

EDUCATIONAL PLANNING

Vol. 7, No. 1

The Journal of The International Society for Educational Planning



PROMOTING THE STUDY AND PRACTICE OF EDUCATIONAL PLANNING

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Translations: *Educational Planning* will attempt to provide readers with major language translations of journal articles. Interested members should contact the editor regarding availability, costs, lead time, etc.

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Educational Planning is the refereed journal of the International Society for Educational Planning. *Educational Planning* is published quarterly by the Society, which maintains editorial, production, and correspondence offices at The University of Alabama, P. O. Box 870302, 312 Wilson Hall, Tuscaloosa, AL 35487. The Journal is assigned ISSN 0315-9388 by the International Serials Data System/Canada. All material in the Journal is the property of the International Society for Educational Planning and is copyrighted. No part of this publication may be reproduced or transmitted in any form by any means electronic or mechanical, including photocopy, recording or any information storage or retrieval system without written permission from the publisher. Permission to use material generally will be made available by the editor to students and educational institutions upon request. For submission information, please see last page.

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SCHOOL ASSESSMENT AND SCHOOL IMPROVEMENT: AN ORGANIZATIONAL CULTURE ANALYSIS

Robert V. Carlson

The public and its representatives continue to clamor throughout the United States for school improvement. Numerous national studies and state legislative mandates further document these concerns and the call for action (Passow, 1984; Street, 1986). Unfortunately, as is often the case, the desires exceed the realities. That is to say, it is far easier to identify what is broken than it is to fix it. This dilemma continues to perplex educational leaders and is the focus of this report.

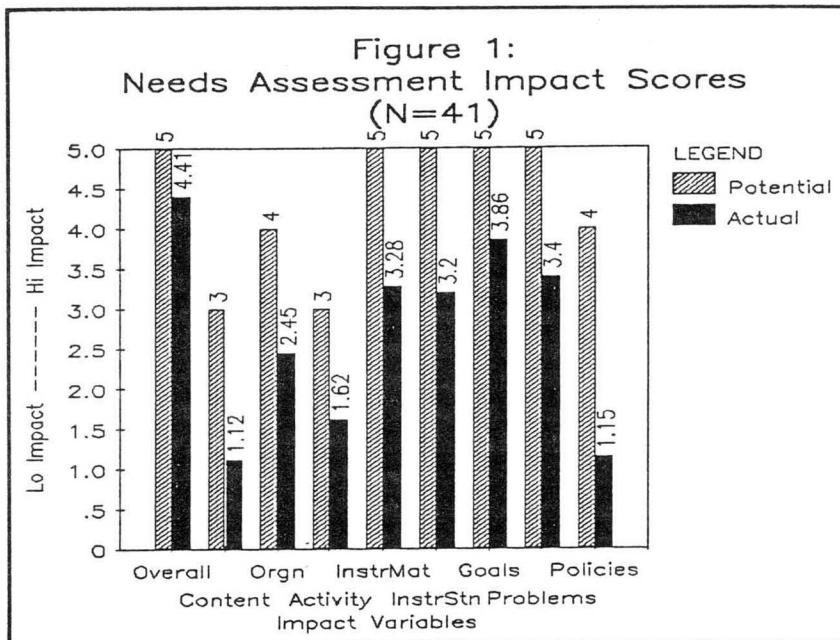
The research described herein began with the over-arching question concerning the role school level needs assessment studies play in the improvement of schools. For the purposes of the study, the definition of a needs assessment was a set of data-gathering activities deliberately and systematically initiated for the purpose of setting an agenda for long-term school improvement. Three types of needs assessment approaches were studied and included the familiar accreditation model espoused by the National Study for School Evaluation (NSSE, 1983), a systems management model which draws upon a predetermined list of goals and objectives, and the Effective Schools Research Model (ESRM) modified from the research of Edmunds and Fredericksen (1978) and Brookover and Lezotte (1977).

The study involved two phases. The first phase identified a population of schools which had recently, in the past 3 - 5 years, conducted a needs assessment study. The second phase involved identifying a subset of schools from the original population which demonstrated successful results from their needs assessment study and subsequent improvement efforts.

The first phase study resulted in identifying and surveying 148 schools located primarily in the states of Arkansas, Connecticut, Colorado, Pennsylvania, Iowa and Michigan. These schools were recommended by persons involved either as consultants or state department of education officials in supporting a local school improvement effort. Each school received three copies of the *Implementation Questionnaire* to be completed by the principal and two other staff members and a *School Background Information Form*. Forty-one (41) or twenty-eight percent (28%) of the schools responded to the questionnaire and background information form. The questionnaire, which was adapted from a study by Rosenblum and Louis (1981), queried respondents concerning the influence of their needs assessment overall and upon curriculum content, school organization, teacher activities, instructional materials, instructional situations, school goals, school problems, and school policies. The background information form provided information on school, community, and the nature of the needs assessment study.

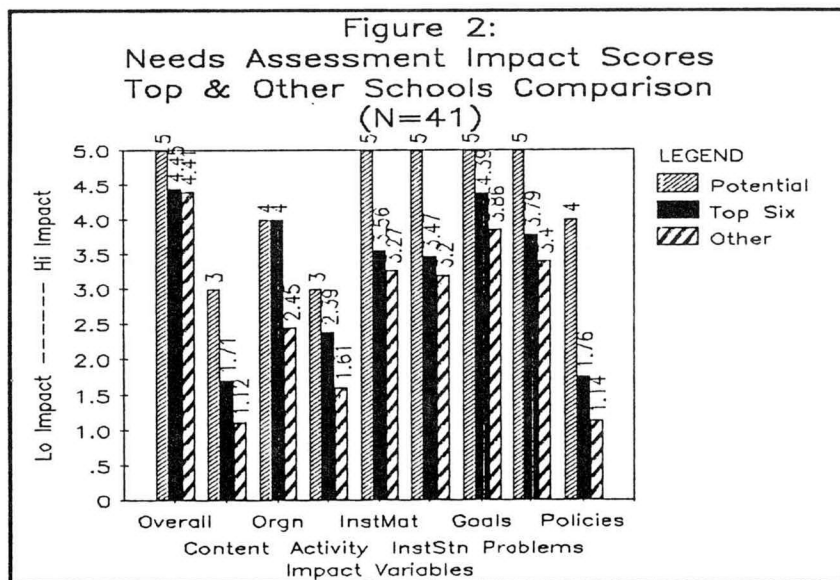
Space constraints limit a complete treatment of data generated by these instruments. As can be observed in Figure 1, the perceptions of school personnel regarding the potential impact and actual impact of their needs assessment efforts suggest some lags. Even though they perceived the overall impact to be high, when probed on specific areas of impact, a different impression results.

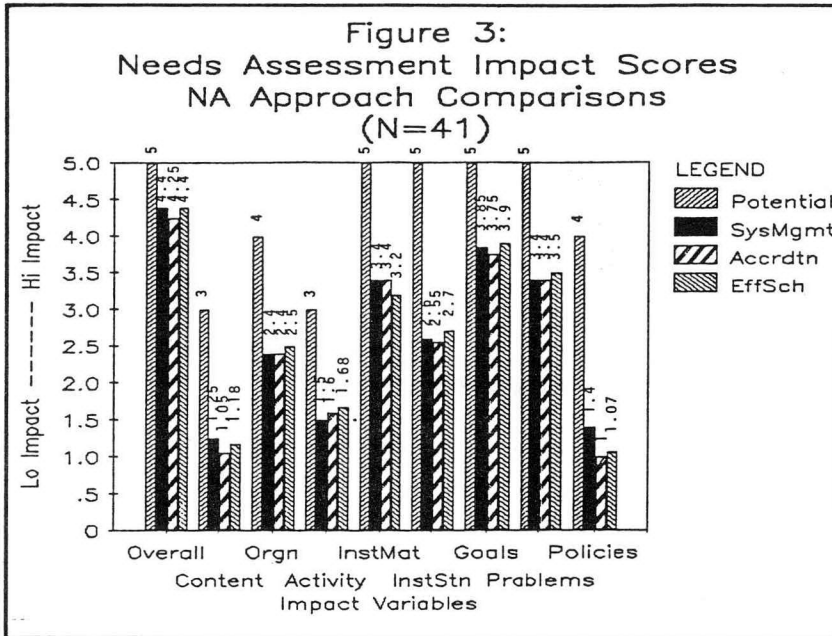
Aggregating the data from the three respondents for each of the schools enabled deriving a needs assessment impact score for each responding school. Using scores which fell one



standard deviation beyond the mean score for the responding schools, six high-performing schools were identified. Figure 2 displays the results which compare the top six schools with the other schools in the study.

Major areas of difference were in curriculum content, school organization, teacher activities, goals, and policy changes.





A comparison was made of the respective needs assessment approaches used by the schools under study. Figure 3 displays the relative impact of the three needs assessment approaches and potential areas of impact. As can be observed, each approach seems to have similar impact with a slightly greater impact displayed by the systems management approach in regard to policy changes.

In summary, the first phase of the study ascertained that minimal changes were evident across the responding schools in spite of a general claim of high overall impact and the exceptional performance of a small subset of schools. The needs assessment approaches followed by the school districts seem to yield similar results.

The second phase of the study was designed to answer the question concerning what made the difference in the schools reporting greater impact of their needs assessment approach. As indicated earlier, six schools surfaced as exceeding the group's mean performance by one standard deviation. Using a comparative case study design, three most contrasting schools were identified from the six schools. The schools selected varied in the type of school-community (e.g., rural, small city, and urban), type of needs study utilized (e.g., accreditation, systems management, and effective schools), and grade levels represented (e.g., K-12, high school grades 9-12 and middle school grades 5-8). Figure 4 summarizes the three schools which were targeted for an on-site visit.

The purposes of the on-site visitations included determining or documenting the specific changes which occurred over the recent past, establishing the methodology followed to achieve these results, and uncovering, via perceptions of staff members and through observation of school practices, the factors which contributed to the implementation and continuation of these changes.

Using case study methodology and related qualitative methodology (Stake and Easley, 1978), a week-long visit was conducted at each school. The visitation protocol included:

Figure four: Summary of characteristics of three schools visited

School	rural	small city	urban	grades	needs asmt
A	x			K - 12	sys mgmt
B		x		9 - 12	accredtion
C			x	5 - 8	Eff Schs

(1) interviews of 50% of the school’s faculty (randomly selected), building and district administrators, and school board members; (2) observations of classrooms, faculty and administrative staff meetings; and (3) a review of pertinent documents (e.g., curricula guides, policy handbooks, etc.). Standard qualitative data analyses (Miles and Huberman, 1983) followed data gathering and included transcription of field notes, content analysis and pattern identification, and cross checking of findings across multiple sources.

The results of the visitation’s data gathering procedures and subsequent analyses grouped into the two categories of anticipated and unanticipated findings. The anticipated findings supported the 15 change factors propagated by Fullan (1982). These include characteristics of the change itself (e.g., need and relevance of the change, clarity, complexity, and practicality), characteristics at the school district level (e.g., history of innovative attempts, adoption process, central administration support and involvement, staff development and participation, evaluation, board and community characteristics), characteristics at the school level (e.g., principal, teacher-teacher relations, teacher characteristics and orientations), and characteristics external to the local system (e.g., role of government and external assistance). These findings have been reported elsewhere (Carlson, 1987) and currently are being prepared for further dissemination. The focus of this report, however, is upon the unanticipated findings which included the influence of the school’s organizational culture upon the school’s improvement effort.

