with “a solution,” that blends what we know about effective middle schools, effective staff development, and effective “large scale change,” it is time to rethink how the puzzle should be approached.

WHAT DO WE KNOW? SOME PIECES OF THE RESEARCH PUZZLE

The ostensible purpose of this paper was to review the existing research on professional development in middle schools, and to draw some conclusions about

effective strategies. As I reviewed the published research, however, I was struck more by what we do not know, at least for certain.

Middle Schools as Unique Contexts

The “middle school movement” is fueled by research on the argument that young adolescents profit by the development of integrated approaches to the social, emotional and intellectual needs of young adolescents. I am not a psychologist, and I will not examine this body of research with a critical eye, but take it largely for granted. As almost everyone interested in school reform knows, the best compilation of research-based thinking about middle school reform was summarized in the Carnegie Corporation’s (1996) report on the topic. The principles outlined include:

- Creating trusting, caring schools through smaller learning environments, teacher and student teaming, and personal adult advisement
- Encourage critical thinking, healthy lifestyles, and active preparation for citizenship
- Provide opportunities for all students to succeed by limiting rigid tracking, using cooperative, mixed ability instructional strategies, flexible scheduling and the use of out-of-school time to reinforce learning.

In order to accomplish these goals, a number of supportive conditions are recommended, including teacher and administrator empowerment, improved access to health services, active parental and broader community involvement.

These are commendable recommendations, although it is hard to see why they are applicable only to students in the middle grades. But the “middle school movement” may be seen as largely a response to the pernicious development of junior high schools, that (true to their name) operate as “high schools for short people” without acknowledging the need for guided transition from childhood into a more adult, independent status.

Nevertheless, there is little systematic research that supports the contention that middle schools *must* be different because of developmental characteristics. To give just one example, Phillips (1997) finds that middle schools demonstrate the same pattern as high schools with respect to the relationship of “caring” and “pressure to achieve” to student achievement results. Her results suggest that, like high schools, “caring” is not related to student achievement in mathematics, but “pressure” is related both to achievement and attendance. Hoy and Hannum (1997) also find that instruments developed to measure healthy school climates in high schools apply equally well to middle schools, while Lee and Smith (1993; 1995) find that in both middle and high schools, smaller learning communities and efforts to restructure are positively related to achievement. Similar findings occur for other aspects of the middle school reform agenda, such as the focus on teacher collaboration and teaming, and the significance of parental involvement.

This argument does not mean, of course, that there is no need for reform, or that middle schools do not have special characteristics. In many countries other than the US, there has been a renewed interest in changing education for early adolescents, under the assumption that it is an age group whose needs and curriculum have been long ignored. “Getting there” from a set of recommendations to changes in practice is not, however, simple. Although middle schools may be easier to change than high schools (Well and Oakes, 1996), the path is not smooth. Oakes, Vasudeva and Jones (1996) end an analysis of change in 16 middle schools with the following:

Our findings imply that school reform movements such as *Turning Points* should include in their change some attention to the steps schools can take to develop a new culture and political environment, alongside a vision of new practices.... And professional development activities around reform should pay considerable attention to these aspects of reform, as well as to new organizational and pedagogical techniques...(p. 33)

Professional Development as a Component of *School Reform*

The call for “systemic reform”—typically defined as higher, mandatory standards linked to new curricula and methods of assessing students’ achievement of the standards—has dominated state agendas for over a decade. Bill Clinton, who chaired the National Governor’s Council when it developed its positions on standards-driven school reform, has made it a central feature of his educational policy efforts, assuring the continuing prominence of systemic reform. A recent visible manifestation of this line of policy development related to the topic of this paper is the National Commission on Teaching, which translates the call for higher standards in K-12 schools to a similar, standards-based reform in teacher preparation and professional development programs (National Commission on Teaching and America’s Future, 1996; see also Darling-Hammond, 1993 and Cohen, McLaughlin & Talbert, 1993). Scholars, major foundations, and policy makers have embraced systemic reform (See Resnick & Resnick, 1992).

