# Professional Development in 'Healthy' vs. 'Unhealthy' Districts: top 10 characteristics based on research

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ABSTRACT   *Professional development is a requirement of every reform effort. Most states in the USA mandate a certain number of days in the school calendar to be allocated for professional development. Other nations often fund professional development for teachers to accompany an initiative to improve student performance. Although assumptions about why and how professional development should be conducted are shared, empirical evidence is relatively slim. Recent research generally focuses on the role of professional development in school reform. This study investigates the characteristics of involvement in professional development at the level of the district–the umbrella organisation for a geographic collection of schools. As part of a larger study, this research examines the professional development activities in school districts in relationship to overall district health. How do healthy and unhealthy districts differ in their approaches to professional development? What is the relationship between district health and student achievement? While confirming some of the assumptions about what makes effective professional development, this study provides research-based evidence for what districts can do to ensure district-wide impact and to bring about and sustain change. Furthermore, it illustrates the close association of district health and student achievement.*

## Introduction

As part of a larger 4-year study on teacher-led professional development, this research examines the professional development practices and school district philosophy in randomly selected urban, rural and small towns across the USA. In the USA, districts are defined as the governing body that oversees the curriculum and organisational management of schools within a geographic region. These would be

somewhat comparable to the Board of Trustees and building principals working together in New Zealand to implement the national curriculum, to the Local Education Authorities working with an Education Director in England or to such umbrella organisations in other nations that exert local authority over school personnel, management and instruction, if not curriculum. Only two states in the USA set a state curriculum, although curriculum standards are being introduced in various subject matter areas at the national level, and states and local districts are engaged in aligning their curriculum to these standards. In this study, districts were all not-for-profit public (state and local control) enterprises, rather than private. They were headed by a superintendent (the chief officer of the local district), operated by a district-wide administration, called the Central Office, included building-level principals and had an elected School Board with oversight responsibilities.

Some nations register, certify, or license teachers for life, unless the teacher leaves the profession, and do not require further education other than continued teaching. In the USA, however, professional development for teachers who are already licensed is mandated by the states for the renewal of one's teaching license. To keep their licenses valid, teachers must earn continuing education units (CEUs) through a combination of continued teaching and professional development activities, which may include on-site work, participation in educational conferences and advanced degrees. These activities are beyond induction requirements, such as the Newly Qualified Teacher Programme for mentoring new teachers found in England as well as in many districts in the USA. CEUs are a lifelong education requirement for teachers. However, CEUs are not usually required for administrators. One exception we found in our research were renewal requirements for superintendents in the state of Kentucky.

In nations with a national organisation for schools, central government allocates money based on staffing for the provision of professional development. In the USA, districts receive an allowance from the state for the purpose of offering professional development activities for their teachers. Most states mandate and fund a certain number of days for teachers to participate in paid professional activities when students are not in school. These 'protected' days are often at risk when state budgets are burdened. For example, amidst controversy, California recently changed from 11 days to 3 days in its allocation of $250 per teacher for mandatory professional days.

This study looks at how districts managed professional development, with either local funds, grant awards or money provided by the state. Each district's professional development approaches are analysed in relation to overall district health. *District health* includes how well a district manages its daily operations and functions, but it also encompasses a broader domain: the quality of school and district climate; the degree of commitment of teachers and administrators to growth and change; the evidence of strategic planning that ensures district focus on learning processes; and the positive and negative attitudes of students.

District health also entails how professional development is viewed by administrators in the central office and across the district. One view is that professional

development is a collection of activities offered in response to surveys of individual teachers or to demands from outside the school system, such as from state government, school improvement initiatives, accreditation requirements, and funding agencies. This professional development often accompanies directives outside of the unit responsible for delivering the professional development, such as the two professional development days mandated and funded by central government during the phasing in of the National Certificate of Educational Achievement (NCEA) to supply training in the assessment processes used for the New Zealand Achievement Standards. In the USA, professional development for teachers is usually required along with the introduction of a new state test for students. In this view, professional development is a way to improve operations, to broadly introduce new directives, or to remediate teachers or 'fix' isolated problems, sometimes in particular buildings or content areas.

A second view of professional development is as a process of continuous improvement for everyone in the district, teachers and administrators alike. Deming (1991) and Kelly (1999) emphasise that continuing professional development is essential for improvement so that all members of the organisation can cultivate the policies (or vision) of the organisation. Professional development here is central to creating a 'learning organisation.' (Easterby-Smith 1990; Senge 1990). As part of the belief system of the governing body of schools, it would be enacted as a district strategy whether or not outside forces demanded it.

Porter (1996) distinguishes between operational effectiveness in an organisation and strategy, noting that operational effectiveness is about achieving excellence in individual activities or functions, while strategy is about complementing activities to make a fit. Porter notes that organisations have unwittingly let management and operational effectiveness supplant strategy, and mistakenly explain success by specifying individual strengths, core competencies, critical resources and lists of best practices. School districts that have a bits and pieces approach to professional development lack the stability to maintain changes, which require time. In contrast, the truly successful educational organisations, whether district-level or national-level, have strengths that cut across many functions and themes that are embodied in tightly linked clusters. In healthy educational organisations, practices combine to form a holistic system of professional development for all educators. Since their positions are built on a system, they are far more sustainable than those built on individual activities.

This principle of professional development as a strategy based on an integrated system underpins our research questions into the organisational characteristics of school districts which foster or hinder effective professional development:

(1) How do professional development activities in healthy and unhealthy school districts differ?
(2) How and to what extent in healthy and unhealthy districts is professional development implemented as a collection of discrete tools (such as those to upgrade teachers, to provide information for the state-mandated tests, to

    introduce achievement standards, to explain a new textbook series, to expose teachers to particular strategies)?

(3) How and to what extent in healthy and unhealthy districts is professional development an integrated system of activities that underpins the strategic planning of the whole district and is based on the concept of a learning organisation?

(4) Does student achievement in districts rated as healthy differ significantly from student achievement in districts not rated as healthy?

The study reported here looks at the fit among various professional development activities in a school district to see if the district is doing many things well, not just a few, in an integrated system, and to distinguish between the characteristics of professional development and student achievement in healthy and unhealthy school districts.

## Background: professional development

In all developed nations, educators consistently acknowledge the important role of professional development in the retention of teachers, in building capacity to address problems in education, and in improving schools. It is proclaimed as the cornerstone of all reform efforts. Deming (MIT 1996) listed professional development twice among his 14 points for developing high quality organisations. Professional development was among the final seven correlates for Effective Schools (Edmonds 1979; Lezotte & Bancroft 1985). In the USA, such professional organisations as the National Staff Development Council (NSDC), the Association for Supervision and Curriculum Development, the National Board of Professional Teaching Standards and the National Council of Teachers of English, to name a few, have set standards for the professional development of teachers. For example, NSDC recently revised its standards for staff development to include context, processes and content (NSDC, 2001b). In the domain of context, the Council recommends that the goals of individual learning communities should be aligned with school and district goals. Comparable in England might be the Office of Standards in Education, in New Zealand, the Qualifications Authority, the Education Review Office, or the Teachers Council.