To aid in understanding the meaning of organizational culture and its role in influencing the behavior of members of an organization, a brief overview follows.

Organizational Culture

The term “culture” is a current topic of interest and a framework for examining, explaining and changing organizational performance (Bolman and Deal, 1984; Deal and Kennedy, 1982; Frost et al., 1985; Peters and Waterman, 1982; Schein, 1985). To limit one’s perspective to the “charts” of the structuralists or the communications of interpersonal relations can seriously miss the essence of organizational behavior. The unwritten norms, mores, symbols, and rituals are described as the “glue” (Frost et al., 1985) that holds the organization together. Such a perspective is being applied with increasing frequency to organizations in education (Ducharme, 1985; Fetterman, 1984; Lawrence-Lightfoot, 1983; Matthes, 1986; Perrone and Associates, 1985; Smith, 1982; and Spindler, 1982). It is a perspective which can be used to isolate those cultural elements which have contributed to the very nature of the organization or school. It is a perspective which recognizes the uniqueness of each organization or school.

Cultural analyses provide a different set of lenses for examining and explaining organizational behavior in a general sense as well as the behavior of individual members. There are many definitions of culture as applied to organizations ranging from the simple to the complex.

However, the following definition provides a sharper focus in describing organizational culture as "... the pattern of basic assumptions that the group has invented, discovered or developed in learning to cope with its problems or external adaption and internal integration and that has worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems." (Schein, 1986, pp. 30-31)

The key concepts of interest are the "basic assumptions" as manifested in rituals, symbols, and beliefs that influence and sustain an organizational change effort. These rituals, symbols, and beliefs are common to all organizations to one degree or another. However, they take on more specific meaning and influence during an organizational change effort. For example, the conducting of a needs assessment is more than the sum of its parts. That is to say, the process of gathering performance data can be viewed as a perfunctory effort or it can be seen as mobilizing members of the organization to accept a greater vision of themselves and their organization. It is from this latter perspective that the culture of an organization has greater potency in understanding the meaning of ordinary events. This is not to ignore other strategies for change including structural and/or human resource approaches. Rather it is an attempt to provide insight on what is often ignored in the organizational change literature. That is, a view of how organizational culture can play an important and complementary role in motivating personnel to change.

There are some cautions in applying this type of analysis to organizational behavior and Schein (1986) provides a brief review of these "pitfalls." He points out there is a danger that such an analysis can be superficial and miss the essence of an organizational experience or overlook the historical development of its culture. It is in this spirit that the following analyses are presented and must be treated as exploratory in nature.

Cultural Artifacts

Each of the following three schools visited provided a rich bank of qualitative data. School A, the Hill Top View School District, is a rural system in terms of size and location. The district is located in a mid-eastern state somewhat isolated in a coal-mining region and facing the economic fallout of idle mines. The enrollment is slightly less than 800 students, grades K-12. The district followed the mandate of the state department of education in generating a five-year set of plans. This long-range plan was initiated with a systems needs assessment approach facilitated by a local higher education institution and included school district input in identifying desired goals for their district. The survey of staff and members of the community and subsequent implementation efforts resulted in a number of changes including the reading program with the hiring of a reading specialist, the acquisition of new reading materials, and new developmental and remedial courses. Additional changes included curriculum development in language arts and mathematics, an adult education program, and the establishment of a full-time kindergarten program. Hill Top's planning effort followed closely the state's mandate approach and received state-level recognition.

School System B, Prairie View, is located in a small city in the rural Midwest and enrolls approximately 1200 students in grades 9-12. The community serves as the commerce center for an extensive agricultural economy and light industry. The school district enjoys wide community support and has gone through significant changes over the past eight years. There is relatively low turnover among the faculty and those teaching in the system feel they have "arrived" by being employed in the district. The school system enjoys both a national and

regional reputation as an outstanding and innovative school system. The school district followed the accreditation model for identifying needs of the high school. The accreditation approach included a self-study and an external team visitation guided by the evaluative criteria for secondary schools. This review and subsequent improvement efforts resulted in district-wide and high school-level changes. The district-level changes included the formulation of a district-wide curriculum committee which guided extensive revision and updating of K-12 curriculum guides, the creation of a staff evaluation and development program, and the establishment of a parent volunteer program. At the high school, changes included the establishment of an advisor-advisee program, submission of grants which resulted in the acquisition of audiovisual equipment and computer hardware, updated classroom equipment in the sciences and industrial arts, and the establishment of a child-care team made up of community and high school staff members.

City View Middle School, School C, is an all-black school which was formed in 1980 as a result of court ordered redistricting. The school resides in a neighborhood where there is extensive poverty, dilapidated and burned-out buildings, and major concern for the safety of the students. There are slightly over 400 students attending grades 5 - 8 being taught by a faculty of 30 members and 3 full-time administrators. Changes, which were very closely linked to the Effective Schools Research Model, included a shift to a large group instructional model, a raising of expectations for student performance, development of a dress code for students and staff, alignment of the curricula to the standardized testing program, the establishment of planning procedures including year-long and quarterly goals with related reporting, and the formulation of teacher teams and time allocated for their planning. These changes resulted in documented improvement of standardized test scores and observable improvement in school climate and teacher morale.

The three schools, Hill Top View, Prairie View, and City View, offered contrasting but comparable cultural phenomena. That is to say, each context differed in regard to content but not necessarily in regard to process. It was possible to observe or recapture retrospectively through interviews a vivid story for each school which included several cultural artifacts. Displayed in Figures 5 - 7 are specific rituals, symbols, and beliefs for each of the three schools. These cultural phenomena grouped reasonably well into the major stages of the change process which include readiness, initiation, implementation and continuation (Rosenblum and Louis, 1981).

As can be observed in the figures, rituals include mostly committees and related meetings, symbols include shibboleths and selected objects, and beliefs expressed run a wide range of opinions in the respective schools. Some artifacts are unique to a particular phase of the change process (e.g., Hill Top View's State Department Long Range Planning Policy and "Are we doing the best for kids?" for the readiness phase) and other artifacts appear in several or all phases (e.g., Prairie View's symbols of "What's best for kids?" and City View's "All children can or will learn").

It is important to keep in mind that these cultural artifacts are not so extraordinary when viewed by themselves but when put in the context of a school or school system, they take on stronger meaning. That is to say, they perform a function of clarifying value choices, motivating personnel to spend their energy on certain causes, and sustaining interest in the change effort. The best examples of this are the beliefs linked to student potential. In the Prairie View School District this was expressed as "what is best for kids" and in City View it was "all children can/will learn." Over a short period of time these beliefs in both school systems became a

Figure five: Stages and cultural artifacts in the process of organizational change for the Prairie View School District.

Rituals	Symbols	Beliefs
1.0 Readiness		
-Adm. staff mtgs. -Curr. Articulation Comm.	- "What's best for kids?" - "Do what is right!"	-Bd. & adm. support -Adm./bd. authority
2.0 Initiation		
-Adm. staff mtgs. -Curr. Articulation Comm.	- "What's best for kids?" - "Do what is right!"	-Bd. & adm. support -Adm./bd. authority
3.0 Implementation		
-Wkly fcly mtgs. -Adm. staff mtgs. -Board of Ed. reports -A/A morning mtgs. -Curr. Articulation Comm. -Child care team mtgs.	- "What's best for kids?" - "Do what is right!" - "Do it well!"	-Bd. & adm. support -Adm./bd. authority -Politeness & distance
4.0 Continuation		
-Wkly fcly mtgs. -Adm. staff mtgs. -Post-Inch tch.r. rm. exchg. -May Day basket custom -A/A morning mtgs. -Curriculum Committee -Child care team mtgs. -Board of Ed. reports	- "What's best for kids?" - "Do what is right!" - "Do it well!"	-Bd. & adm. support -Adm./bd. authority -Politeness & distance

Note: A/A = Advisor/Advisee

Figure six: Stages and cultural artifacts in the process of organizational change for the Hill Top View School District.

Rituals	Symbols	Beliefs
1.0 Readiness		
-LRP Committee -NA process	-School architecture -Trophy/photo displays -State Dept. LRP policy -Life-size portrait	-Politeness -Frugality -Orderliness & control -Felt need for change -"Are we doing best for kids?"
2.0 Initiation		
-LRP Committee -NA process -Board of Ed. reports	-Formal attire -New equipment -New textbooks	-Adm./bd. control -Principal support -Orderliness & control -Felt need for change
3.0 Implementation		
-Scrapbook -P-T conferences -Board of Ed. reports -Curriculum writing -Curriculum in-service	-New textbooks -Reading specialist	-Tchr. professionalism -Students are good -Orderliness & control -Felt need for change -Principal support -Felt need for change
4.0 Continuation		
-Scrapbook -Board of Ed. reports -Quality circles -P-T conferences	-New textbooks -Reading specialist	-Tchr. professionalism -Adm./bd. control -Orderliness & control -Principal support

Note: LRP = Long Range Planning
 NA = Needs Assessment
 P-T = Parent-Teacher

Figure seven: Stages and cultural artifacts in the process of organizational change for the City View Middle School.

Rituals	Symbols	Beliefs
1.0 Readiness		
-Desegregation order -Faculty polarization	-Disadvantaged Blacks -White flight -Impoverished neighborhoods	-Segregation is harmful -Poverty means inferiority -Need for Black pride
2.0 Initiation		
-Grant submission -Four-school cluster -ESRM survey -Summer workshon	-"All children can learn." -Four-school network	-Black students can do better -Faculty cohesion is needed
3.0 Implementation		
-Staff in-service -LR & qtrly goals -Teacher team mtgs. -Lesson plan reviews -P-T conferences	-Dress code -Instructional specialist -Display of Black leaders -Principal leadership	-Higher expectations produce greater effort -Higher test scores indicate success
4.0 Continuation		
-Staff in-service -School review -Teacher team & fac. mtgs. -Outsiders' visits -Long range plng. -Curricula revisions	-"All children will learn." -Principal leadership	-Importance of preventing all students from failing -Higher test scores means success -Instructional specialist

Note: ESRM = Effective Schools Research Model
P-T = Parent-Teacher

symbol to many administrators, teachers, and board members and took on greater importance in initiating and sustaining needed school changes.

Cultural Analyses

A cultural analysis is rich in providing potential explanations of organizational behavior particularly those surrounding the implementation of change. It is difficult to establish any closely connected relationships among the observed artifacts and between the various changes that were achieved in these school systems. However, the analysis of the three school systems which are comparable in their change efforts does afford an interesting contrast.

The school systems offer a sharp contrast in the degree of institutionalization of the change process. In the Prairie View and City View school districts, the depth and breadth of the change effort was very evident. Both systems continue to invest heavily in staff development, curricular changes, and improvement of instruction. The Hill Top View School District experienced a quick start on a number of changes but was having greater difficulty in sustaining longer range curricular and instructional changes. There are a number of possible explanations including some mix-up on a curriculum design format and inexperienced leadership in the Hill Top View system.

However, further analyses of the cultural artifacts vis-a-vis the stages of change suggest some contrasting differences. Although there are a number of similar rituals and beliefs in the three school systems, the symbols differed appreciably between the systems. For example, initially all systems expressed the belief that they should do what is best for their students. However, in the Hill Top View District this belief never reached the level of a symbol and thus did not take on the significance that it did in the Prairie View and City View systems. In addition, in Prairie View additional beliefs became symbolized (e.g., "Do what is right!" and "Do it well!") to the extent that these concepts were part of nearly everyone's lexicon and were sustained throughout the four phases of the change process. In City View the motto of "All children can learn" was modified to emphasize all children "will" learn. The expansion and shared support for similar symbols did not occur in the Hill Top community.