The logic of this approach to professional development is that (1) schools need to change because they are currently inadequate; (2) change must be stimulated by widely agreed-upon standards, developed by the profession or by the profession in conjunction with scholarly collaborators; (3) new standards demand development to bring teachers’ beliefs and skills in line with emerging pedagogic demands; and (4) development must be *professionalized*; that is, it must build capacity for change within and among teachers rather than through older models that emphasize the transmission of knowledge from experts to passive teacher-consumers.

A large number of approaches to professional development emerged in conjunction with the systemic reform paradigm. Corcoran (1995), for example, identified

a number of promising approaches, based on preliminary research evidence, such as teacher networks, school-university collaborations, professional development schools, and national board certification of teachers. These strategies, which have, in common, a focus on providing stimulation from outside the school for teacher learning, continue to be explored in the research literature.

Teacher networks are subject or project-based communication systems among teachers in many schools. The purpose of the networks is to engage teachers who have similar interests (mathematics, writing, and pedagogy for middle grade adolescents, etc.) in temporary or semi-permanent collaboration to learn together. (Lieberman & McLaughlin, 1992). The teacher network serves several functions: teachers serve as “critical friends” in a noncompetitive environment, the focus is on teacher-identified problems of practice, and teachers are working “to their passion” rather than to a pre-identified agenda (Hargreaves, 1997b).

School-university collaboration also involves temporary but often long-term, relationships between university faculty and teachers (Jacullo-Noto, 1984; Huberman, 1994). These relationships are formed around the mutual purpose of experimenting with curriculum and pedagogy, and involve elaborating and developing shared perspectives (Miller and O’Shea, 1996). The underlying assumption is that both educational researchers and teachers have a great deal to learn from each other, and that when they are engaged in the unusual activity of co-creation, they will both be more likely to change because they will be forced to challenge their own assumptions.

Professional Development Schools (PDSs) attempt to institutionalize the model of temporary collaboration between schools and universities (Levine & Trachtman, 1997).

Collaboration goes beyond experimentation with a small group of teachers to the involvement of all teachers and university faculty as permanent and equal partners in pre-service teacher education, professional development, and R&D related to new curriculum and instructional strategies. In the early 1990s the concept was endorsed by both colleges of teacher education, such as the “Holmes Group” and by national teacher associations as a model for creating adult learning and change. Because of the nature of state certification requirements for teacher licensure (which often do not specify a special license for middle school – see Dickinson & McEwin, 1997), and the costs of running a PDS (most evaluations indicated that maintaining collaboration required more reallocation of effort than initially expected (Metcalf-Turner & Fischetti, 1996), the number that involved middle schools was never large. (See Dixon & Ishler, 1992 and Rafferty, 1996 for examples of successful middle school PDSs.)

National Certification for Teachers provides a strong external stimulus and a framework for teacher development for all grade levels (French, 1997; Ingvarson, 1998). While not mandatory (and still controversial), the National Board for Professional Teaching Standards has developed both a rubric for measuring teacher expertise, and a portfolio-based process for obtaining recognition. More importantly for this paper, there are unique standards oriented to students of different ages, and five separate certificates are offered for teachers of young adolescents. A number of districts, particularly those that have promoted standards-based reform, have collaborated with universities to help experienced teachers understand and meet the goal of Board certification – and have provided financial incentives. In most districts, however, the relatively laborious process of becoming Board certified, and the uncertain professional payoffs, have limited

participation, although it is apparently growing. Middle school teachers are, apparently, over represented in some states among the Board certified teachers, and underrepresented in others. Out of 21 certificates, five deal with students between the ages of 11-15, which is defined as early adolescence. From the National Board website, I randomly selected two states beginning with C (Colorado and Connecticut) and two with M (Minnesota and Massachusetts) from the lists published by the National Board on their website. When I pooled the three states, and counted the number who were middle school certified. Overall, the proportion was 26%. These data, albeit very preliminary, suggest two things: first, the number of teachers participating from any given level is probably sensitive to state and local initiatives, and second, that middle school teachers are no more likely than others to take advantage of the professional development opportunities offered by the National Board process.