Yet, professional development, especially district-sponsored as compared to that offered by Ministries of Education, by professional associations, or by universities and other tertiary institutions, suffers a poor reputation among teachers. In their examination of research on professional development, Wilson and Berne (1999) observed: 'Teachers are loathe to participate in anything that smacks of one-day workshops offered by outside 'experts' who know (and care) little about the particular and specific contexts of a given school'. In Smylie's study (1989) of the value of 14 possibilities for professional learning, teachers ranked district-sponsored professional development as last. Little (1993) notes that 'although high quality professional development is a requisite to high quality schools, professional development is too often substantively weak and politically marginal' (148).

A more recent study into the reasons why teachers did not voluntarily participate in professional development (Supovitz & Zief 2000), suggests that teachers have an outdated view of professional development: 'Non-participating teachers' concepts of the structure of professional development–short and compact sessions— were at odds with newer concepts of … professional development … Non-participating teachers' beliefs that effective workshops disseminate information goes against the … philosophy of active exploration of larger ideas and concepts' (26).

It is not surprising that studying professional development is a messy process. First is the negative attitude hovering about the topic on the part of the participants. Wilson and Berne (1999) point out that '… researchers appear hesitant to study traditional professional development: Why study something that so many teachers dismiss as less than helpful?' (197) Then, there is the fragmentation around dealing with the ever-expanding contexts for professional development, including the audience, purpose, setting, content, political arena, to name a few. Wilson and Berne discuss the lack of empirical evidence that teachers actually learn anything through professional development and note only a few studies that relate teacher development to student learning. Brown (1992), as quoted in Wilson and Berne, speaks of the 'methodological headaches' in creating research designs to study professional development: 'Components are rarely isolatable, the whole really is more than the sum of its parts. The learning effects are not even simple interactions, but highly interdependent outcomes of a complex social and cognitive intervention' (166).

Furthermore, no particular model of professional development has been verified by research as the most effective for schools. Studies by the Scottish Council for Research in Education (1995) indicate that '… research had much to offer to staff development, but was not making the contribution it was capable of'. While matching professional development to the needs and purposes of the school was key, there was 'no consensus about the role of staff development or the most effective models'.

Many educators lack awareness about what professional development models exist and what purposes they best serve. The appropriate model might be a change process model or a skill-training model. It could involve action research, clinical supervision, reflective practitioners, distance education, learning networks and study groups or expert-presenters, to name a few of the research-based models summarised in the professional literature. (Sparks & Loucks-Horsley 1990; Gall & Vojtek 1994; Sprinthall *et al.* 1996; Zepeda 1999; Robb 2000).

In a Wyoming study (Azin-Manley *et al.* 1996) of over 1500 American educators, respondents typically described professional development as a group in-service activity. They reported that it was relatively infrequent to find professional development as ongoing or job-embedded, that is, offered over time with the intent to build skills and competency needed to perform better in one's work setting. They indicated that administrators and teachers had different opinions about who decides what professional development will be offered, with administrators feeling that teachers were more involved than the teachers felt they were. Finally, they revealed a critical

lack of attention and resources dedicated to support professional development. These findings parallel the findings of our research [1] conducted in randomly sampled school districts across the USA.

Certainly, successful components of professional development have been identified in the educational literature. For example, in their distillation of research on professional development, the Kansas Staff Development Council (1994) estimates that less than 10% of teachers are able to use in their classroom settings the knowledge and skills gained in a one-time workshop; professional development efforts offered over time are more likely to be implemented in the classroom. Ball (1996) echoes this in findings about professional development in mathematics: 'The most effective professional development model is thought to involve follow-up activities, usually in the form of long-term support, coaching in teachers' classrooms, or ongoing interactions with colleagues' (501–502).

We have distilled many studies across time, including those following, some of the abiding components of successful professional development models. Effective models are: (1) focused on subject matter knowledge and knowledge of students (Kennedy 1988; Putnam & Borko 1997; Frank *et al.* 1998); (2) involve participants and stake holders in the very beginning of the planning (Little 1988, 1993; Fullen *et al.* 1990; Goddard 2000; Bernauer 2002); (3) recognise the importance of teacher confidence and attitude, especially enthusiasm, as it relates to student achievement (Rosenshire & Furst 1973; Good & Brophy 1987; Bratcher & Stroble 1994; Langer 2000); (4) emphasise teacher responsibility (self-instruction, peer work, one-to-one consultation), role-taking and problem solving experiences (Caldwell & Marshall 1982; Huberman & Miles 1984; Thies-Sprinthall & Sprinthall 1987; Ball 1996; Putman & Borko 1997); (5) tend to rely upon local personnel for the design and conduct of the inservice (Dilworth 1980; Dufoura & Eaker 1991; Goddard 2000); (6) provide continuous supervision and support (Oja & Sprinthall 1978; Neill 1982; Abdal-Haqq 1995; Smylie *et al.* 1998; Hawley & Valli 1999) especially in the work setting where the activities are expected to be integrated (Howey & Bents 1979; Neill 1982; Joyce *et al.* 1992; Wood & McQuarrie 1999); and (7) involve forceful leaders in the school (Crandall & Loucks 1982; Huberman & Miles 1984; Lieberman & Grolnick 1996). Yet, much of what we know to be effective practices were simply not evident in our research. For example, the dominant form of professional development in this national study appears to be discrete activities or hot topics sessions, offered in one-shot, large-group, after-school sessions. (Marshall *et al.* 2001; Pritchard & Marshall 2001). Another recurring model was to send teachers off to professional conferences without any follow-up activities.

Foremost among the challenges for the two researchers in the present study is the paucity of research about the impact of professional development on *whole districts* and about its power to *bring about and sustain change* in a district. The equivalent situation in other nations might be when researchers are unable to identify impact of training beyond individual classrooms or buildings, such as across schools in the same geographic area, or when improvement seems piecemeal, effective for teachers and students in one school while failing in another one nearby.

Moreover, as Wilson and Berne (1999) note, tying professional development to student achievement is a 'messy process'. This research looks at what is actually happening in educational professional development and how it relates to the organisational quality of school districts and to student achievement. It confirms some of the findings of earlier studies, while identifying new barriers and positive factors that derive from the district as a whole.

## Method

This study was embedded within a larger study of the characteristics of districts that had successfully implemented a nationally disseminated teacher-led professional development programme. It was quickly apparent in the site visits to districts that the district view of professional development was directly related to other district characteristics including: (1) district view toward student learning; (2) pattern of administrative leadership; (3) district and building support for change; (4) school climate; and (5) locus of control for decision making.

The researchers began with a population constructed from a national sampling frame consisting of over 1500 sites which had participated in the same teacher-led staff development initiative on writing—the longest-standing project in the National Diffusion Network, a federally-funded programme. The population was narrowed to 100 acceptable school districts based on: multiple levels of teachers participating: elementary (teaching students ages 5–11), middle school (ages 12–14), and high school (ages 15–18); training within the time period Fiscal Year 1990—Fiscal Year 1997; and identified contact person within the district. The district contacts were interviewed by phone during the fall of 1997. Based on the interview data, districts were classified as high or low implementors of the staff development training. Further, they were classified as serving rural, urban or city locations. A stratified random sample of 24 districts was identified for the selected sample. Of these, 18 districts from 11 states from three parts of the USA agreed to participate in the study. In a few of these districts, concepts and procedures garnered from professional development had become institutionalised, permeating every classroom. In other districts, there had been no implementation of the instructional processes and, in some cases, no local record of participation in the professional development.