The symbols of Hill Top are rooted in the past and are somewhat superficial. As can be observed in Figure 5, the school architecture (i.e., the high school) and the enormous portrait of a past patron, whose wealth paid for the construction of the school, served as symbols of past glories and are very evident in the initiation stage. In addition, these symbols have become impediments to progress and have made future changes extremely difficult, if not nearly impossible. Several ironies seemed captured in these symbols. For example, in the current period of a local level economic depression, the high school building is a reminder of a better era and a source of community pride. However, the building is extremely outdated, a potential fire hazard, and an inflexible and constrained structure for meeting contemporary curricular needs. As a consequence, future changes are being seriously hampered.

Thus far, the most successful symbols have been the creation of a reading position and the purchase of texts and equipment. Considerable pride was shown in identifying reading deficiencies in students as a major need and gaining school board approval in hiring a reading specialist and replacing outdated reading texts. The acquisition of microcomputer equipment is a slightly different story. The high school principal had been successful in initiating the purchase of 12 microcomputers; however these machines are standing idle in an empty, locked classroom. There appears to be an impasse with the school board as to what further support is

needed to make this equipment usable by students and where the funds are to be obtained. In the meantime, the idle equipment serves as a symbol of tension and perceived lack of school board support for innovative school practices.

Summary

The research reported here was initiated to determine the degree to which schools change based on a local needs assessment study. Although the survey results did not offer much encouragement as to the role needs assessments play in enabling local school change, a smaller number of schools did indicate some progress. Three of these schools were identified for follow-up and each was visited. The visits produced some interesting findings particularly concerning the influence of organizational culture upon the change efforts.

The theoretical framework of organizational culture aided in understanding how these schools achieved their results. The three schools, although initially similar in the overall impact of their respective change efforts, did prove to be quite different in respect to the institutionalization of the change process. The Prairie View and City View systems took greater pride in their changes and saw these changes as important to the health and vitality of their school and community. The Hill Top View system became locked in conflict with its community and school board and must rely on the state's mandated long-range planning requirements to extract further support from the community.

A possible explanation for sustaining change in a school system, as exhibited in both Prairie View and City View, rests in the ability to raise its beliefs to commonly shared symbols and to utilize its rituals to further reinforce these symbols. It is interesting to note that the Prairie View School District was in a similar state as the Hill Top system. That is, the previous school board and superintendent of Prairie View prided themselves in maintaining a very conservative fiscal philosophy. It was not until these conservative board members either retired or were defeated and replaced by more liberal minded persons that the school system began to initiate numerous changes, including the replacement of the superintendent.

There is little doubt local school change is complex and closely interlocked with its community. It seems each community is unique. How easily strategies of change can be transferred to different systems remains a very difficult question to answer. The lens of organizational culture provides greater appreciation for these subtle and often hidden school-community differences and in part explains the differences. As to whether the culture of a school system can be controlled or manipulated, remains a very open question and clearly needs further study. On the other hand, ignoring rituals, symbols, and beliefs of schools seriously limits the potential for improving them in the future.

REFERENCES

- Bolman, L.G. & Deal, T.E. (1984). *Modern approaches for understanding and managing organizations*. San Francisco, CA: Jossey-Bass.
- Brookover, W.B. & Lezotte, L.W. (1977). *Changes in school characteristics coincident with changes in student achievement*. East Lansing, MI: College of Urban Development of Michigan State University and Michigan Department of Education.

Carlson, R. V.

Deal, T.E. & Kennedy, A.A. (1982). *Corporate cultures*. Reading, MA: Addison-Wesley.

Ducharme, E.R. (1985). Establishing the place of teacher education in the university. *Journal of Teacher Education*, 36, 8-11.

Edmunds, R. & Fredericksen, J.R. (1978). *Search for effective schools: The identification and analysis of city schools that are instructionally effective for poor children*. Cambridge, MA: Center for Urban Studies, Harvard University.

Frost, P. J., Moore, L.F., Louis, M.R., Lundbery, C.C. & Martin, J. (1985). *Organizational culture*. Beverly Hills, CA: Sage Publications.

Lawrence-Lightfoot, S. (1983). *Good high schools*. New York, NY: Basic Books.

Matthes, W.A. (1986). *Colleges of education: cultures or organizations*. Paper presented at the meeting of the American Association of Colleges of Teacher Education, Chicago, IL.

National Study of School Evaluation. (1983). *The first fifty years, five decades of service to education*. Falls Church, VA: NSSE.

Passow, Harry A. (1984). *Reforming schools in the 1980s a critical review of the national reports*. New York, NY: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University, 87.

Perrone, V. and Associates. (1985). *Portraits of high schools*. Lawrenceville, NJ: Carnegie Foundation for Advancement of Teaching.

Peters, T.J. & Waterman, R.H., Jr. (1982). *In search of excellence*. New York, NY: Harper and Row.

Rosenblum, S. & Louis, K.S. (1981). *Stability and change*. New York, NY: Plenum.

Schein, E.H. (1985). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.

Schein, E.H. (1986). What you need to know about organizational cultures. *Training and Development Journal*, 40, 30-33.

Smith, L.M. (1982). Ethnography. *Encyclopedia of Educational Research*, New York, NY: Macmillan.

Spindler, G.D. (Ed.). (1982). *Doing the ethnography of schooling*. New York, NY: Holt, Rhinehart and Winston.

Street, S. (1986, April). *Qualitative analysis of educational reform in ten southeastern states*. Paper presented at the meeting of American Educational Research Association, San Francisco, CA.

SCHOOL IMPROVEMENT

Jack Owens and Deborah Walker

In recent years, policy-makers at the federal and state levels have given considerable attention to the reform of public education in the United States. Commissions have been established, blue ribbon panels formulated, and legislative committees have exerted considerable energy toward identifying the current condition of public education in America as well as proposing potential remedies to the apparent crisis. Voluminous pages have been dedicated to the subject in the form of reports, position papers, resolutions and legislation, both at the state and federal levels.

What in fact is an area of great importance to both policy-makers and policy-implementors concerned with improving the lives of children in our nation's schools has become a political issue of tremendous importance. As with most political issues, the policies and practices recommended by decision-makers may be politically motivated rather than research based. In fact, the best intentions can fall prey to the temptation to do what is appealing at the moment, rather than adhere to a clearly defined set of values operationalized through the policies we adopt and course of action we choose.

The following paper is an attempt to share the story of one district's efforts to operationalize that body of research encompassed by the work done in the area of school effectiveness (Edmonds, Lezotte, Brookover, Rutter and others). As with any body of research, school effectiveness has its legitimate critics. Our intent here is not to enter the debate, but to share those policies and practices implemented at the local district and school level which have contributed to the promotion of student achievement for all children. Even more important is the work carried out in the district in the area of organizational assessment performed at the local school level, aimed at identifying areas of strength as well as those requiring further attention.

Milpitas is a unified school district (K-12) located in the Silicon Valley in California. The city itself is undergoing rapid demographic change, making the transition from a blue-collar to a high-tech community. The district has a 50+% minority enrollment, a significant number of students on AFDC, a variety of languages spoken, and a range of parent income and education levels.

The school effectiveness studies were read with great interest in Milpitas, for several reasons. Achievement was low, despite the fact that students demonstrated ability on a variety of measures. Expectations among staff and community were also low, the curriculum was somewhat diffuse and focused on minimal skill acquisition, and there was not a common sense of purpose. Thus, the school effectiveness research had the effect of putting into bas-relief many conditions that worked against increased achievement. It also provided a way of looking at schools that was helpful in bringing about instructional improvement for students.

The district first sought to make administrators aware of the school effectiveness findings and to discuss ways to apply that knowledge to the schools. The district provided training in how to translate the school effectiveness variables into school practices and asked principals to include the variables in their school plans. These practices became part of the principal evaluation criteria as well. The district also incorporated the effectiveness variables into its

long-range plan, resulting in development of a district mission and long-term goals, a set of Board policies, renewed curriculum development efforts, a district-wide plan for administrator and teacher staff development, and a revamping of teacher evaluation criteria and procedures. The ideas of curricular adherence and effective teaching methodologies incorporated into evaluation predated state reforms that were adopted in 1983. What the research provided was a lens through which to view the schools and the district as a whole, and to give direction as to the quality of leadership needed. In many ways, school effectiveness results were interpreted as leadership priorities, helping the district make the transition from principal as plant site manager to principal as instructional leader.

An outgrowth of the implementation efforts was participation, with the Santa Clara County Office of Education, in development of the School Effectiveness Project. The idea was to translate the school effectiveness studies into a form usable by districts throughout the county and the state. From this collaboration emerged the idea of the Basic School Profile, a computer-generated analysis of a school based on survey and demographic information, which compared the school to "effective schools." The comparison was based on 14 effectiveness variables developed by the project and gave schools an indication of how far they needed to go to match the effective schools' ratings.

The profile service was to include a staff orientation session, an option for action planning and training on individual variables. In addition, the project would conduct its own study to confirm the school effectiveness variables with schools demonstrating consistently high achievement on standardized measures. The project plan was an ambitious one, fueled by what we had already learned in Milpitas about implementing the research.

The Basic School Profile is an assessment instrument developed by the School Effectiveness Program located at the Santa Clara County Office of Education in San Jose, California. The BSP is divided into two major components of assessment data. The first is educational outcomes—student reading and math achievement, academic self-concept, student attendance, and behavior. Student outcome information is reported for the entire school as well as for specific sub-groups, i.e., grade level cohorts, sex, ethnicity, language dominance, and socio-economic level which is determined by parents' level of education.

The second component of the Basic School Profile reports the perceptions of the educational environment held by students, parents, and teachers. Perceptual data is collected through the administration of surveys to each subgroup. Contents of the surveys reflect information known about the characteristics of effective schools. The characteristics of effectiveness are represented by 27 indicators organized across four categories: (1) learning climate; (2) social climate; (3) organizational climate; and (4) instructional leadership.

The BSP yields two aspects which differentiate it from other school effectiveness assessment instruments. It reports data more discretely than other instruments. Perceptual data is reported from 14 variables (see Figure 1) of effectiveness rather than the common seven. Variables are broken down into more specific indices of effectiveness referred to as "indicators."