| National Board Certification in Four States | Number Certified | Middle School Certified | Percent MS Certified |
|--|-------------------------|--------------------------------|-----------------------------|
| Colorado | 65 | 25 | 38% |
| Connecticut | 34 | 12 | 35% |
| Massachusetts | 71 | 11 | 15% |
| Minnesota | 104 | 23 | 22% |
| TOTAL | 274 | 71 | 26% |

Professional Development as a Component of *Teacher Improvement*

Unlike the school reform movement's efforts to stimulate and support large-scale professional development, the focus of research on school improvement for the middle grades has emphasized a strategy of "one school at a time" or even "one teacher at a time." A fundamental assumption of professional development strategies that are grounded in school improvement is that the reasons that some schools don't get better are found in their internal conditions, which must be changed in order to promote better teaching and learning. This does not mean that external pressure and support are unimportant, but that "certified courses, inspirational speeches and isolated workshops are normally much less effective than professional learning that is at some point built into teachers' everyday working responsibilities" (Hargreaves, 1997, p 117)

Most of the discussion of effective teacher improvement strategies thus emphasizes a combination of increased individual skills and knowledge, and the development of supportive school cultures and school leadership. In doing so, they often make an explicit or implicit response to Sarason's (1990, 1996) and Tyack and Tobin's (1994) concerns about the "culture of the school and the problem of change" – namely that schools cannot reform because of the unexamined attachment to a "grammar of schooling" that is based on non-democratic classroom and school cultures. (See Loucks-Horsley, 1995 and Hale, 1998 for a discussion of the importance of culture in professional development programs for middle schools.)

Nevertheless, a number of specific proposals for professional development strategies that can change teachers' cognitive models about content and pedagogy in middle school setting have found solid support:

Enhancing skills and understanding through participation in materials and instructional design serves a number of functions (Loucks-Horsely, 1995; Park & Coble, 1997). First, the need for experimental curriculum and instructional strategies in the rapidly evolving middle school setting virtually demands local invention. More importantly, it is argued that teachers who participate in curriculum development must, necessarily, learn more about content and “practical theories” of teaching. Teachers, it is argued, will also be more engaged in improving something that they have developed than in tinkering with materials that have been developed elsewhere. Note that this perspective rarely assumes that teachers are creating a whole curriculum from scratch.

Encouraging and providing opportunities for reflection follows Schön’s (1983) research on how professionals in practice learn best, and has been rapidly adopted among middle-school advocates (Fairbanks, 1995; Burk & Littleton, 1995; Swafford, Jones, Thorton, Stump & Miller, 1999). The assumption is that teachers must be more analytical about their own practice, including structured activities such as journaling, conducting pedagogical “applied experiments,” and conducting post-hoc analyses of why classroom practice went well or did not (Taggart & Wilson, 1998). The introduction of reflective practice is frequently assumed to require new skills and predisposition that can be taught, either in preservice education, or through professional development with experienced teachers. As an extension of reflective practice, some have advocated long-term “professional development profiles” that summarize where the teacher has been and it going.

Reflective practice implies self-awareness about what one does. It implies both self-critique and institutional-critique as teachers work towards discoveries concerning their own

learning and practice. By engaging in reflection teachers can become students of their craft as they puzzle about the assumptions basic to quality practice. Furthermore, commitment to reflection as a communal activity in which teachers engage suggests a public activity.