The researchers employed a 'nested contexts' approach (Marshall & Rossman 1995) to gather data from multiple levels and various sources. Researchers collected over 400 hours of interviews from teachers, principals, central office administrators and others who might shed light on system characteristics that support or impede a culture of continual improvement. They gathered nearly 3000 essays from students at grades 4 (age 9), 8 (age 13) and 11(age 16) writing about their schools. Additionally, photographs and documents such as school and district improvement plans, professional development offerings, trends in student achievement, accreditation studies, district policy manuals, etc. were collected and reviewed.

## Analysis

The qualitative procedure of constant comparative analysis was used to address the first three questions in this study. The fourth question used quantitative analyses to compare districts.

For the qualitative analyses, the taped interview transcriptions were read and analysed for recurring themes independently by the researchers and by a panel of four educators in one site and three in another site. Categories were identified for classifying the interview and document data. Themes were developed related to common, and sometimes conflicting, information provided by administrators and teachers in interviews and in district documents. Information about the same issue or interview topic was gained through multiple sources, including central office staff, building administrators, classroom teachers, students, and, in some cases, support staff. Sometimes the physical space–office, bulletin boards, trophy cases, school halls, or classrooms–provided significant information for determining the priorities of educators, and how personnel interact with each other. Three types of procedures (Denzin 1989) were used to verify the data: triangulation across collection methods (document analysis, scores on on-demand essays, observations and interviews), across data sources (central office administration, building principals, teachers, teacher-consultants and students), and across investigators (two researchers, two research assistants, 'critical friends,' member checking and a panel of educators).

Instruments can provide a lens for looking at particular features or elements that affect the belief system in an educational organisation. But they are not always satisfactory in painting a full picture. As Schein (1992) points out, at least three levels of culture affect actions in an organisation: *Artifacts* that provide observable manifestations; *espoused values* that derive from statements by members about the functioning of an organisation; and *basic assumptions*, the most elusive level comprised of unstated guidelines about how one is to behave in an organisation. Furthermore, most scales are limited in that they offer pre-determined or structured responses from which participants select and are aimed mainly at *espoused values*. Most existing scales are designed to be administered directly to participants, such as the Organizational Health Inventory (Hoy *et al.* 1990) and the School Participant Empowerment Scale (Short & Rinehart 1993). Freibert (1999) describes 15 instruments used for measuring climate, such as the Students Concerns Surveys.

For this study, the researchers had *artifacts* from their site visits, interview responses of teachers and administrators and essays written by students to address *espoused values*, as well as an organisational health scale that amalgamated features of healthy organisations in order to get at core values and *basic assumptions*. The Organizational Health Scale (see Table I) was developed as a comprehensive measure by one of the researchers after all site visits had been made.

### *Organizational Health Scale*

The researchers did not enter a district with the Organizational Health Scale already designed, and then look for evidence to confirm or refute the instrument. The

TABLE I. Organisational Health Scale

| | Range |
|---|---|
| **Directions**. Think in terms of the overall character of the school district. Do not think in terms of a single administrator or teacher or of a specific incident. Focus on your general perception of the behaviour of the educators in the district being rated. Mark one response for each of the following six items. | 0–10 |

1. How would you describe the general behaviours of educators in the district?

| | |
|---|---|
| Doing the right thing (for kids) | A = 1 |
| Doing things right (for management) | B = 0 |

4. Where is the responsibility placed for district problems and solutions to problems?

| | |
|---|---|
| Internally on educators (e.g. staff take responsibility) | A = 1 |
| Externally on parents or others (e.g. blame parents) | B = 0 |

3. What is the level of agreement/support for district focus among central office, administrators and teachers?

| | |
|---|---|
| High | A = 2 |
| Moderate | B = 1 |
| Low | C = 0 |

4. What type of leadership is the norm in the district?

| | |
|---|---|
| Pattern A, Hard | A = 0 |
| Pattern A, Soft | B = 1 |
| Pattern B, Collaborative | C = 2 |

5. What level of trust & relationship is typical between central office and schools?

| | |
|---|---|
| 1. High | A = 2 |
| 2. Moderate | B = 1 |
| 3. Low | C = 0 |

6. What level of communication & co-operative relationships is typical among and between teachers and principals?

| | |
|---|---|
| 4. High | A = 2 |
| 5. Moderate | B = 1 |
| 6. Low | C = 0 |

*Source:* Based on Kanter's (1983) concept of a Culture of Pride and Climate of Success.

instrument was created as a holistic measure grounded in the characteristics of healthy organisations drawn from the literature on educational climate, leadership and restructuring, as well as from the expert judgment of the researchers after they had made all site visits, read the student essays and other documents from the districts and re-visited the interview transcripts. Furthermore, the elements of the instrument were based on the independent work of the researchers who interviewed central office administrators together, but teachers and principals separately and in different buildings in each district. An outside educator familiar with the professional literature validated the instrument for content.

A strong theoretical underpinning to the Organizational Health Scale is Kanter's (1983) theory that high-performing organisations have a Culture of Pride and a Climate of Success. This Culture of Pride occurs in an organisation where there is an emotional connection and commitment between the organisation and the individual; where the individual has a feeling of belongingness and a meaningful purpose; and where the individual's values can be realised while he or she contributes to the endeavours of the organisation. In the Empowered School District Project (Short *et al.* 1991) and in a study of the Reading Recovery program (Rinehart & Short 1992) investigators found similar variables necessary to foster collective participation in the critical area of organisational goals.

According to Kanter's theory, organisations with a high Culture of Pride demonstrate high levels of interconnectedness both within and between levels of the organisation. This results in an integrated, co-operative system which supports new practices and individual success and enables the organisation to succeed over time, while adapting to changing environments (Parsons 1961). This construct is evident in many of the measures used to evaluate district health (Hoy & Feldman 1987; Hoy *et al.* 1990).

In contrast, organisations with a low Culture of Pride are segmented with individual isolation, minimal communication within or among levels of the organisation and limited support for the individual. People in these systems often cocoon or become disrupters taking little pride in their organisation. The culture here is characterised by decisions focused on basic survival with a limited focus on success (in schools, 'success' would be defined as student learning).