A second aspect which differentiates the Basic School Profile is that it contains a standard for comparison drawn from a sample of high achieving schools in California. The sample was identified from the entire population of public elementary schools across the state based upon their display of continuous high performance over time on state mandated achievement tests in the basic skills.¹

SCHOOL EFFECTIVENESS VARIABLES

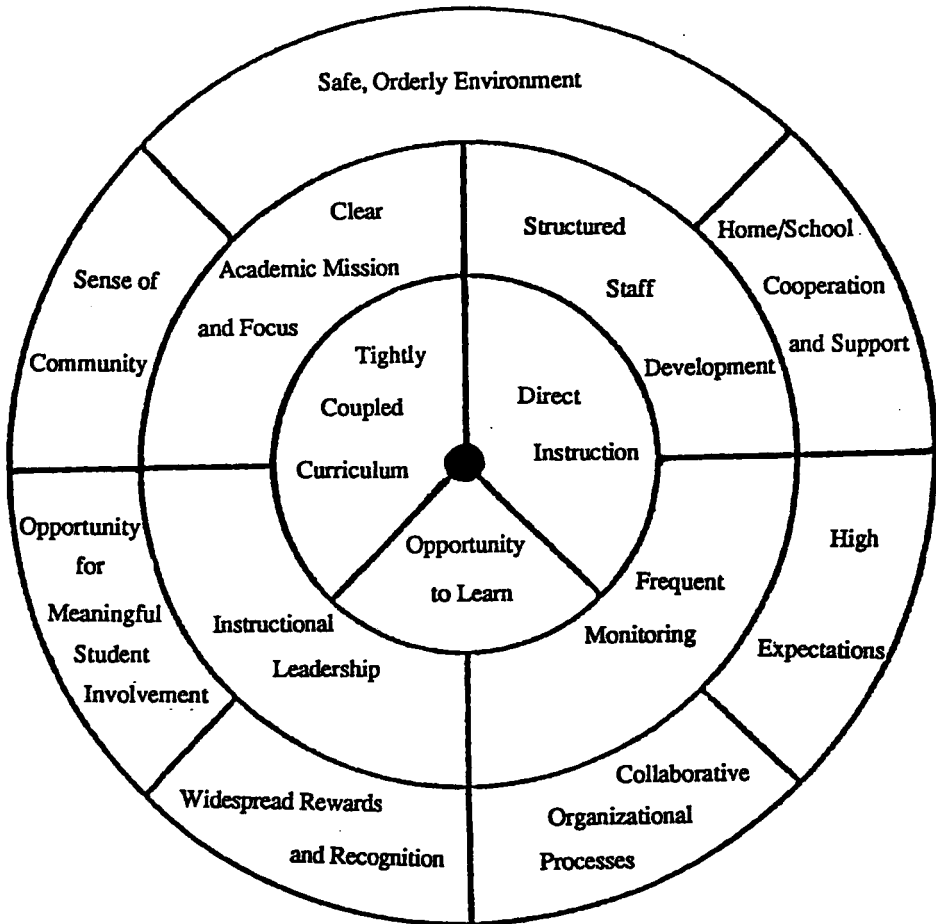


Figure 1

A school score is provided for each subgroup as well as for the total number of students for whom information is provided. The school score simply represents the mean score for the profiled school. The school score is provided on a scale of 1 to 10, with 10 representing a more desirous level of attainment. Within the total planning process, the actual score obtained is useful only to the degree that it assists staffs to draw conclusions about the level of performance of a particular subgroup in relationship to that of other subgroups or the performance of all students. Sample size is also offered to provide a certain level of statistical honesty in the planning process.

The review of this data is also helpful to the planning group when they address school level practices related to various program and policy issues. The entire issue of equity in terms of student access to and progress toward the curriculum program objectives can be explored through use of this information. The authors' experiences within the planning process underscore the power of this type of reporting.

Data yielded through the Basic School Profile obtained through surveying teachers, students, and parents regarding their perceptions of the school's educational program is presented for each of the 14 variables and for specific indicators of effectiveness where applicable. For example, teachers respond to questions directed at the variable Opportunity to Learn, which is delineated by four distinct indicators: protection of instructional time, time allocations, homework, and success rates for students. Various data are reported: number in sample, school score, degree of consensus (standard deviation), effective school comparison band, and steps to effectiveness.

The school score for each of the variables reported is presented in relation to the performance of a group of high achieving schools in California. This relationship is represented geographically within the profile by means of the Effective School Comparison portion of the report. The use of a comparison band introduces a standard against which schools can compare their performance in a particular area. The Steps to Effectiveness section allows for schools to see the areas in which additional improvement may be required. Contained on the following pages are samples of pages from a Basic School Profile report.

The authors would offer one word of caution with respect to the use of information contained within the school report. While the information is valuable and of immeasurable assistance in providing a backdrop for exploring areas for school improvement, users are cautioned to interpret the data with care. The results are best utilized within a structured planning process such as Action Planning. Under these conditions, school staffs benefit from the assistance of a facilitator trained to guide them through the information contained within the report.

Upon receiving the Basic School Profile report, school staffs in Milpitas participated in Action Planning. Action Planning is a planning process which was developed collaboratively among staff members of the School Effectiveness Program and the Milpitas Unified School District. The planning model is an adaptation of that used by the Connecticut State Department of Education. The process is comprised of six distinct phases: (1) Analysis of the Data; (2) Prioritizing Areas of Concern, (3) Generating a Problem Statement for Area of Priority; (4) Generating a Plan for Intervention; (5) Determining Assessment Procedures; (6) Planning for Implementation.

School Effectiveness Program
Basic School Profile

SANTA CLARA COUNTY
OFFICE OF EDUCATION

SCHOOL: SAMPLE
DISTRICT: SAMPLE
COUNTY: SAMPLE

DATE: 05/17/85

	NUM IN SAMPLE	SCHOOL SCORE	EFFECTIVE SCHOOL COMPARISON										STEPS TO EFFECTIVENESS			
			1	2	3	4	5	6	7	8	9	10				
TOTAL	145	6.3						X--								1.7
ACHIEVEMENT LEVEL (9-TILE)																
6-7 (2ND)	32	6.8														.8
7-8 (3RD)	16	6.5														4.3
8-9 (4TH)	17	5.7														5.8
1-25 (4TH)	22	5.6														
SEX:																
FEMALE	73	6.9														1.4
MALE	69	5.7														1.6
GRADE:																
4TH GRADE	41	6.3														1.7
5TH GRADE	54	6.6														1.0
6TH GRADE	50	6.0														1.1
7TH GRADE	0															N/A
8TH GRADE	0															N/A
ETHNICITY:																
HISPANIC	11	6.5														.9
CAUCASIAN	82	6.4														1.5
BLACK	15	5.6														N/A
JAPANESE/CHINESE	12	7.8														N/A
FILIPINO	2	4.8														N/A
VIETNAMESE	3	7.6														N/A
OTHER	20	6.2														N/A
LANGUAGE DOMINANCE:																
ENGLISH	185	6.3														1.7
LIMITED ENG PROF	22	6.3														3.8
LIMITED ENG PROF	13	6.3														.8
PARENT EDUCATION:																
HIGH	57	6.8														.8
MEDIUM	63	6.1														2.1
LOW	25	4.8														11.4

Table 1

School Effectiveness Program													
Basic School Profile													
SANTA CLARA COUNTY OFFICE OF EDUCATION		DATE: 05/17/85											
SCHOOL: SAMPLE		TEACHER'S PERCEPTIONS OF											
DISTRICT: SAMPLE		EDUCATIONAL ENVIRONMENT											
COUNTY: SAMPLE													
NUM IN SCHOOL SAMPLE	SCHOOL SCORE	DEGREE OF CONSENSUS	1	2	3	4	5	6	7	8	9	10	STEPS TO EFFECTIVENESS
SCHOOL SOCIAL CLIMATE													
SENSE OF COMMUNITY:													
16	6.3	1.49								X			10.2
-TEACHER COHESION													
STUDENT OPPORTUNITY FOR MEANINGFUL INVOLVEMENT:													
16	5.8	1.27							X				.8
-GOVERNANCE AND RESPONSIBILITY													
SAFE, ORDERLY ENVIRONMENT:													
14	7.6	1.05									X		4.4
-SCHOOL SAFETY													
16	6.9	1.13								X			2.3
-RULES AND ENFORCEMENT													
14	5.3	1.99							X				3.8
-CLASSROOM MANAGEMENT													
INSTRUCTIONAL LEADERSHIP													
15	6.6	2.84									X		4.2
PRINCIPAL SUPPORTIVENESS													
15	6.6	1.56								X			3.1
ENTREPRENEURSHIP													
PROMOTES INSTRUCTIONAL INVOLVEMENT													
16	6.8	1.32										X	.8
ORGANIZATIONAL CLIMATE													
COLLABORATIVE ORGANIZATIONAL PROCESSES:													
16	5.5	2.46										X	5.3
-TEAM-MAKING													
16	6.3	1.52										X	3.2
-GOAL PROCESS													
16	6.8	1.56										X	2.5
-COMMUNICATION													
JOB SATISFACTION													
14	5.9	1.47										X	8.4
STRUCTURED STAFF DEVELOPMENT:													
16	6.7	1.28										X	1.6
-GOAL RELATED													
14	6.6	1.75										X	2.3
-OPERATIONALIZED													

Table 2

A planning team of approximately five to seven members comprised of the principal and teachers representative of the school staff meet to review the data contained within the report for their school. The school planning team meets for two to three days to implement the phases outlined above. An external facilitator (external to the immediate school, not necessarily the district organization) guides the group through the planning process. The outcome is a written action plan which outlines the course of action which the school will implement to address a particular effectiveness variable. ²

Schools within the Milpitas Unified School District were profiled initially during the 1983/1984 school year. Action Planning was conducted at each elementary school with Jack Owens acting as the external facilitator for each site. Subsequent to these initial planning efforts, the district refined its planning process, incorporating the contents of the school effectiveness profile with other student outcomes defined by the district.

Schools within the district were profiled once again during the 1986-87 school year. Schools have incorporated this most current information into their yearly planning activities. In recent years, the use of an external facilitator has been eliminated. This is due in part to fiscal constraints as well as increasing sophistication on the part of the principals and their staffs to review raw data and incorporate it into their school plan. Additionally, district level staff under the direction of the superintendent have developed a systematic planning model which addresses both process and content. This model has served as the basis for all planning efforts within the district during the last three years.

The language of school effectiveness became embedded in the vocabulary of the school district. The notion of classroom instructional variables and school climate variables as guideposts for improvement was woven into the fabric of the district. As a result:

- * Principals and assistant principals shifted their focus significantly from school management to instructional leadership. They directly supervised classroom instruction more; they participated in methodology training and supported teacher implementation efforts. They helped teachers interpret test score information and make instructional decisions based on that information.

- * Teachers participated widely in methodology training, and with the assistance of administrators and peer coaches, tried out newly learned skills in the classroom. They also participated in districtwide curriculum development efforts, aimed at aligning the curriculum as well as providing greater enrichment opportunities for students.

- * Students performed better than in previous years, on standardized measures. They benefited from more targeted teaching, more time spent engaged in classroom learning and homework, higher expectations for their achievement, and stricter monitoring of their progress.