Public conversation concerning the school and practice within the school may focus itself in four traditions as identified by Zeichner and Tabachnick (1991):

- Academic- The focus of reflection is on representations of subject matter to students to promote understanding.
- Social Efficiency - The focus of reflection is on the intelligent use of generic teaching strategies suggested by research on teaching.
- Developmentalist - The focus of reflection is on the learning, development and understanding of students.
- Social Reconstructionist - The focus of reflection is on the social conditions of schooling and issues of equity and justice.

Teacher-as-researcher is a formal extension of reflective practice, which is assumed, when learned, to be the status quo. Using the rubric of “action research” the model assumes that teachers (usually in small groups within schools) are trained in formal research methods, and use them in designing and assessing their own interventions in curriculum and pedagogy. New handbooks for teaching action research methods continue to emerge (Schmuck, 1997; McKernan, 1996; Stringer, 1999). The role of action research as a professional development tool has been as a comprehensive model for improving education (Grimmett, 1996) and has generated its own journal (*Action in Teacher Education*), but has often proven to be more difficult to implement as a tool for widespread change. Studies of action research efforts (Allen & Calhoun, 1998; King, 1997) do not always support the contention that teachers eagerly accept action research. Competing models of how to do action research, reluctance to share practice,

and difficulty in moving from an intuitive model of reasoning to a databased model are some of the problems encountered. (Some concerns have also been raised about the ethics of action research in classrooms, at least in cases where teachers deliberately alter their “treatments” and gather data on them without oversight from a human subjects review committee.)

Interdisciplinary Teaming originated with efforts to reform middle grades education, and is still largely confined to middle schools, although there has been an increasing adoption of transitional teams in the first year of high school (McKenna, 1989; Crockett, 1994; Pollack & Mills, 1997). While teacher teams are viewed as significant ways of promoting reflective practice and experimentation, they are not without problems in school-wide change programs. In three middle schools studied by Kruse & Louis (1997), teams were very important in providing support for change within the team. However, communication between teams was, in all three cases, problematic, which led to difficulties in coordinating curriculum, student management strategies, and had serious impacts on within-school staffing flexibility.

The Limits of Existing Approaches

As noted above, a significant limitation of existing research is the lack of robust data related to the need for unique environments for students of this age group, and a general ambivalence among policy makers about the wisdom of treating students of this age group differently—an ambivalence that is shared by many parents. Our approach to children of this age is both socially constructed and paradoxical. The social and emotional needs of young adolescents are, of course, not a fixed developmental characteristic but are largely determined by the social structures and expectations

developed by adults. We in the US assume, for example, that it is natural for children of this age to turn away from their parents and engage with their peer groups because of “raging hormones” combined with the need to develop a differentiated identity – but, in other societies the social expectation is that children will simply enlarge their social and emotional support system to include additional important adults. In the US, family vacations become shorter as children move into this period, under the assumption that parents and children will have less in common; in many European countries, however, parents and children maintain or even increase the pattern of spending three to four happy weeks together as a means of renewing family ties after the business of the school and work year. As Andy Hargreaves (1997) has noted, in North America it is a time when parents simultaneously cry out for zero tolerance of violence in schools, but assume that it is acceptable to buy *Mortal Kombat* for their 11 year olds.

Research on professional development in middle school contexts has been developing rapidly in the past few years, but is still relatively weak in producing unique conclusions. Middle schools are, for example, largely ignored in most of the large-scale empirical research on school reform. In the studies of the Chicago school reform, for example, they are ignored because they are part of K-8 structures, although they operate substantially separately. In the national databases, such as NELS, most analyses are confined to upper secondary schools. The international studies of math and science achievement pay equal attention to middle schools, but contain virtually no information about professional development strategies that might help to account for noted differences. While a number of good published case studies of reforming middle schools are emerging (Newman, 1997; Louis and Kruse, 1998; Oakes, Quartz, Ryan and Lipton,

2000), the first extended set of (commercially available) cases that treats middle school reform as a unique issue is Oakes, et al., op cit. The latter is, however, hardly a simple primer for “how to do it right” but, rather, a sympathetic account of how the middle schools in their study struggled to achieve the vision when surrounded by cultural and organizational contradictions. Particularly telling is the limited exposure that the schools in the study had to professional development that even remotely resembled the middle school standards developed by the National Staff Development Council (1994).