Since its introduction in 1983, this concept of a Culture of Pride has been supported and elaborated on by educational inquiry (see, for example: Argyris 1971/1991; Deal & Kennedy 1983; Kanter 1983; Sergiovanni 1984, 1996; Peterson *et al.* 1990; Sparks & Loucks-Horsley 1990; Elmore 1992; Little 1993; Bonstingl 1996; Darling-Hammond 1996, 1997; Lieberman 1996; Parish & Aquila 1996; Elmore & Burney 1997; Firestone & Louis 1999; Fullan 1999; Carr & Artman 2002)

The Organizational Health Scale defines district culture broadly as a body of solutions to external and internal forces that have evolved over time as the appropriate way to respond. The health of an organisation entails the assumptions, values and norms that are not always explicitly stated or visible to those affected by them, but that can be recognised or experienced by newcomers to an organisation, especially when they discover that they have broken an accepted norm of behaviour, or by outside researchers. The Organizational Health Scale reflects Owens' (1995) and Schein's (1992) notion that the culture or overall health of an educational organisation involves multiple levels. Owens separates culture and climate, seeing culture as behavioural assumptions and beliefs, and climate as the perceptions of persons that reflect such norms. However, most researchers regard district health, climate and culture as similar and overlapping abstractions. The Organizational Health Instrument used in this study was an attempt to operationalise the abstraction. To summarise the scale used for this study, organisational health encompasses the following areas: philosophical orientation toward learning for students and

faculty; origin of responsibility for problems and solutions as outside or inside the school system; fit of beliefs and focus across all levels of the district; pattern of leadership; and attitudinal features such as trust, commitment, and co-operation.

After all site visits were completed and documents and interview transcripts were studied, each researcher independently rated each district to yield a combined score of 0 to 20. The correlation between ratings was 0.91 ($p < 0.01$) for a very high coefficient of agreement. Those districts with overall organisational health scores of 12–20 were considered to be healthy, high quality districts; those with scores of 0 to 8 unhealthy, low quality districts. The significance of difference in District Health ratings was analysed using a repeated measures factorial design. The fixed factor was the group (High versus Low District Health) and rater (two independent raters). Both the group difference (F = 50.60, df = 1/12, $p < 0.01$) and the rater difference (F = 6.50, df = 1/12, $p < 0.05$) were significant. There was no interaction between group and rater. These results show that there was a substantial and significant difference in mean ratings on District Health (High = 8.07 and Low = 2.43) between the two groupings of districts used in this study. While the two raters ranked the health of the districts in similar orders ($r = 0.91$), one of the raters assigned significantly lower mean ratings than did the other rater (4.79 and 5.71) attesting to the independence of the raters.

The process of determining district health resulted in seven districts (131 interviews in 23 buildings) rated as high, and seven districts (125 interviews in 28 buildings) rated as low. Districts in the middle range (district health scores of 9–11) were not included, so that distinctions between the extremes could be studied. High districts included two rural, one small town, and four urban districts in the Northeast, Northwest, Midwest and South USA; low districts included three rural, two small town and two urban districts in the Northwest, Midwest, South and Southeast USA.

*Professional Development Practices*

Next, professional development practices were identified that characterise high quality, 'healthy' school districts and which distinguish these districts from low quality, 'unhealthy' school districts. The observed practices were then scrutinised for whether or not they were integrated to make a fit with the purpose of the district. These practices have been distilled by the researchers into a Top 10 List of Professional Development Characteristics of Healthy and Unhealthy Districts (see Table II). The most powerful characteristic is given as number 10, with other characteristics following more or less in order of importance in terms of impact.

*Student Achievement*

To assess student achievement, Students in grades 4 (approximately age 9), 8 (approximately age 13) and 11 (approximately age 16) were asked to contribute comments in writing about their schools, resulting in nearly 3000 essays. Essay responses were collected from students in randomly selected classrooms in randomly selected schools across all districts visited. For this study, the on-demand essay were

TABLE II. Professional development characteristics of unhealthy and healthy districts top ten list

| | Unhealthy districts | Healthy districts |
|---|---|---|
| 10 | Use staff development as a required tool rather than district strategy; implement discrete professional development activities. | Address fundamental issues of curriculum and instruction as part of an integrated district strategy for professional development. |
| 9 | Provide professional development without establishing a shared *district* focus based on learning for all professionals. | Provide professional development driven by a shared *district* focus based on learning for all professionals. |
| 8 | Provide professional development without first establishing a shared *building* focus aligned with the district vision; format likely to be predictable. | Provide professional development driven by a shared *building* focus aligned with the district vision; format varies with purpose. |
| 7 | Provide external incentives for professional development such as reduced cost for graduate credit, licensure points, or CEUs | Establish expectation that professional development is a job responsibility for every employee in the district. |
| 6 | Base professional development primarily on individual building and teacher choice. | Base professional development primarily on district constancy of purpose and secondarily on individual selection by building or teacher. |
| 5 | Do not require that administrators participate in professional development activities; often use professional development as a remediation tool or for information dissemination. | Involve administrators in planning and participating in professional development activities; emphasise that professional development assures excellence for the system. |
| 4 | Provide predominantly before- or after-school workshops, professional development days, and summer institutes. | Provide predominantly work-time professional development activities. |
| 3 | Provide a smorgasbord of unrelated hot-topic professional development activities. | Provide thematic professional development activities targeted to the district purpose and offered over time. |
| 2 | Use staff development surveys to identify teacher 'wants' as the basis for setting professional development activities. | Use assessment of *district* needs for setting professional development priorities. |
| 1 | Use 'soft money' or hide professional development money in other line items in the budget. | Designate a protected line item in budget for professional development. |

analysed for students in the extreme districts, resulting in 1973 students in grades 4, 8 and 11 in 14 different districts. Of these, 1041 essays were from districts classified as having high organisational health and 932 were from districts classified as having low organisational health. Minority students–Native American, Black, and Hispanic–made up approximately 27% of the data collected in high organisational health districts and 23% of the data collected in low organisational health districts.

To evaluate the writing quality of the student essay, a 6-point scale was created and piloted with a group of National Writing Project teachers. Eighteen anchor papers were determined to represent each of the six points on the rating scale. Two raters, both experienced teachers at different levels and not associated with other

TABLE III. ANOVA summary table for student essays

| Source of variance | SS | df | MS | F |
|---|---|---|---|---|
| Group | 188.23 | 1 | 188.23 | 43.94** |
| Level | 528.34 | 2 | 264.17 | 61.67** |
| Group by level | 100.15 | 2 | 50.07 | 11.69** |
| Error | 8425.71 | 1967 | 4.28 | |

*Notes:* $* p < .05$; $** p < 0.01$

aspects of this research, were trained using the anchor papers until their scores were consistent within one point. They then worked independently to determine ratings. In cases where scores varied by more than one point, a third rater was used. All scores were recorded. The correlation for the two raters was 0.92, for a very high coefficient of agreement.

The essays were analysed using a 2 by 3 analysis of variance design. The factors were group (High versus Low District Health) and Level (Grade Levels 4, 8 and 11). All three analyses—group, level and group by level—were significant at the 0.01 level. These results are summarised in Tables III and IV and Fig. 1.

The students in districts rated as high health obtained significantly higher ($p < 0.01$) mean writing achievement results (8.40) than students in districts rated as having low health (7.75). Significant ($p < 0.01$) positive change in mean scores was evident between grades 4 and 8 (7.39 and 8.46) but showed no difference ($p > 0.05$) between grades 8 and 11 (8.46 and 8.39).