Products were developed as a means of codifying the implementation of practices based upon the school effectiveness research. These included, for example, the following:

1. An agreed upon set of performance objectives for teachers based upon the research.

**SCHEMA FOR COLLECTING AND USING SCHOOL
EFFECTIVENESS INFORMATION FOR SCHOOL IMPROVEMENT**

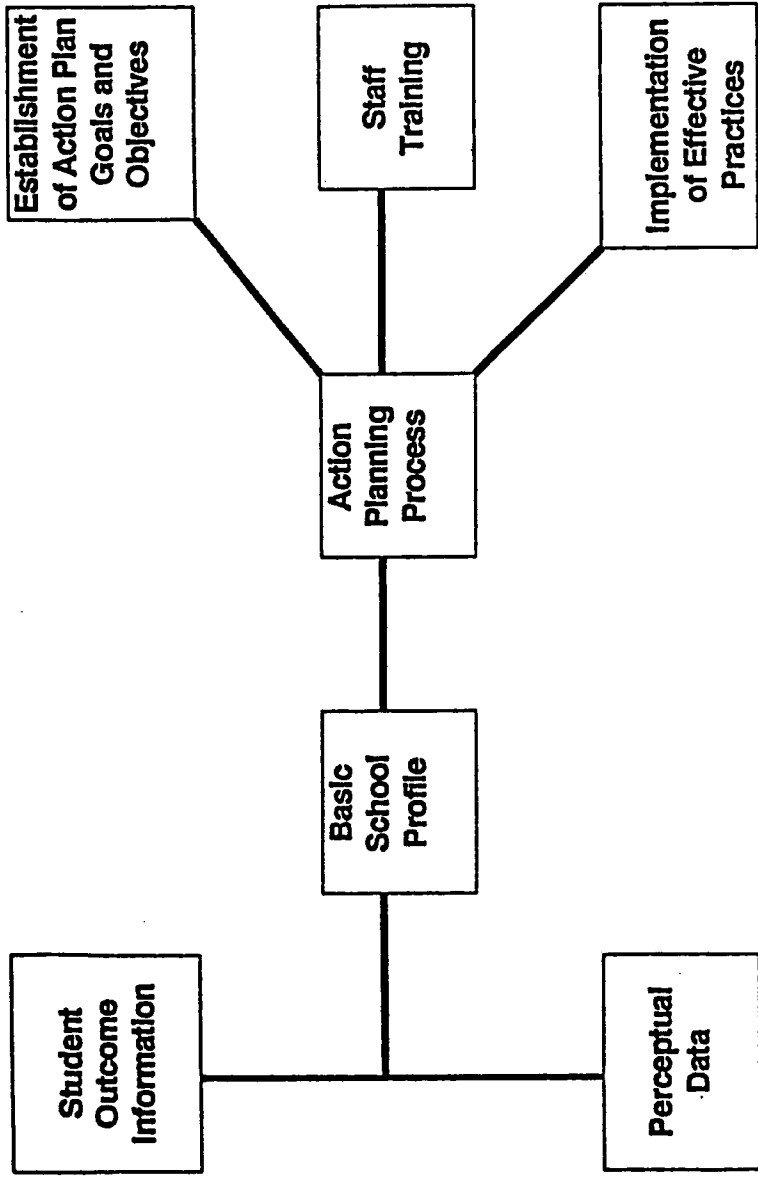


Figure 2

2. A comprehensive teacher evaluation plan which includes a variety of types of observations, review of classroom artifacts and student progress measures, and summation of accomplishments in the form of a rather thorough evaluation letter.
3. A common curriculum throughout the district which includes a set of student performance goals.
4. A comprehensive site administrator evaluation plan based upon the descriptors of each variable as defined by the School Effectiveness Project, and translated into administrator performance objectives.
5. A set of training manuals aimed at increasing both teachers' and administrators' instructional knowledge and capability.
6. A modified organizational structure that promotes the school effectiveness practices referenced in the literature. Included are elementary school vice principals, to support principal instructional leadership, a district level staff development team, and a school site training team which helps institutionalize effective practices at the school level.
7. A central office role designed specifically to assist sites in implementing school effectiveness practices and to monitor the quality of implementation efforts. Referred to as the "executive function," the role was piloted first by the superintendent, to establish parameters, assessment documents and the supervision process. Later, the role became formalized as the Director of School Supervision and Support, and was assumed by Jack Owens.

After nearly eight years of emphasis on school effectiveness, there exists within the district a variety of artifacts; that is, evidence that the school effectiveness practices have become operationalized. Some of these artifacts are described below.

- * Board policies on school effectiveness: curriculum, instructional leadership, discipline, teacher evaluation/performance.
- * Related policies and administrative regulations on uniform textbook adoption, homework, grading.
- * A set of intended student outcomes—the result of a community long-range planning process—which forms the basis for planning and decision-making.
- * School level plans which blend categorical program objectives with district direction, that is, with district mission and focus. These plans are built around the student outcomes.

Many districts have tried to bring about change and improvement. Often these efforts are overly general and diffuse. What we learned in Milpitas is that the change must be clearly defined, clearly focused and based on solid research.

Even given these three conditions, the plan for implementing new practices, such as those drawn from the school effectiveness research, must be comprehensive, affecting every level of the organization. We believe these conditions must be in place:

1. Conceptual understanding and support for school improvement at the top administrative level.
2. Commitment to and support for school improvement at the board policy level.
3. An organizational structure that allows new practices to take hold. This includes some sort of executive function role, which is responsible for reviewing and monitoring the implementation of new practices.
4. An organizational philosophy that includes strong central direction during initial implementation efforts, and increasing school autonomy as there is greater understanding of the basis for the improvement efforts and a shared vision of the results.
5. Willingness to direct efforts toward training of staff: first administrators, so they can provide strong, instructional leadership; and teachers, so they can direct their efforts toward accomplishing improvement goals.

We found in Milpitas that we quickly developed a common vocabulary, based upon school effectiveness concepts, and that we used this vocabulary extensively to reinforce improvement efforts. We also took great care to define the school effectiveness variables clearly and in detail, so that the temptation to co-opt this new knowledge, by dismissing it as existing practice, was reduced. With increased knowledge and understanding, we were able to realize in a relatively short time many of the goals we had set for ourselves. These early successes energized us as a district and increased our willingness to focus efforts toward school improvement.

NOTES

1. For an indepth review of the criteria used to select the sample of schools upon which the effectiveness standard is based, see Technical Report: "Santa Clara County School Effectiveness Program," Jennifer Pruyn and Marsha Weil, November 1985.

2. For a more detailed discussion of action planning, see "Using a Criterion-Based School Effectiveness Assessment Instrument: The Santa Clara County Experience," Jack Owens, Jennifer Pruyn and Marsha Weil. Paper presented at the Annual Meeting of AERA, Chicago, April 1985.

PUBLIC SCHOOLS: MEETING THE CHALLENGE OF CHANGE*

Carl Candoli

The suggested topic for this presentation has caused me to reflect on the changes that have occurred during my lifetime and their impact upon the way one lives and perceives his accommodation of the change process. For the sake of relevancy and expediency, I will focus on the change that has come during the past four decades.

It is well known that the United States has moved from an agrarian society to an industrial society and is now a technological (information) society. The post World War II years have seen fantastic technological developments. Among the more spectacular to me are:

1. In communications, we can now transmit sound and visual images around the world and beyond. We have the capacity to communicate interactively by image and by sound so that we can provide the resource of the finest teacher to an unlimited audience. Through the miracle of television, we can span the world and beyond and provide instant dialogue with any group, any country, any individual with whom we desire to speak. However, we do not yet have the will to utilize this wonderful technology to provide educational resources to the millions of persons in the U.S. and abroad who can most profit from it.
2. In manufacturing, we have virtually eliminated unskilled/non-skilled labor and in the process have created an almost permanent unemployed-unemployable segment of our society. We have moved from the industrial age of production lines and mass production to the technological age of robots and computerized production. Such concepts as quality circles, networking, participatory governance, decentralization, joint venture, risk capital, etc., have forced the understanding of a new and sometimes confusing vocabulary. These topics along with computers and micro-chips, bioengineering, telecommunications, genetics, the environment, energy (nuclear and fossil fuel), the greenhouse effect, and similar titles and concerns dot the intellectual landscape in 1988.
3. In transportation, we have broken the sound barrier and have devised ways to move massive loads of materials and people at an extremely efficient cost. Yet we have not solved the issue of pollution and contamination of the air we breathe. We have succeeded in developing the auto as the prime means of getting people from one location to another, yet we have not really solved the problem of driver error that leads to an unbelievable toll of lives and resources annually.
4. In agriculture, technology has dramatically increased our productive yield with hybrid seeds and improved methods providing capacity to feed the entire world. Yet, we have not yet devised a mechanism for supplying the hungry and enabling those in need to participate in the productive gains of the past four decades.

**Reprint of a 1988 speech to the ISEP membership, Austin, Texas.*

5. In distribution, technology has dramatically changed the need for long-term warehousing space resulting in reduced inventory requirements that previously tied up tremendous capital for producers. With computers predicting flow of component parts, production can be planned to meet needs and supply materials on an as-needed basis, resulting in a more controlled capital investment and providing more capital for new product development and risk.

6. In finance, technology has virtually eliminated the need for carrying substantial amounts of cash with which to do business. Electronic transmission of payments, charges, investments, payables, payrolls, and every other transaction have served to irreversibly change our business lives. While much more efficient and effective, it nonetheless has depersonalized the financial area to the point of anomie. It is hard to get to know credit card numbers as real people and checking accounts as real families.

The point is that the past four decades have seen tremendous technological changes—changes that we've yet to absorb into the nation's school systems.

Another area of dramatic and traumatic change has been the massive sociological change that has occurred in the post World War II years. Beginning in the late 1940s with President Truman's Executive Order desegregating the armed forces, the pace of sociological change has accelerated in this country.

The 1954 and 1955 Brown I and II cases began a school desegregation process unparalleled anywhere in the world—a process continuing today in attempts to insure all children an equal education.

The civil rights acts of the 1960s giving particular attention to voters' rights will go down as significant pieces of legislation and are attributed to the leadership of President Johnson.

The 1970s saw continued pressure on affirmative action concerns and spawned a variety of Justice Department interventions in schools, employment, and residential areas. Clearly the U.S. was moving in a positive manner to address the most glaring inequities facing those persons previously ignored by the process.

The 1980s have been a period of retrenchment and retreat with national and state leadership becoming increasingly cautious in pursuing civil rights-related activities. The law is still the law, but interpretations have considerably changed the impact. For example, the change to a strict constructionist point of view on the part of the federal courts and the Justice Department have slowed the process of civil rights action to a crawl.

In the arena of traditional social institutions, i.e., the family, the church, government and other "democratic" strongholds, we have seen and felt seismic changes in the past 40 years.

The nuclear family as we once knew it, with father, mother and two children is a thing of the past. An overwhelming majority of children are being raised in one-parent homes, and in a majority of those homes the parent is a working parent and must find day care for the child. Indeed, the realization of desperate need for day care is now bursting upon the country and every political figure is rushing to further confuse the issue. The harsh reality is that the conventional nuclear family is no more. The need for adequate day care for the vast majority of children in the U.S. is a growing need that must be met.

Organized religion as we knew it 40 years ago has also changed. The Roman Catholic Church, for example, has undergone a series of modernizations. Attempts range from the

English Mass to massive changes in church expectations of members. Likewise, other denominations have moved to reflect prevailing theological thought and existing mores in their practices. All of these changes, of course, generated counterforces in the form of theologically conservative groups and movements. Thus, we see the forces for the Latin Mass and a return to conservative patterns; a movement in the Southern Baptist Church to recapture the schools of theology and the governing body; a series of scandals surrounding the electronics ministry and a genuine concern for organized religion as we have known it.

The issue of government and governing bodies has undergone considerable change over the past four decades largely because of the dramatic change in communications processes. Truman was the last president to undertake a "whistle stop" campaign and largely depended upon the printed media for coverage and exposure. With the advent of electronic media, particularly television, the entire concept of the political campaign had to be redone. Government has a way of more quickly reflecting prevailing thought and postures. Therefore, as we note, the movement has been dramatically to the right and toward conservative postures. However, and this is an anomaly, we have seen an increase in political use of government for particular vested interests.

The point here is that almost every institution, every organization in the U.S., has undergone extensive change during the past 40 years, yet the institution of public education has successfully resisted change and more than any other institution is basically the same as it was. Shifting values of the U.S.—growing attention to individual rights, the environment, technology, changing family structures, and massive sociological changes—have had little impact on the educational system of the country.