Even more importantly, we don’t know very much about what staff development should consist of in the middle school. NSDC’s guild to staff development for middle schools contains no references to *processes* of change and development that give clues to the unique characteristics and challenges facing them; when it comes to *content*, there is excellent and practical work on early adolescent development, some on curriculum, parent/community involvement, service learning and advisement, but much less on specific pedagogic strategies for young adolescents. Much of the research on instruction and assessment is still discipline based, in spite of the fundamental assumption that middle school curriculum should be multi- or inter-disciplinary. On the question of teaming – a core feature of the proposed restructuring of middle schools—research is contradictory, with some studies finding positive effects on students and teachers (much of which is published by the National Middle School Association), while others observed more mixed results (Kruse and Louis, 1995; Oakes, et al, 2000).

Another problem revealed by recent research is that while visions of schools may have broadened and deepened, what teachers expect from professional development has changed only slightly. Haslam (1999) in his report on the implementation of professional

development in “New American Schools” projects reports that the NAS models challenge teachers to become facilitators to develop the potential of individual students, who play the role of boundary spanners between school, home, and community, develop curriculums with enhanced subject matter expertise, and to work in teams and through networks. Participating teachers, on the other hand, want pragmatic, immediately useable information. Haslam notes that “Activities that do not have concrete examples and experiences are seen as less helpful... veteran teachers can provide explanations of ‘nuts and bolts’ instructional issues.” (p 4-5). Furthermore, they also want trainers who have the same background as they do, a significant constraint if the goal is to foster networking and interdisciplinary approaches to new teaching. Finally, he points out that principals in the NAS schools have a limited understanding of how their roles need to be changed or even transformed if these major changes are to take effect. Haslam sees the enterprise through a lens of the enthusiasm that teachers report for the task, although he notes that “schools rarely fully understand the meaning of whole school change...” (p. 10). On the other hand, he also sees a short-term focus on what Huberman (1984) calls “recipes for busy kitchens” in which time-pressed teachers want to implement major changes quickly with inadequate new ingredients.

The limitation draws attention to another issue that arises in most of the literature on professional development and middle schools: the need for reallocation of resources (Miles and Darling-Hammond, 1998). American secondary school teachers have high workloads, in terms of number of student contact hours, compared to other developed countries (OECD Yearbook, 1997). In addition, most whole-school reform efforts, such as moving toward a true middle-school model, are planned with only limited additional

resources for professional development (Haslam, 1999; Oakes, et al, 2000), and states, in general, have no consistent policies related to funding for teacher professional development (St. John, Ward, and Laine, 1999). While it is clearly possible to change teacher workloads and the use of time without greatly increasing the costs of education (the much-discussed example of Central Park East Secondary School is an example in which teacher-pupil loads were as low as 36 in the middle grades), but this involves thinking far outside of the current box of block scheduling and teaming. For example, CPESS eliminated all non-teaching positions from its professional staff, and used non-certified instructors to cover some service learning activities, in addition to eliminating traditional subject-matter specialization (Miles and Darling-Hammond; Newman, 1997). Oakes, et al. (2000) report that the middle schools in their study consistently struggled with public perceptions that significant structural changes of this type “watered down” educational standards and provided inferior education, particularly from more involved and ambitious parents.

A NEW MAP: APPROACHING “THE PROBLEM” FROM AN ORGANIZATIONAL PERSPECTIVE

The very cursory review presented above does not, of course, take account of the complexities that are acknowledged by all parties involved in the change process—whether program developers, researchers or educational practitioners. If Bob Slavin were reading this, his first response would be “So, what’s new?” And, my response would be, “Well Bob, its not the ideas, its how you put them together—and you could have told me that too!” I do not yet have an answer or a model, but will articulate below some of the

elements that need to be considered as we move forward with the essential task of thinking about how to support teachers in creating effective middle schools.