It can be noted from Fig. 1 that the pattern for change was dependent on group classification. Both groups had about the same writing achievement level (7.41 and 7.36) at grade 4. The students in the high health districts were

TABLE IV. Group by level means for student essays

| Grade level* | Group** | $n$ | Mean | SE |
|---|---|---|---|---|
| 4 | High | 507 | 7.41 | 0.09 |
| | Low | 424 | 7.36 | 0.10 |
| | Total | 931 | 7.39 | 0.07 |
| 8 | High | 331 | 8.86 | 0.11 |
| | Low | 264 | 8.06 | 0.13 |
| | Total | 595 | 8.46 | 0.08 |
| 11 | High | 203 | 9.94 | 0.14 |
| | Low | 244 | 7.84 | 0.13 |
| | Total | 447 | 8.39 | 0.10 |
| Total | High | 1041 | 8.40 | 0.07 |
| | Low | 932 | 7.75 | 0.07 |
| | Total | 1973 | 8.08 | 0.45 |

*Notes:* * Level = Grades 4, 8 and 11.
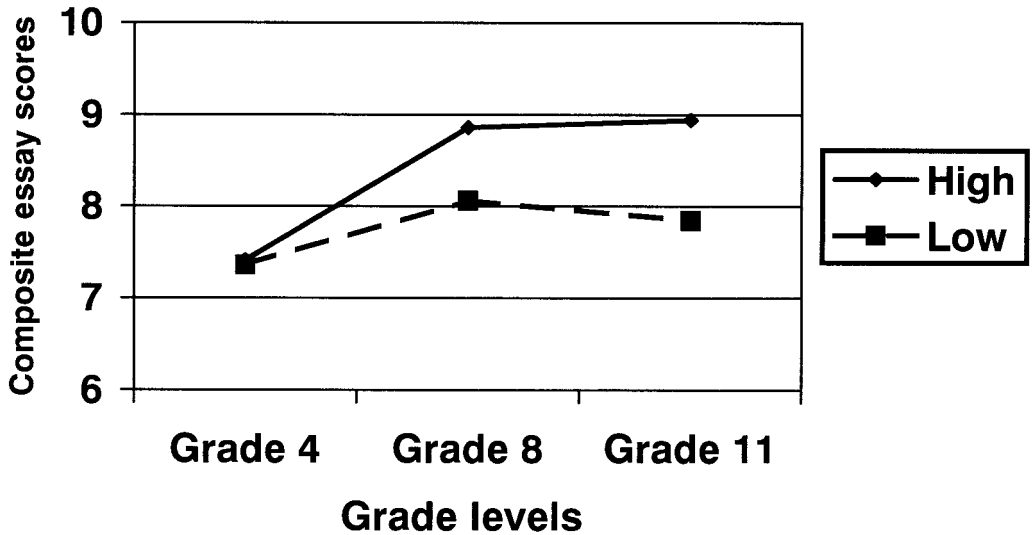** Group = High district health and low district health

FIG. 1. Essay scores by grade level and district health.

significantly higher than the students in the low health districts by grade 8 (8.86 and 8.06). The students in the high health districts showed a small increase in writing achievement (8.94) by grade 11, while the students in the low health districts showed a decrease (7.84). This difference in interaction pattern was significant at the .01 level. These results illustrate district health associated with student writing achievement. There seemed to be little impact at the early elementary level. However, the effect on student writing achievement is discernible at the 8th and 11th grade levels.

## Discussion

The following section will elaborate on each characteristic on the Top 10 list and provide examples of successful practices. However, remembering Brown's insight that professional development components can rarely be isolated, most of the examples will illustrate several characteristics. In fact, in the healthiest districts where professional development was integrated into the district strategic plan, most of the observed ten practices overlapped. In only two districts, however, were all 10 healthy practices evident.

*In healthy districts, professional development:*
*10. Addresses fundamental issues of curriculum and instruction as part of an integrated district strategy*

In healthy districts, professional development practices were integrated among themselves, and in concert with other efforts for continuous improvement. This means that they were united by themes or strands developed over time, rather than

offered as one-shot, hot-topic sessions (see characteristic 3 below). In unhealthy districts, some individual professional development activities were quite positive, but their impact was mitigated because the district was not complementing professional development activities to make a fit.

When a district includes professional development as part of a strategic plan, knowing what not to do—what to leave out as a trade-off—is as important as knowing what to do. Furthermore, in healthy districts professional development activities were planned with the end in mind, to use Covey's phrase (1989). That end is to continuously improve the teaching and learning in the district. It is not to raise test scores on state-mandated test, as was the common end for unhealthy districts. In healthy districts, test scores on state-mandated tests were only one indicator of results to be considered for the lessons that they could reveal to educators, while addressing curriculum and instruction remained the purpose of professional development.

For example, after a new literacy programme and philosophy were introduced into an urban district in the Southwest, teachers were enthusiastic about sharing the classroom applications they created. Central office administration organised a menu of practical application sessions so that teachers could demonstrate how the new programme is manifested in lessons. Thirty were offered in the fall and 30 in the spring, with participation voluntary. Teachers submitted their ideas to central office who arranged and distributed the menu. The teachers presented the lessons in their own classrooms in one and one-half hour sessions after school. The presenters were paid $50 and the participants, $15. If books were required, the district provided them. As a standalone activity, these professional demonstrations would have had limited impact on the literacy programme in the district. The key is that all sessions were thematically related, rather than a random smorgasbord of ideas, and all were teacher-led. It is notable that central office facilitated this teacher-initiated effort as a *secondary* support for a district-wide initiative on literacy.

### 9. Is driven by a shared district focus on learning for all professionals

The key word here is *district*. Healthy districts tended to base professional development practices on defined *district* purposes, which focused on teaching and learning. In the healthy districts, professional development was an essential process for promoting a shared vision among all educators that student learning was a priority. As Schmoker (1996: 103) says (quoted in Wolf *et al.* 2000: 355): 'Schools improve when purpose and effort unite. One key is leadership that recognises its most vital function: to keep everyone's eyes on the prize of improved student learning'.

In healthy districts, this orientation toward professional development dominates. It differs from that more commonly found in unhealthy districts, which was often based on responses to state tests and mandates, criticism from the public, forced changes from state departments of education, and pressures to write grants for any money available. It was noted, for example, that new monies made possible through technology grants in unhealthy districts resulted in equipment purchases rather than in professional development, so that teachers floundered to

incorporate technology into their instruction. Here, not only did the district lose its focus (technology for what?) it also did not have an integrated strategy (see 10 above) across functions in central office, so that the training and development people did not know the agenda of the equipment and facilities people.

In contrast, in one high-level district, a superintendent talked about building a linkage with a local area community college, a post-secondary/tertiary institution that awards 2-year Associate degrees. The college set up a computer school where teachers could take evening, weekend courses (at no cost to them) to develop computer competence. Once competence was demonstrated within the district, a teacher could order computer equipment for the classroom. Here, training came before equipment.

In unhealthy districts, schools and professionals move independently, often not even knowing what the teacher or school next door is doing, and with little agreement among the central office and individual schools and teachers as to the best focus for schooling. In contrast, in healthy districts, the school board, central office personnel, building-level administrators, teachers and others share the same vision for optimising student learning.