The political reality of the U.S. has also undergone tremendous change over the past 40 years. Who would have predicted that a Republican president would open communications with Communist China and that another Republican president would consummate an arms limitation treaty with Communist Russia? Who would have predicted that the prevailing political focus would be the center of the spectrum with both parties striving to assume the most centrist position possible? While the Democrats have always been supportive of social programs and of meeting people's needs, witness the change in posture of such "liberals" as Senator Moynihan relative to welfare and attendant requirements to work to qualify, and Senator Kennedy on balancing the budget, to mention just two examples. Also, witness the position of such people as Senator Kassebaum on farm subsidies and Senator Weikert on civil rights, and the shifting change in positions is seen. Who would have predicted that the U.S. would be transformed from the world's creditor to the world's largest debtor during a Republican administration? Who would have predicted the \$140 to \$150 billion annual balance of payments deficit during a Republican administration? Yes, the political landscape is topsy-turvy with positions not stable and firmly held. If a person had gone to sleep in 1948 and awakened in 1988, the ability to differentiate between Democrat and Republican would be most difficult.

Credit television for some other significant changes in the political process. Starting with John F. Kennedy the focus has been on television presence and showmanship rather than substance and thoughtful positions. The capacity to project and to present a favorable visual image has become of utmost importance in the campaign. Even the conventions are orchestrated for prime-time effect.

Another disturbing political fact is the "Do as I say, not as I do" posture of political figures. Giving lip service to solid family virtues such as church attendance and godliness while never going to church is one example. Giving lip service to anything and everything that is moral and

right while conducting a series of activities that are at best unethical if not downright dishonest is another example. Holding all others to the highest standards of integrity while not following the same high standards is still another.

Comparable change has occurred in the economic arena during the past 40 years. In the transition from an industrial society to a technological society the payoff has shifted from production to information and from goods to ideas. In 1950, an overwhelming majority of the work force was engaged in production of goods. By the early 1970s the work force was equally divided between production and the services area. Today, the bulk of the labor force is engaged in service and/or information tasks. The need for an educated work force has finally dawned on the American public with the reform movement of the 1980s. Earlier reforms of the 1970s were predominantly in the "rust belt" states where the economic change burst upon the scene about a decade earlier. In these states, Illinois, Indiana, Ohio, Michigan, Pennsylvania, New York, Massachusetts, etc., the dual impact of the oil embargo and Japanese response to the need for energy efficient cars served to jar the electorate and their officials to recognize the need for educational reform about 10 years earlier than the southwestern states which still had the luxury of gas and oil as well as the growing agricultural productivity of the region.

The anomaly is that while thousands of jobs requiring literacy skills are advertised in paper after paper across the country, there has emerged a permanent underclass, unemployed and unemployable because of the lack of simple literacy. This is a serious and most damaging accusation levied against the public schools of the U.S.

There also has emerged a real need to take stock of U.S. priorities and expenditures. We continue to provide the major defense force for Europe and the Far East and expend vast sums to protect Europe and Japan, yet both Europe, especially Germany, and Japan are reaping economic windfalls at the expense of the U.S. while we continue to support the armed forces to the tune of billions. These countries have become creditor nations of the U.S. with the American taxpayer picking up the tab. To speak of withdrawing our troops is to consort with the enemy, but to continue the present path is sure bankruptcy. Similarly, the U.S. has gotten involved in a number of questionable activities around the world (South Africa and Panama for example), and here in the U.S. with the Pentagon scandals, just now being recognized as costing billions over the years. Judicious use of those funds would enable a series of needed expenditures to meet priority needs: the environment, health, education, and child care to name a few.

I feel terrible about a national debt that will be my legacy to my grandchildren and beyond. How, in the name of good government, can we allow the accumulation of a debt that threatens to submerge us with nary a whimper? Just think, in eight years we've gone from the world's banker, the largest creditor nation, to the world's pauper—the world's largest debtor nation—without reacting to the obvious dangers. We simply must regain our national initiative and commitment in order to survive and recover. We shall have to face the need to tax and to conserve if we are to regain our national prestige.

Demographic change has been perhaps even more dramatic in the past four decades with Texas realizing as much or more change than any of the other states. In Texas, this rapid demographic change was accompanied by parallel economic changes that exacerbated the effects of demographics. These were the decline of the price of oil and the decline of agriculture as a major cash producer for the state. In other words, we had both the drying up of the oil patch and the cotton patch simultaneously. These two facts, when coupled with the emerging demographic reality, were the driving force behind the education movement of the 1980s. Let

us examine the demographic patterns of the U.S. and more particularly of Texas to get some idea of the realities to be faced by the public school system of the late 1980s and the 1990s.

First, the massive movement from the southern farms to the northern cities changed the demographic pattern of both the South and the urban North. This movement, coupled with the early suburban development, ended by the mid 1960s and forever changed the demographic patterns of the large and middle-sized cities of the North.

Second, the immigration of persons for political and economic reasons from such places as Cuba (to Florida), Mexico (to Texas and California), Central America, China (to California via Canada), Vietnam, Cambodia, Thailand, Africa and Europe accelerated during the 1970s and 1980s.

Third, the birthrate of the Anglo child-bearing-aged population declined dramatically while the birthrate for Hispanic and Black families remained at prior high levels. This skews the age breakdown to show a disproportionate number of young people in the total population of these groups.

Fourth, severe economic depression in Mexico and virtually every open border between the U.S. and Mexico led to untold millions of Mexican natives migrating to the U.S. and becoming a growing segment of the populace.

To show the severity of the demographic change, the Texas public school enrollment figures indicate that by 1987-88 over 48% of the enrollment came from minority groups. By 1990, it is projected that over 50% of Texas public school enrollment will be of minority origin. By the early 2000s, the majority of Texas public school students will be of Hispanic origin. California's public school enrollment reflected a minority enrollment of over 50% in 1987-88. Other states report similar growth patterns for minority students with a reported 90% of Hispanics living in nine states: Texas (21%), California (33%), New York, Florida, Illinois, Arizona, New Jersey, New Mexico, and Colorado.

As we examine the proportion of students in higher education, and in particular teacher education, we find a wide disparity between numbers of public school students who are Black or Hispanic and the numbers of Blacks and Hispanics currently enrolled in institutions of higher education. A dropout rate in excess of 33% with greater percentages for Black and Hispanics further exacerbates the issue. It becomes quite clear that not only are we not succeeding in providing adequate educational stimulation to motivate students to finish high school, we are also failing to motivate Black or Brown students in the pursuit of higher education. Our track record is really quite dismal when viewed as disaggregated data by race and by socioeconomic level. When analyzing the data by race we find that, in terms of high school completion, the Anglos are at the 77-80% rate, Blacks at 70-73% rate and Browns at 62-65% rate. Statistics also show that students from lower income homes are also disproportionately represented in the dropout statistics. This, after at least a decade of emphasis on multicultural education and after Chapter 1, Title 2, Title 4, state compensatory education aids and other efforts to address the issue.

The reality is that without institutional response to match the changes discussed above, we will not significantly influence the distressing and depressing statistics just stated. What must we do to initiate needed reform?

First, we must begin to address the wide disparity in the enrollment figures between public schools and higher education. We have begun to do that by adopting the effective schools model for public education in Texas. As students of all socioeconomic levels and race begin to succeed in school, the universities and colleges must attract them to their institutions. We must make

it convenient for all students to participate in the educational process. Data from the alternative certification programs are excellent and suggest that the ATC is the best source of existing efforts or incorporation of methods is in order.

Second, a whole series of institutional changes must proceed in public education. Comparable change is intimated for higher education as well. Included in these changes are: (a) Decisions affecting students and student performance must be made at the classroom and school level. The teaching staff must be involved in generating programs to meet unique needs and in assessing the effectiveness of particular programs. Teachers must be given a role in the determination of educational priorities and direction. They must be considered professionals and must develop a professional demeanor that warrants professional status. This, of course, has serious implications for teacher education in preparation programs, and (b) considerable improvement in the understanding and appreciation of our multicultural society is imperative for prospective educators. This need must be met before any dramatic improvement in the educational process for minority and poor youngsters can occur.

Third, in professional education preparation programs we must move from an arts and sciences model to a professional school mode. This, of course, means that the reward system of the university must be examined and modified. The arts and sciences model with its emphasis on academics and scholarly research simply does not accommodate the clinical relationships that are essential to the kinds of institutional changes needed to resolve the issues we face in the 1990's. Just as medicine cannot develop cures in isolation from patients, education cannot devise a response to an educational need in isolation from students in the classroom.

Let me be quick to assure you that I am not discouraged or negative about our collective and individual accomplishments over the past 40 years. We have done some wonderful and important things in the post World War II decades. American education has always responded to the needs of its constituency, ranging from the Brown cases to Sputnik to the tremendous growth of the American school system. We have, in spite of great odds, managed to serve the citizenry very well. When we bemoan a 35% dropout rate, we forget that 40 to 50 years ago a high school diploma was considered unique, when the school-leaving percentage was on the order of 70% of the population.

The public schools of the U.S. responded to the need for trained workers with a variety of vocational programs that fed the industrial age for decades. We responded to the need for engineers and scientists in the same way. Now we are being called on to respond to a new set of needs, a new circumstance, one we have never faced before.

As planners we have the responsibility to bring the realities to the attention of the decision-making bodies—realities that incorporate the massive changes that have occurred in other sectors and that have so much potential for education.

American educators are not uncaring, unseeing individuals. They can, with proper stimulation, respond to the vastly different needs that are emerging. They can and will respond to dramatically changing conditions and once again produce the quality of educational programs needed. However, educators must be initiated into the new reality and provided with a support mechanism to allow and promote the needed change. As planners we have both the responsibility to incorporate changes into evolving reform efforts and the opportunity to substantially impact of the future of American education.

COLLECTING AND USING STUDENT INFORMATION FOR SCHOOL IMPROVEMENT

N. Blyth Riegel

... "Would you tell me, please, which way I ought to go from here?"
"That depends a good deal on where you want to get to," said the Cat.
"I don't much care where—" said Alice.
"Then it doesn't matter which way you go," said the Cat.
"—so long as I get somewhere," Alice added as an explanation.
"Oh, you're sure to do that," said the Cat, "if you only walk long enough."

Lewis Carroll, *The Annotated Alice: Alice's Adventures
in Wonderland and Through the Looking Glass*

Many of us involved for the last 20 years in educational evaluation may well feel as though the Cheshire Cat designed the roadmap for the last decade of student assessment. One legitimate and effective use of student performance and other management information is to enable and facilitate the making of plans to spend monies judiciously in order to derive maximum benefit. Budgets are getting shorter and tighter every year, and this trend appears to be continuing. In the area of educational expenditures, we are all pretty much in the same boat: trying to make sense out of myriad data, some of which have only recently been formulated well enough to be valid, accurate, and standardized in definition.

We live in the age of accountability, and we have witnessed statewide assessment burgeon into a rejuvenated, full-fledged, and federally well-funded national assessment program, for the explicit purpose of state-by-state comparisons. Sometimes, the need and demand for educational management information can become a consuming addiction: Data may be required that eventually prove to be either redundant or of marginal utility.

The identification of educational management information meeting high standards of both utility and validity is a developing science, yet it sometimes admittedly resembles more closely an art form. This paper is an accounting of one local educational agency's attempt to determine highly effective and valid data for management decision-making, and then to make that data readily accessible to managers at all levels. Part of the constraints for the database design have been the emerging requirements for the state department's newly born database for instructional management. Therefore, the interaction and accommodation of data needs at both the local and state levels will also be considered.