Beyond “Managed Change” and “Teacher Professionalism” in Staff Development

Two images of how middle school staff development will support the proposed changes of *Turning Points* dominate most of the writing on the topic. On the one hand, the “School Reform” literature typically adopts an image of ‘managed change’ in which it is assumed that staff development content and process will follow (logically) from the central reform policies—if adequate guidance is provided (St. John, et al., 1999). The NSCD standards are organized, for example, around the core recommendations of *Turning Points*, implying that professional development is in service of implementing this vision. To expand further, classic and more recent writings on school improvement emphasize the need for leaders to maintain at least an oversight role throughout the change process, which involves initiating careful, preferably data-drive problem analysis, a careful choice of solutions, the development of explicit implementation plans, and active monitoring of implementation (Eastwood and Louis, 1992). In each case, the role of staff development is seen largely in a context of supporting a change whose parameters are known (Louis, 1994)

The image of 'managed change' as an effective strategy for school improvement has been explicitly challenged by critical theorists but also by recent empirical research on school improvement that falls outside of a critical theory framework. In particular, studies of restructuring schools raise questions about the degree to which the traditional ways of thinking about change management apply to efforts to make a major transformation.

Elsewhere, colleagues and I have argued that our current models for school improvement are incomplete (Voogt, Lagerweij & Louis, 1997). They rely too heavily on the “managed change” assumption, which assumes that policy makers, administrators, teachers, and parents are striving toward the same ends using roughly the same means. This assumption has been challenged by a number of important writers on organizational change based on research in the business sector. Mintzberg (1994) described *The Rise and the Fall of Strategic Planning*; Beer, Eisenstadt & Spector (1990) formulated the problem as “Why Change Programs Don’t Produce Change.” Morgan & Zohar (1997) asserts that an individual’s direct leverage over work results is limited to 15%.

Reform and Improvement –Choices for Middle Schools or a “Wicked Problem”?

Much of the rhetoric of school reform and school improvement literature assumes that policy makers and practitioners who seek a “new vision” for young adolescents are facing practical problems of making good choices and then “sticking to the knitting” during a phase of experimentation and implementation. I, on the other hand, would argue that the efforts to tie professional development and middle school reform into a relatively neat prescription for change constitute a “wicked problem” for which there are no easy choices and no clear prescriptions. Whenever schools tackle one set of issues facing middle school reform, they face a new, and often competing set of pressures that make the problem of change more, and not less difficult. For example, current systemic and/or comprehensive reform movement makes a number of assumptions that are critical for middle school practitioners:

- There are well-developed, research-based models for middle schools that can be implemented, with modest adaptation, in other contexts;

- Professional development should be focused around key implementation issues for the specific model and vision for middle grades education;
- Teacher professionalism and commitment will be enhanced primarily by deepening specific knowledge and skills in line with the *Turning Points* recommendations;
- Assuming adequate leadership and parental support in the school and district, implementation will be time-consuming and difficult, but measurable and linear;
- Reform usually implies additional resources, either as a “lump” in the regular budget or through subsidized external support.

The improvement models, on the other hand, imply a different but equally reasonable set of assumptions:

- *Turning Points* does not provide a “blueprint” for a good middle school, but a guiding list of concepts – some of which have a weak or poorly articulated research base;
- Professional development needs to focus on developing teachers’ analytical skills and judgment, focused on problems of practice that are visible and directly affect their work;
- Teachers’ professionalism and commitment will be enhanced by increasing the resources that are available for reflection, development and co-creation with colleagues; and experimentation stimulated by the basic framework of *Turning Points*;
- Implementation will be time consuming and lengthy, but will be, at best, modestly organized. It will be affected—and sometimes even deflected—by

local change and development, unanticipated changes in external policies and internal changes.