For example, building-level Instructional Specialists are a feature of all elementary schools in a large urban district in the Midwest USA, and also of all K-12 (ages 5–18) schools in a large urban district in the Southwest. These personnel are indeed *instructional* specialists, not assistant principals who deal with bus schedules, or discipline or bell schedules. Their priority is to assist teachers in their buildings in curriculum and instructional matters. They tend to be vocal, assertive, social and a-political. Their duties are expected to derive 80% from building needs and 20% from administrative needs (such as serving on district committees). Key is that for these specialists, instructional focus takes priority over management duties and their time and the district budget reflect this (addresses all 10 characteristics).

For another example, a rural district in the Midwest USA, like all the districts we visited, had difficulty identifying a pool of substitute teachers so that the teachers could be released for working together or attending professional conferences. Leaders at the district level recognised that students should not suffer when their teachers need to be away for professional development activities and that teachers should not have to worry about playing catch-up when they return to their classrooms. They addressed this problem by hiring a permanent, full-time substitute teacher for every building, allocating a permanent budget line for this purpose (see 1 below). The substitutes are selected in the same way teachers are hired. They are trained and participate in professional development along with the regular faculty. This way, the substitute teachers know the teachers, the students, the building culture and the rules and rituals. On the rare days when they are not needed in the classroom, they assist in the building.

## 8. Is driven by a shared building focus aligned with the district vision; format varies by purpose

In healthy districts, individual schools shared the district vision and found strong

support and leadership from central office administration. In unhealthy districts, if individual schools were having trouble, they could not necessarily depend on guidance and direction from central office.

A project-mentality for professional development dominated schools in un-healthy districts, so that when the funding for educational innovations stopped and the experts left, the project died. 'Outlaw' projects simply did not last. In healthy districts, only projects and funding that supported a district vision were adopted in individual schools. Collectively, then, the district grew and benefited as a whole from the success of individual schools. This ensured that the learning from the experience would sustain itself in the school, as well as provide a model for the district. In healthy districts, there was much flexibility about what format pro-fessional development might take for a particular school, especially in large districts where schools varied much in the demographics of the students they served.

For example, seventh grade English and Reading teachers in a Junior High School (ages 12–14) in an urban district in the Midwest USA wanted to combine their classes and teach 2-hour literacy blocks. Because the school had traditional scheduling, this was not an easy task. The principal agreed to support the idea, but only if substantial study *during the school day* could be accommodated over a year's time. The 7th grade teachers agreed to take more students in each of their classes and teach five classes a day instead of six, thus freeing up one planning period a day to meet in a study group. The central office provided the Language Arts Specialist as a consultant/facilitator. She met with a formal agenda/syllabus with the teachers an hour a day for the school year to address how teaching could be adapted to a block schedule and planning shared with a teaching partner. Central office also provided each teacher with books for the sessions, such as Nancie Atwell's *In the Middle: Writing, Reading, and Learning with Adolescents*. In the second year, the teachers taught three 2-hour literacy blocks successfully, and met once a month as a study group. Now, the 8th grade teachers are involved in a daily study group to change to the literacy block. The key here is that the study group is conducted during work time (no. 4), is ongoing (no. 3), focuses in-depth on topics related to teaching literacy–fundamental to the district purpose (nos. 1 and 2), and is sup-ported by forceful leaders in the building and in central office (no. 5).

## 7. Is expected as a job responsibility of every employee

Wade (1985) argues that professional development has to be based on incentives for teachers, such as enhanced status or college credit. In healthy districts it was found that teachers did not have to have such 'carrots' to participate; professional develop-ment was a positive expectation of the district culture.

For example, a small town district in the South USA requires all new hires to participate within their first two years in a 2-week writing workshop held in the district in late summer before school starts. Two sessions are offered each summer, with about 30 teachers participating (many veteran teachers return for personal renewal and updates). Teachers are paid for their participation as part of their contract year. New administrators have a required 1-week awareness

workshop on teaching writing. Across the district—in all buildings, grade levels and disciplines—the philosophy and practices for teaching writing are shared and developed. Key is that the district requires the workshop, it is led by district teachers and it provides an intense 'conversion experience' for participants, where they must take risks and share personal writing while learning how to engage students in writing. How and why to teach writing are articulated across the district, so that students progress through a district programme to develop literacy skills (see nos. 10 and 9 above). Students moving from one school to another will experience best practices commonly used to enhance literacy. Of note is that the quality of the student writing in this district, based on the essays gathered by the researchers, was consistently high across grade levels and schools, as compared to that in unhealthy districts. Furthermore, interviews indicated that all administrators are aware of the literacy philosophy and practices, can articulate them to parents, and can support and evaluate teachers.

## 6. Is based first on district constancy of purpose and secondarily on individual selection

Daniel and Stallion (1996) report that professional development in Kentucky was based on individual teacher options and that about one-third of the districts did not even provide support for this limited type of professional development. Little (1993) argues '… that the dominant training and coaching model [for staff development]—focused on expanding an *individual* (emphasis added) repertoire of well-defined classroom practice—is not adequate to the conceptions or requirements of teaching embedded in present reform initiatives' (129).

Healthy districts provided ongoing, educative professional opportunities for teachers in a variety of formats, such as the examples in this Top Ten List. They recognised that teachers need a stimulating learning environment and should not be expected to leave their districts in order to find it in university courses or professional conferences. Participation in professional conferences is an opportunity offered in most districts, but in healthy districts it did not supplant effective district-level professional development. Too often teachers attend conference sessions, which appeal to their idiosyncratic interests. In the study of teachers who did not voluntarily participate in professional development (Supovitz & Zief 2000) half of the teachers were motivated to participate by personal interests rather than professional needs. Those who attended professional conferences 'were looking for a quick fix to a specific problem rather than in-depth learning'. In this study it was found that even though teachers may have had a splendid professional experience, the impact is rarely felt school-wide or district-wide and sometimes not even in the teacher's own classroom.

However, if a cadre of teachers attends the same conference, with the intent of creating a professional development session to share with their peers, their experience can have more impact, especially if the conference theme makes a tight fit with the professional development focus of the district. For example, all 25 of the English/Language Arts teachers in the study groups in the Junior High School

example given in characteristic no. 8 above had participated in a National Writing Project summer institute.

For another example, after teachers had been trained to be district leaders in literacy professional development–a district-wide focus—the teachers formed peer partnerships. Their principals provided them email and a common planning time in the day so that they could communicate in 'real time', as well as supported their expenses to attend the same state and national conferences. The key here is that teachers shared in a partnership formed out of the district purpose (no. 2), rather than going off alone to their professional meetings and likely not sharing much when they returned to their home sites.

*5. Involves administrators in planning and participating in professional development activities, and emphasises that professional development assures system excellence*

Supovitz and Zief's study (2000) concluded that schools showing high participation in professional development activities 'tended to be schools where leaders (both teachers and administrators) demonstrated extraordinary commitment to the reforms' (27). In this study, in order to mitigate barriers to participation, administrators in healthy districts purposefully managed and organised structures that are out of the domain of classroom teachers. This could mean determining class or bus schedules, how to evaluate and encourage teachers, and what to do to enhance communication among professionals.