The Richardson ISD Coordinated Database

The Richardson Independent School District (RISD) has a current enrollment of approximately 34,000 students K-12 and preschool. There are 35 elementary, nine junior high, and four senior high schools in the district. Richardson itself is a northern and well-established suburb of Dallas, comprised mostly of middle to upper socioeconomic families. Ethnic proportions average 9% Black, 3% each Hispanic and Oriental, and 85% Anglo and other nationalities. Median percentiles in the basic skill areas are well above the national norm, and generally

more than 50% of the students at grade levels tested score in the top quartile. Mobility is a concern at selected schools and not a district-wide problem. However, these nonhomogeneous contextual variables create a challenge for school improvement and evaluation, especially in a state which has in recent years leaned towards a "wall-chart" approach to campus and district comparisons.

Nearly three years ago, the need for valid, timely, and accessible management information led to the design of RISD's *coordinated database*, a comprehensive system of student demographic and performance files linked to other sources of context data. The coordinated database (CDB) is actually comprised of various files on the regional educational service center IBM mainframe, the student database on the RISD TI 990/12 microcomputer, and a few files and databases residing on central administrative personal computers—TI PCs; IBM XTs, ATs, and clones; and Macintosh SEs. Originally, there were two difficulties to be resolved in order to render the student data both usable and accessible to decision-makers:

- A plan was needed for the electronic reduction and maintenance of the information.
- A plan was also needed for linking the various files and databases and offering user-friendly reports and screens.

At the present time, a large proportion of the student database resides on the Richardson Instructional Management System (RIMS) on the TI 990 minicomputer. Each school accesses RIMS via either telecable or phone line (using 2400-baud modems). Some of the data are installed centrally, such as standardized test results and many of the special program codes. Student demographic information and mastery results by skill in mathematics and language arts are input at the campuses.

Newly enrolled students are entered on the database by data technicians and office staff in the schools. School staff also withdraw students, using several codes which address the newly formulated state education dropout/at-risk mandates as well as district mobility information needs. The withdrawn students' records are transferred to a "holding school" on the database for two years, in case the student re-enrolls (as many do). A mobility record is also generated, which will be used in efficiency and effectiveness analyses after the end of the academic year. As records are requested to be transferred out-of-district to the student's receiving school, this information is also maintained on the database, where it is used to generate state-required student audit reports and to monitor the integrity of the mobility file regarding dropout status.

Not all of the student data, however, reside in RIMS. The permanent records, secondary grades, and student attendance file are maintained on the regional service center IBM mainframe. Student demographic data and the secondary master schedule are also on the IBM, although these files are involved in daily uploads and downloads from the TI minicomputer, thereby keeping some of the student data current though duplicated for the time being. Current plans are to move *all* student services data onto one database within the next few years.

The last three years have been spent in refining the central functions of the student database on the TI minicomputer; implementing upload and download processes which are efficient and user-friendly; and designing reports and screens for school and administrative staff which are highly efficient, informative, and facilitative of decision-making. Reports and screens meet five basic information needs:

- Student diagnosis/prescription
- Instructional management
- School effectiveness/efficiency evaluation
- Program evaluation
- Parent communication.

Classroom and campus summaries of student performance can be ordered for all students, for specific ethnic categories or special program codes, and for cross-sectional data or cohort groups. Campus summaries are presented with subdistrict and total district averages as a comparison; in addition, campus averages are included on classroom summaries.

Failure rates by grade, by campus, will be added to the CDB by the end of summer 1988. These data are now derived each reporting period by massaging on PCs the figures printed on summary reports from the IBM mainframe grade files. A download process will soon be implemented which will remove the interim data-massage step and make the failure report available as soon as grade reports have been generated. Additionally, a district-wide committee is currently reviewing a computerized elementary grade reporting system which, if implemented, would enable similar automated report summaries at the elementary level.

Deciding "Where To Get To"

Every database application, including additions or revisions to the data dictionary, should begin with the same question: "What do I really want to *learn* or *know* from the information?" RISD uses a campus-based management system, where the principal is empowered with a total budget and FTE instructional allocation. He or she then develops a campus action plan to spend these resources in order to accomplish stated, measurable outcomes. The action plan is comprehensive and addresses student performance outcomes, professional development goals, and many other aspects of school success.

Figure 1 contains a summary listing of the kinds of information needed to evaluate the success of district action plans. On the CDB, these data are represented in much greater detail. For example, each campus norm-referenced achievement record is identified by test, grade level tested, subtest, cohort duration, and ethnic identification. All data elements included on the CDB for any information were determined by identifying *what was to be learned* from the information.

As an illustration, Table 1 displays the data dictionary entry for the student mobility record. Each student is entered into this file with a record sequence number (MOB-SEQ) equal to zero (0) upon original enrollment during the school year. As the student exits and returns or transfers between schools, additional records with consecutive sequence numbers are added to the file. At the end of the school year, the contents of this file will be analyzed for mobility patterns and student profiles by linking to student performance and demographic records.

Table 2 displays an extract from the mobility file, containing records for two highly mobile students. Student A (020031) spent no more than four weeks at any school (including the non-RISD school) within a two-and-a-half month period last fall and left RISD twice in this period. As of today, this student has not re-enrolled in RISD. Student B (150075) spent three months in one school from the beginning of the school year, transferred to another RISD school, and then transferred after one month to yet another RISD school.

It is easy to recognize the power of this type of information, both to assist in identifying at-risk students and to compute a *turmoil* or turnover index for each campus. Administratively coping with large numbers of these kinds of students takes a toll on the resources of a school, both in terms of budget and staff time/energy. Without the CDB, continuity of student records is difficult to maintain for certain subpopulations. These subpopulations are precisely the students who most likely need to receive extra services (compensatory, ESL, special education, etc.), but determining their needs is a serious problem when there is limited accessibility to valid data. Just having norm-referenced data for these students available in a form so that it can follow them around and reappear when needed as the student reenters RISD is a major asset of the CDB.

When classes regroup in September, teachers can order profiles of their classes on standardized test results from earlier years, or previous mastery-by-skill information in language arts and mathematics. Thus, much time is saved by benefiting from previously collected information which is available for easy re-sorting into new groupings. Standard reports generated automatically from the CDB are also available to central program managers. Many of these reports were previously compiled laboriously by hand (e.g., students listed alphabetically by grade within special programs, talented and gifted candidates based on current test results, potential at-risk students). The CDB provides central administrators as well as school staff labor- and time-saving functions which facilitate more effective and efficient performance of their respective job duties.

There are other benefits from the collective data on the CDB. Many data collection processes are now done with scan forms that were preslugged from the CDB. Both student and teacher ID numbers are contained in the database, keyed to schools and classes/periods. In addition to student responses on standardized testing, in-service evaluation responses are collected using preslugged and preprinted scan forms, custom-designed for the RISD in-service program. Random samples are also drawn from teacher and student files, and mailing labels are generated for research and/or evaluation surveys. All of these functions are available to school and central staff alike. Efficiency and effectiveness analyses are also performed centrally each year using campus-level data. These results are included in the campus performance profiles and are based on data accessible by school staff on the CDB.

How Far Do We Have To Walk?

It appears that the overall database design for RISD is in good shape. The main improvements to be made in the near future involve expanding hardware to enable student services files to reside on one computer only (instead of the partial duplication which now exists). In fact, when the state dropout database requirements were announced earlier this year, the decision was made that RISD would offer itself as a pilot for both additional dropout and student services data collection. As additional intradistrict needs for reports and/or screens are identified, these requests will be reviewed by a management information advisory committee for approval and prioritization.

RISD has also been a participant for over a year in a newly formed research collaborative with six other ISDs and the graduate school of education at Texas A & M University. As a result of the pioneering work done by this group, all members of the collaborative are being regarded as advisors to the state database and at-risk coordinators for programmatic and procedural

design recommendations. Two of the original goals of the collaborative were to conduct research that would both impact policy and procedure at the state level, and be proactive in effect rather than the usual reactive, knee-jerk response usually afforded ISDs when lead time is short and databases are inadequate to answer questions.

In short, it seems that we in RISD have found a short-cut to “where we need to get to,” merely by spending some time in the early stages of reacting to management information needs by applying principles of common sense, coupled with expertise in planning. Texas has been consistently hard-hit within the last several years with educational reforms. Many ISDs have not yet had the time to catch their collective breaths and review which heading they should next consider. When it seems that a response is needed and needed now, regardless of the quality or accuracy of that response, making the time to review options from a perspective of future needs sometimes appears to be an unaffordable luxury. However, to respond from any other position will almost certainly guarantee that the “walk” will be much longer in the end.

Figure one: CRITICAL VITAL INDICATORS FOR STRATEGIC PLAN

Student Performance

Achievement Data (longitudinal by cohort and cross-sectional)

Median percentiles by subtest
Quartile proportions
Profit margin statistics

Criterion-Referenced Data (longitudinal by cohort and cross-sectional)

TEAMS mastery percentages by subtest
Mastery percentages by essential element from RIMS

Failure Rates: analyzed with achievement and criterion-referenced data

Grades (elementary and secondary): analyzed with achievement and criterion-referenced and other data

Mobility patterns and rates

Comprehensive Curriculum

Profile of retained and compensatory education students: based on mobility and drop-out databases, using achievement and other test data, failure rates, grades, etc.

Longitudinal follow-up study

[cont. next page]

Riegel, N. B.

[fig. 1 cont.]

Effective Teachers

Employee Absence Reporting System (EARS) Summary

Summary statistics on TTAS data

(Recommend expanding available data in this area)

Organization and Management

Efficiency and effectiveness statistics by campus

Inservice evaluation results for instructional leadership topics

Finance

Summary of program expenditures by organization, function, etc.

Trend analysis of expenditure data for last 15 years

Parent and Community Involvement

Marketing research results

Mastery reports home to parents three times/yr (from RIMS)

Innovation

Plan for dissemination of collaborative research results

(Recommend expanding available data in this area)

Communications

Community survey of teaching profession

Evaluation results of action plans

TABLE 1. Format of the Student Mobility File

POSITION	DATANAME	SIZE	TYPE	DESCRIPTION
1	MOB-RECORD	24	Group	Mobility record
1	MOB-KEY	4	Binary	Key for record
1	MOB-ID	3	Binary	Student ID #
4	MOB-SEQ	1	Binary	Sequence #
5	MOB-SCH-SEND	2	Binary	Sending school # 7
7	MOB-SCH-RECV	2	Binary	Receiving school#
9	MOB-DATE	3	Binary	Date withdrawn
12	MOB-GRADE	1	Binary	Grade level
13	MOB-CODE	1	Binary	Mobility code
14	MOB-ENTRY-DATE	3	Binary	Date re-entered
17	MOB-ENTRY-CODE	1	Alpha	Re-entry code
18	MOB-FILLER	7	Alpha	Filler

TABLE 2. Extracted Student Mobility Records

Student A

Sequence Number	Student ID#	Sending School	Receiving School	Grade	Withdrawal Date	Reason
0	020031	318	397	4	09/21/87	Orig. Entry -New
1	020031	397	318	4	10/20/87	W/D to Other RISD
2	020031	318	397	4	11/11/87	R/E Transfer in RISD
3	020031	397	340	4	12/03/87	W/D to Other RISD

Student B

Sequence Number	Student ID#	Sending School	Receiving School	Grade	Withdrawal Date	Reason
0	150075	317	317	6	09/01/87	Orig. Entry-BOY
1	150075	317	397	6	12/09/87	W/D Transfer in RISD
2	150075	397	340	6	12/10/87	R/E Transfer in RISD
3	150075	340	397	6	01/04/88	W/D Transfer in RISD
4	150075	397	334	6	01/04/88	R/E Transfer in RISD

THE ROLE OF THE PRINCIPAL IN PROMOTING STUDENT LEARNING

Ralph W. Tyler

The Importance of the Principal's Leadership

Several developments help to explain the current emphasis upon the educational leadership of the school principal. One is the finding that significant improvements in the educational effectiveness of schools cannot be brought about just from pressures at the federal, state, or even school district level. Schools that have made great improvements in the learning of their students accomplished this through the concerted efforts of their teachers with cooperation from parents and other interested persons in their community.