- Change will not necessarily involve significant additional resources—assuming adequate current funding—and will be largely funded by internal reallocation within the school and district.

The reform model and the improvement model have an uneasy co-existence in the lives of most practitioners, who are subjected to state and local policies that incorporate both images without reconciling their differences (Louis, 1998). Yet, it is unlikely that the policy environment will change sufficiently that a simpler or more coherent reality will emerge.

In other words, middle schools and developers and trainers who are working with middle schools have little choice: they must learn to live with anomalies and incompatible expectations. External systemic demands and internal developmental needs will not be reconciled, at least in the foreseeable future.

What are the Elements of Change in Professional Practice in Middle Schools?

Based on the above analysis, middle school development is a result of a variety of influences, each of which will affect the kind of professional development that is most appropriate. These include:

- An autonomous developmental process (organizational life cycles) including the acknowledged but unplanned for enormous increase in new teachers in most systems due to retirements;
- Deliberately directed attempts (from within and from outside) to bring about educational and organizational changes; and

- Unanticipated events or “normal crises”, both positive and negative, such as leadership turnover, changes in state policy that must be factored into the development process.

This set of factors, in which non-planned change dominates all planned change processes, leads to the following conclusion: *Effective middle school development is an ongoing process in which the simultaneous effects of autonomous, coincidental, and deliberately directed changes that affect the functioning of schools converge. Every professional development program must be attuned to the development issues facing the school.*

The vision may guide choices of middle school professional development programs, but many other factors will affect appropriate choices. This conclusion is reflected in one recent, but relatively obscure, synthesis of what is known about effective staff development. Gall & Vojtek (1994) identify six research-based models for staff development that are prominent in practice: expert presenter, clinical supervision, skill training, action research, organization development, and change process. They argue that schools should not choose a model, and that there is no evidence that one is overwhelmingly more effective than another. Further, they argue that most existing syntheses “do not take into account the possibility that different [staff development] program characteristics may be effective for different staff development objectives.” (41) Instead, they propose a contingency approach, in which the needs of the school are matched to the strengths of the professional development model.

The implication is, of course, that most schools will need to blend models in a continuously evolving effort to provide support for a “vision” that is also evolving based on school’s current conditions. This matching process is not a “science” but the art of

adjusting action to the combined influence of autonomous, planned and unplanned changes within the school and its context. This little booklet is, by far, the most sensible approach to staff development for the complex and “wicked problems” facing middle schools, whether they are implementing a comprehensive change model or are relying on a locally developed plan.

WHERE ARE WE GOING? TOOLS FOR THE JOURNEY

Mental Models – Not Techniques

Recent research on the use of service learning indicates that teachers’ beliefs about what constitutes appropriate teaching, and teacher and student roles strongly predict whether they will be frequent users of service learning strategies in their own classrooms (Toole, 2000). The beliefs/mental models that are particularly relevant to middle grades education are: learning as constructed; learning as self-regulated; learning as contextual; and learning as social. While most teachers who have been exposed to middle school models in professional development settings are aware of what is expected of them, and can articulate these concepts, they are still torn between their belief in structure and order, and the newer constructivist models. In other words, skills in concrete classroom practices (such as cooperative learning) do not necessarily translate into a persistent effort to organize their work in new ways.

The issue, then, for professional development is to move beyond knowledge and skills that are appropriate for implementing *Turning Points* to the larger issue of creating fundamental dispositions to teach and work in new ways. Changing hearts requires more effort, and a different kind of effort, than changing minds.