For example, a middle school in the Midwest USA decided to implement both the instructional team concept and the traditional departmental structure. Grade-level instructional planning teams met from Monday to Thursday, as is typical in middle schools. On Friday, the content area departments met across grade levels. Every teacher interviewed commented on the strength of this model. They were able to do effective instructional planning four days a weeks with their team members, while one day a week, they could share across teams, meeting with other grade levels and content specialists. They spoke to how these Friday meetings had broken down the communication barriers which had started to develop when they focused solely on the grade level instructional teams.

For another example, all elementary school principals in an urban district in the Southwest USA meet in a Quality Circle every other week for two hours. There is no set agenda; the principals come to the meeting with an educational issue to be discussed. A rule is that this is sanctioned time that will not be pre-empted or interrupted, not even by the superintendent. They do not discuss nuts and bolts and schedules like the more common information-sharing meetings that principals attend. Instead, they discuss their beliefs, values and responsibilities as school leaders, so that over time the working group negotiates a common belief system. The district supports the salary of an outside professional facilitator to meet with them. A key point is that this is one of the few examples that was found of professional development of administrators, conducted over time, by a trained facilitator (nos. 6 and 10).

*4. Is predominantly addressed during work time*

The National Staff Development Council recommends that up to 20% to 25% of staff time be devoted to development activities (NSDC 2001a). In only two districts did we see this recommendation met. Most districts expected teachers to stay after school, work during free periods and lunch, report to school early or meet at weekends or summers to accomplish professional development. Often, teachers pay for these experiences themselves, both in terms of time and money. In Supovitz and Zief's study (2000), teachers who do not take advantage of professional development activities said that family commitments are a barrier; they needed to get home when school ended.

In healthy districts, leaders made efforts to accomplish professional development activities during regular work time, sometimes inventing new structures to make it happen. This characteristic of healthy districts is necessarily coupled with characteristic no. 5: involvement of administrators.

For example, a rural high school in the Midwest USA took advantage of block scheduling to facilitate small groups of teachers to meet across grade levels and content areas. Block scheduling allows teachers to have 80 minutes of conference/planning time every day; every Friday, a fourth of the staff (about ten teachers) will have a common planning period. Teachers in this high school take 40 minutes of this time to sit down together and discuss educational ideas. This collaborative time is called 'Friday Forty'. It is expected that all teachers will attend and not use this time as an individual planning period (see characteristic no. 7). The only rule is that it cannot be used as a gripe session. Administrators attend if invited. Topics have included discipline, attendance policy, grading practices, early graduation and curriculum. To facilitate discussion, the school provided short readings, such as *Master Teacher* pamphlets, where relevant (www.masterteacher.com). Each Friday Forty group elects two members who serve on the School Leadership Council to decide how the school's professional development money will be spent. The key is that this is job-embedded time, and issues relate directly to the improvement of the school.

For other examples, a small town district in the South USA has a history of providing early release days for students every Wednesday that allows for 12 hours of professional development a month. Some of this professional development time is allocated to district meetings/issues, but most is left to the buildings to decide how to best use it. The students get out of school two hours early and teachers give one hour. No CEU (continuing education units) credit is given because teachers cannot earn CEUs for paid time. However, since the teachers do not have to give up all their own time for these weekly meetings, they participated readily. The key here is that this is a district-wide decision that takes priority (no. 2), so that the usual hurdles (and excuses), such as, 'We can't control the bus schedules', do not dominate the more important educational focus. Another district has determined that if the district adds 10 minutes to each school day, then teachers will have half a day a month of early release time to work together.

*3. Provides thematic activities targeted to the district purpose and offered over time*

Most studies of professional development mention this characteristic as effective, yet few districts accomplished it. Some districts did offer activities over time, but only districts with high organisational health used the district vision to unify these professional development offerings.

For example, after an outside consultant came to a rural school in the Midwest USA and delivered school-wide professional development sessions for teacher awareness of an innovation, the principal organised weekly lunch bag seminars to study the issues raised. The key is that discussion came from a common base and was conducted over many informal sessions. In other districts we found a common base of training was provided for all teachers, either in one building or district-wide, with the expectation that all would participate (no. 7). It is important that the district require this common base, rather than saying, 'If you choose to participate, fine. If you don't, fine'. To name a few, the training topics included Meyers Briggs tests to understand temperament and problem-solving orientation of faculty, 'Working on the Work' to develop lesson plans, Reading Recovery in the elementary school, TESA (Teacher Expectation/Student Achievement), and National Writing Project for all English/Language Arts teachers.

*2. Uses assessments of district needs for setting professional development priorities*

In the poorest applications of the use of assessments, results of state-mandated tests drove the curriculum to such an extent that teachers and students felt that if something were not on the test, it was not worth learning at all. In the unhealthiest districts, test scores were the sole determinant of district needs: if scores were low on a state end-of-course test in history, then teaching historical facts supplanted inquiry-based instruction; if clarification writing were the only form tested on the state writing test, then no other genre of writing was addressed—poetry, drama, narrative, memoir etc. were sacrificed for formula exposition. How and what to test dominated professional development topics in these districts.

In healthy districts, studying state test scores was among several routes used for setting professional development priorities, with the main question always being: Will this professional development opportunity help educators to advance our vision to provide high quality learning experiences for our students? If the answer were no, then no time or budget was allocated to the activity. Further, *individual* teacher needs assessments were used only as a secondary source for making decisions about professional development; how to accomplish a *shared* district vision guided all decisions about professional development.

For example, a change in district vision completely turned around one low income, nearly 100% minority, district in the Southwest USA where English was the second language for most students. Based on poor school performance and discipline records, the administrators and teachers in this district confessed that at one time they had given up on these students, blamed the parents, and accepted the excuse that they were unteachable. When the state testing mandate came down, they

established a new district vision, looked at what they needed to do to accomplish that vision and established priorities from there. Through a very painful process (as described by several people), they re-assessed themselves, their curriculum, their school environment–and quit blaming children, parents and society. They then implemented high-level professional development processes for administrators and teachers, as well as new teaching strategies. Through this process, they discovered that these 'throw away' children could learn, and learn at high levels.

Within this same district is an example of collective problem solving in one school that adopted a process of testing all children every Thursday for formative evaluation purposes. On Friday, the grade level teachers met to discuss the test results and plan for the following week. They adopted a non-punitive mastery instructional model where struggling students are re-taught and successful students are not held back. To accomplish this, parents were asked to bring their children to the school for extra help from teachers who held 'Wednesday Night' and 'Saturday School' for the slower students. On a rotating basis, teachers volunteered their time with no extra pay for the tutoring sessions. This was not seen as extra duty, but rather as the route to accomplishing a district goal. Teachers were not merely compliant; they were proud of their students' accomplishments and felt it their job responsibility to share the tutoring with colleagues (see nos. 7 and 5). These students continued with regular instruction with the rest of their classmates during the regular school day. In one year, under the guidance of an enlightened superin-tendent who set the direction for other schools in the district, the school went from having the lowest state test scores in a low scoring district to one of the highest scoring schools in the state.