Professional Community within Schools

An increasing body of research suggests that real change in schools requires the development of strong professional communities (Little, 1993; Kruse, Louis & Bryk, 1995). This is acknowledged in many of the professional development strategies discussed above under the section dealing with reform, but its centrality is not. Data from a national study of reforming schools, and a large data base from the Chicago Public Schools indicate that professional community within schools is a vital component of change in the directions that are advocated by *Turning Points* (Marks & Louis, 1998; Bryk, Camburn & Louis, 1999). Yet, as noted in many studies of school change, little attention is given to creating organizational conditions that will promote teachers' grappling together with the knotty problems of how to create new models of schooling. The rarely present but minimal conditions include regular and extended time for teachers to meet and talk, meaningful feedback on teaching performance from peers and administrators, supportive and demanding leadership—and professional development models that include the whole staff, working together on common problems over a sustained period of time. Most school staffs are cooperative, but not genuinely collaborative. If low professional community is the problem, professional development is only one part of the solution, albeit an important one. Professional development does not, by itself, lead directly to improved teaching unless the overall organizational conditions promote risk-taking and collective responsibility for student success.

Leading from the Center

There is no study of school improvement and reform that does not highlight the importance of school leadership. Yet, in virtually all of the discussions of professional

development the importance of creating teacher-principal teams, and of providing parallel professional development for administrators is ignored. Teachers and principals do not operate in parallel universes, although our treatment of professional development often assumes that their work overlaps only marginally. Middle school visions that “take” must go beyond the fundamental assumption of “managed change” that administrators help to guide decisions about professional development programs and recruit and evaluate their effectiveness (see Gall and Vojtek, 1994, p 41) or the “professional teacher” model that too-often assumes that administrators pay the bills and make sure the light bulbs are changed, but do not contribute to effective classrooms. Instead, the needs of school leaders and their central role in encouraging and creating standards for school development must be part of a professional development model.

PREPARING FOR THE TRIP: LOGISTICS OR EVOLUTIONARY PLANNING?

The image of educational change embodied in Matt Miles’ and my book on urban high school reform (Louis & Miles, 1990) is that of a long journey with only a primitive map, and an explorer’s willingness to alter planned routes as new information becomes available. The goal does not change, but the itinerary does. I would argue that the road to effective middle schools must be thought of in the same way, only adding that the explorers need an important tool—professional development. In order to achieve this transformation toward the *Turning Points* vision of middle grades education, schools must address not only the need for new skills and knowledge, but also their embedded dysfunctional learning habits. The recent history of educational reform in the U.S. is littered with rapid in-and-out of innovations that prevent real learning, and to the circula-

tion of poor but popular ideas. Some of these result from the paucity of the R&D base that is readily available to schools, and the relative isolation of knowledge production unit (universities) from the knowledge application units (schools)—issues that are addressed in current professional development models. But some also result from patterns that are unrelated to the lack of useable information. One is the over-dependence of many systems on 'quick fix' solutions from outside experts: last year a new instructional model that is touted to fix all reading problems, this year an emphasis on 'total quality management', and next year an 'outcomes based education' model. Educators accept outside pressure to implement and 'show results' in unreasonably short time frames, rather than argue that rapid measurable change in children as a consequence of changes that affect a small percentage of the child's life are unreasonable. Unless middle schools recognize these bad habits, restructuring to provide more opportunities for good professional development will be ineffective.

The implications of the above analysis can be briefly summarized:

- The middle school vision will continue to evolve in highly politicized settings in which external and internal demands will shift and will sometimes be incompatible;
- Teacher change and school reform strategies for professional development tend to proceed from different assumptions, but both should be incorporated into our thinking about professional development for middle schools;
- Our knowledge about effective staff development strategies to promote effective middle schools is just beginning to emerge—we know enough to set out on the journey, but not enough to develop simple plans for how to do it right;

- Changing teachers' beliefs, knowledge and skills is central and difficult—but it is not enough. Attending to professional development without considering the context of organizational and leadership cultures is likely to result in superficial change. And, vice versa.

To return to the laconic truck driver's dilemma with which I began this paper, it is time to move out of the clam business, and into the more challenging and uncertain (but rewarding) work of thinking about how best to support the evolutionary development of exciting learning environments for teachers, administrators and students.

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