## 1. Has a protected, designated line item in budget

Writing about reform in the Kentucky schools, Boston (1996) reports that funding for local professional development moved 'from an initial $1 per student (1990–91) to $23 per student (1995–96). Overall spending on professional development has increased dramatically, from $1.1 million in 1990–91 to $11.6 million in 1994–95' (11–12). Certainly, much more attention and money have been invested in pro-fessional development in the last decade. By and large, this is a result of increased government and grant money going to the schools in reform efforts. The risk is that when the outside funding goes, so does the professional development. In a recent poll of members of the National Staff Development Council as reported in *Education Week* (21 March 2001), many school systems said that they are making 'only a limited investment in any kind of professional development–either in time or money. About 38 percent of those who responded ... reported that their districts set aside just three days a year for training. And about 70 percent said their school systems devoted less than 5 percent of their annual budgets to professional development'.

Districts with a strong commitment to professional development can adjust their budgets to maintain high quality offerings when external limits are imposed. In the reform success in NYC District no. 2 (Elmore & Burney 1997) researchers found that for the district to change, central office had to reallocate money and

earmark it for professional development. In 2000, the district spent three-quarters of the district budget in classroom instruction and instructional support. This necessitated the district reducing the number of administrators. In our study, we found that high quality districts spend as much as 20% of their budget on professional development, but the money is not easy to track as it is nested in a lot of different budget categories. The largest budget for professional development was in an urban district in the Midwest USA that maintained salaries for central office-based trainers (see example below). Lower quality districts allocated only 2–3% of their budget for professional development, usually money mandated by something else, such as by outside funders or by state requirements for a certain number of paid professional development days in the school calendar.

For example, the district devoting the largest protected budget line for professional development was a large urban district in the Midwest USA with a 30-year history of a trained corps of District Curriculum Consultants who work out of central office to provide both professional development and curriculum assistance. This model employs one full-time staff development person for every 450–500 students in the district. Ten full-time district-level Curriculum Consultants, all with considerable classroom experience, represent each major subject, plus media/technology. In addition to their own subject matter expertise, all Curriculum Consultants participate in training in cognitive coaching for mentoring growth and in more generic topics such as multiple intelligences, co-operative learning, active/constructivist learning processes, and interviewing skills. When the superintendent was asked how he saw the job description of Curriculum Consultants, he said that he wants them to be in schools 65% of their time.

Curriculum Consultants are not seen as persons who should spend their time doing the paperwork that central office needs. Their job brief is to assist and mentor teachers for growth and improvement, not to evaluate them. They mentor new teachers for three years, observing them and providing feedback for the first six weeks, but not reporting results to their principals. Many use the 'teaching alongside' model of professional development, where they work directly with students for five days in a row in a classroom with the regular teacher as instructional helper. The Curriculum Consultants meet regularly as a group with the other consultants, as well as meet regularly with a curriculum network, which is composed of Instructional Specialists from all of the elementary schools (see example in no. 9), department chairs from the middle and high schools and principals. Key is that the central office in this district makes on-site, teacher-led professional development a priority, both in terms of time and budget. In addition, although Curriculum Consultants have specialty areas where they can 'do their own thing', they share a common base of training provided by the district (addresses all 10 characteristics).

## Conclusions

The research indicates that some of recommendations for professional development in the professional literature do not stand the test for enhancing district health. For example, those districts that tended to base professional development practices on

surveyed teacher needs assessments and individual choice (no. 6 in chart) showed up as having low district health. Although in healthy districts teachers did attend professional conferences and take courses to develop individual interests and skills, this was only a small component of their professional development, used mainly for developing attitudes and special interests.

It was discovered that healthy districts could successfully incorporate more than one professional development model, each appropriate to the identified objectives which promote the district vision. The models include: study groups, expert delivery, action research, mentoring and peer coaching (side-by-side teaching demonstrations) and intensive summer institutes, to name a few. Additionally in healthy districts, each model works because it is guided by the constancy of district purpose; that is, the belief that the way to improve student achievement is to focus on how teachers can enhance student learning and not on raising test scores.

Most of the educational literature about professional development speaks of *school*-based activities, or *school* reform. An exception are studies conducted by the Consortium for Policy Research in Education (CPRE) which have explored the role of *districts* in the improvement process. A CPRE study of strategies for facilitating improvement in 22 districts in eight states (Massell 2000) identified four prevalent strategies used by districts to build capacity. These are: interpreting and using data; building teacher knowledge and skills; aligning curriculum and instruction; and targeting interventions on low-performing students and schools. This study confirms the use of these strategies in all the healthy districts we visited, but further elaborates on how and why the central office enacts them, as well as the pattern of leadership which supports them. Moreover, this study characterises the differences in professional development activities according to district health.

In answer to the first three research questions, healthy districts tend to make a fit of all their professional development activities by integrating them into a systems belief or vision that moves the district forward. This supports the findings of Langer's study (2000) which identified the most successful districts as ones that co-ordinated efforts across all functions to improve student achievement. In her study, successful districts had 'widespread efforts to improve learning and achievement' (402) and created 'a targeted local plan for instruction that would be orchestrated across grades and over time' (413). In the current study, the finding that district health was more closely related to student achievement as grade level rises might be a result of the entire districts orchestrating or not orchestrating, student learning across grade levels and time.

In answer to the research question four, student achievement apparently is a by-product of overall district health. The means in essay scores between the highest seven and lowest seven districts in terms of district health were significantly different, controlling for grade level. The overall mean for the high districts (8.40) was significantly higher ($F = 43.94$, $df = 1967$, $p < 0.01$) than the mean for the low districts (7.75). Just as in Langer's study, those districts with integrated plans for nurturing a professional culture within which children can learn evidenced higher district health as well as higher student achievement. In Kanter's terms, the healthy districts created a Culture of Pride and a Climate of Success.

In this study, professional development activities in healthy districts were found to be linked to each other and to a district purpose that unifies them. Moreover, professional development in such districts is part of a district strategy governing all decisions in the district. These districts see professional development as another organisational strategy to ensure that overall district purposes are reached. Therefore, the changes effected by professional development tend to be sustainable.

One particularly striking finding was that three of the districts with high levels of organisational health had implemented and supported continuous improvement strategies through professional and curriculum development for more than 20 years. This idea supports Porter's (1996) belief that strategic positions should have a horizon of a decade or more, not of a single planning cycle. Writing in *Education Week* (16 May 2001), Lipkin reports that in the area of hard science, bringing a new idea into practical use usually requires as much as 20 years of research and development (45). Evidently, the visions of scientists and educators keep them tenacious.

In contrast, unhealthy districts see professional development as discrete activities. While individual schools might benefit from an innovation, others remain isolated. Although some individual professional development practices might be quite good in and of themselves, they are not unified into a system of beliefs as part of a strategy to improve learning and teaching. They are, therefore, vulnerable to external influences, such as changes in funding, pressures imposed by state-mandated tests or other external directives and public opinion. In some cases, no traces of professional development efforts remain in these districts.

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NOTES

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