This finding could have been anticipated. It is well known that schools vary widely in terms of their student bodies, their community environments and the resources, both material and personal, that help to support them. A school in the inner part of a city is very different in several respects from a school located in an affluent suburb. A school enrolling a large number of children from homes where a foreign language is spoken is different in certain respects from one where all the children have English-speaking parents. There are many other variations found among the thousands of American schools. Hence, there is no single solution, effective for all schools, to the problems of improving the learning of students. Each school needs to identify its own significant educational problems and develop a solution that is based on the resources it can employ. This requires leadership within the school, the leadership of the principal.

A second development is the finding that several of the necessary conditions for effective learning are school-wide and are not produced simply by individual teachers working alone. The morale of the school staff is found to influence student learning. Morale depends on a common sense of mission and a common sense of progress in accomplishing the mission held by all or nearly all the teachers in the school. The learning of students is greatly dependent upon their sensing that their teachers care about them and have high expectations for their achievement. The development of staff morale, and of positive attitudes toward students also requires leadership: again, the leadership of the principal.

Understanding and Commitment to Mission

A team, whether of teachers, athletes, soldiers, or other professionals, performs best when the members share a sense of an important mission. Baseball players make an effective team when all members focus on winning the game and put aside petty quarrels. Teachers work effectively together when they understand and appreciate the mission of education—the development of civilized people. In this period of history, the American school has the major responsibility for helping young people to become civilized. What they learn in school enables them to overcome the provincialism of their community with its pervasive superstitions, prejudices, and misinformation, by drawing upon the experiences, the ideas, the visions and the

information of many generations of scholars and scientists. No other institution in our society attempts to help all young people become civilized persons. Teaching is the most important occupation in modern society.

The principal's role in developing understanding and maintaining commitment to this mission is to stimulate and guide discussions of the mission of the school periodically, but particularly at the times when staff morale seems to sag, or when excessive weariness or boredom seems to be affecting several of the teachers. This discussion is most fruitful when illustrations are given by teachers of young people whom they have seen become much more civilized as they learned what was important in several school subjects.

Focus on Significant Problems

The principal is leading a team dedicated to improving the learning of the students in the school. If the team has no focus for its efforts or tries to work on many things at once, the energy will be dissipated without having made a significant improvement. The greatest impact of efforts to improve is achieved by focusing on one or two significant problems that interfere with the learning of a considerable number of students.

It is important that the teachers themselves identify the problems. Otherwise, they may think that the problems someone else claims to have identified are not really important or are nonexistent. It is not necessary that the problem identified be the most significant one because the process of problem-solving is self-corrective. When the team works on the problem it has identified, the ultimate test is whether or not learning has been improved. If the attack doesn't bring about improvement in learning, the team seeks again to identify a significant problem that seems to interfere with learning. The principal's role is to help the team understand that improvement comes from solving real problems and that the inquiry into problems, and efforts to solve them, is the way in which educational improvements are most likely to be brought about. Problem solving involves problem analysis, a search for solutions, the development of a plan to implement the solution proposed, the implementation of the plan, and the appraisal of the results and modifications where necessary.

Conditions for Effective Learning

In many cases, after careful analysis, teams find that a major factor in the problem is the failure to ensure that all the necessary conditions for effective learning are present. We know something of what takes place when human beings learn. They carry on some kind of behavior that they have not done before. If they find it satisfying, they repeat the behavior. If it continues to provide satisfaction, it becomes part of their repertoire which they use in those situations where they think it is appropriate. When this occurs, we say the behavior has been learned.

Behavior is used in this sense to include all kinds of reactions an individual is capable of carrying on. One can acquire a new skill, a new habit, a new interest, a new attitude, a new way of thinking, a new way of perceiving some complex phenomenon—all of these are illustrations of human learning.

Several conditions necessary for conscious human learning have been identified through experience and experiments. The first is motivation. Since learners must first direct their attention to the new behavior and put forth the effort required to carry it on, motivation is essential.

Clear learning objectives are a second condition for continuing the behavior to be learned. The student needs to have a clear conception of what it is that he or she is trying to learn. Young people who want to learn to play baseball or to dance can be guided by simply watching games or dances. This gives them at least a rough notion of the behavior so that they can emulate those who are carrying it on successfully. For behavior that is not easily observable, such as ways of thinking or feeling, learners often have difficulty in perceiving the learning objectives. In such cases, the teacher may need to show learners what the "invisible" behavior is and how meaningful and satisfying it can be. Conscious human learning requires that students perceive something to be learned that is attractive to them. Moreover, they must see it clearly enough so that it guides their initial steps in emulating this behavior.

Appropriate learning tasks are a third condition. Initial attempts to learn new behavior should involve a task that requires learners to put forth a real effort, one that they find hard to do but not so difficult that they are unable to accomplish it. If the learning is too easy, learners are likely to perceive it as mere busywork or as a "Mickey Mouse" activity. As a result, they will neither give it careful attention, nor will they find success in carrying on an easy task to be rewarding. Learners gain great satisfaction from accomplishing a task that they found difficult.

As a fourth condition, the learner must have sufficient confidence to attempt the learning task. Lack of confidence is a factor that may inhibit one from attempting a learning task even though one would like to try it. Learners need confidence that they can complete the task successfully and not be perceived as failures by their peers. Teachers can help to develop confidence in learners by encouraging them and by providing preliminary learning tasks that appear to be only slightly more difficult than those that they are now doing successfully.

Rewards and feedback are a fifth condition. As learners successfully carry on the behavior that they are seeking to achieve, their incentive to continue comes from success, that is, the satisfactions they obtain from successful performance. Many possible rewards are satisfying, but in a democratic society, the nature of the reward system itself should be consistent with the role of a self-directive, responsible person. We need to help young people to discover the satisfaction that comes from having acquired and used new understanding, interests, attitudes, and skills, rather than depending largely on rewards that are extraneous to the learning process itself and depend on the favor of others.

Some learners will have difficulty with a learning task and may not carry it out successfully. If we reward such efforts, it will result in their learning the wrong things. We need to inform them instead that they did not complete the task successfully and that they need some information about what the difficulty seems to be. In short, they need what is commonly called "feedback." Next, they need to be encouraged to try again either the same learning task or another that may be more appropriate for their present stage of learning. With the help of feedback and encouragement, most learners having difficulty with a learning task successfully complete it (or a similar one) on the second or third attempt.

Sequential practice is a sixth learning condition. It is extremely important to provide learners with opportunities to practice the new behavior until it becomes part of their repertoire. Availability of opportunities means that learners have many chances to carry on the behavior and also that they have time for practice. Too often, learning situations require learners to spend most of their time passively, while the teacher performs, rather than having learners actively engaged in thinking, feeling and acting what they are expected to learn.

The practice should be sequential, that is, each subsequent practice should go more broadly or more deeply into the learning task than the previous one. Sheer repetition is quickly boring

to the learner and has little or no effect. Only as each new practice demands the learner's attention, because of new elements in it, does it serve adequately as a basis for effective learning. This means that concepts and principles are brought in again and again, but each time there are new and more complex illustrations. As a result, the learner has to think through the way in which these concepts and principles help to explain the illustration. In developing a skill, the teacher needs to ensure that each new practice of the skill provides the learner with greater opportunity for greater variety or complexity in using it. Sequence is also important in developing appreciation, for it means that each new work of art should demand something more of perception, and provide opportunity for a greater variety and depth of emotional response. Opportunities for sequential practice are important for other learning objectives: new attitudes, interests, problem-solving—in fact, all kinds of complex behavior.

Transfer is a seventh condition. It has always been a matter of potential difficulty in guiding learning. Too often, what we learn in one particular context is used only in that context. Fair play may be learned in athletic activities, but some players do not practice fair play elsewhere. Some students learn things in school, but rarely, if ever, do they use them outside. To overcome this lack of transfer, teachers need to see that young people have opportunities to practice in other contexts what they are learning in school.

These seven conditions for conscious human learning have been identified through millennia of educational experience and a century of experimentation. They can be used as a checklist in analyzing a particular school problem in order to identify conditions that may be lacking and could help explain factors that are involved in the problem.

Developing a Solution

Rarely is there only one successful solution to an educational problem. The team needs to be encouraged to look for and to suggest all of the possible solutions that come to mind, and then to examine each one in an effort to decide which appears to be most effective and feasible.

Having chosen a solution that appears likely to be effective in solving the problem and feasible to carry out, the next task for the team is implementation. This involves considering and answering the following questions:

1. What present school practices will need to be changed?
2. What changes in the curriculum are necessary?
3. What new teaching procedures will need to be used?
4. How will the teachers involved gain the skills required to employ these teaching procedures successfully?
5. What new instructional materials are needed and how can they be obtained or constructed?
6. What changes are required in the daily and weekly school schedule?

In many cases, answering these questions is not easy. It requires thoughtful planning. This planning should also include a schedule for implementation. One of the most common sources of failure in putting a promising program into practice is the lack of realistic scheduling. Usually, too much is expected too soon. Changes in people's attitudes, understanding and skills do not take place overnight. If the team schedule is not realistic the staff becomes discouraged and loses its strong interest and effort.

This schedule includes goal setting. All of us are challenged by having goals that we have accepted as attainable with effort. We are likely to focus our efforts more carefully and try harder to attain our goals for a given year than we would if we simply had a general feeling that we should do our work well. We gain a further stimulus when we check toward the end of the year to see what progress we have actually made. If we are not making the progress planned we are wise to reexamine the situation and make changes in our ways of working or changes in our goals, whichever seems sensible as we review the situation.

The principal's role in developing the plan, scheduling implementation, setting goals, and monitoring progress is that of a democratic team leader, guiding discussions, encouraging ideas and proposals from all members of the team, and participating equally with them.

In Summary

I have suggested that the role of the principal in promoting student learning is that of the stimulator of teachers and parents to assist in identifying serious educational problems the school is encountering in its effort to educate all students. The principal's role is then to serve as leader of the school team to develop and implement solutions to these problems.

At a time when human society was changing only slowly and only a fraction of children needed to learn what schools were expected to teach, improvement in education was not deemed necessary. Many children did not learn much in school and dropped out after a few years. Now this is no longer the case. All students need to learn what schools are expected to teach. But, in every school, some students are not achieving. Why they are not achieving and how they can be helped to learn are questions that can best be answered by a problem-solving process. Leading the problem-solving process is a major task for the principal.

INVITATION TO SUBMIT MANUSCRIPTS

The editors of *Educational Planning*, a refereed journal of educational planning issues, invite the submission of original manuscripts for publication consideration. *Educational Planning* is the official journal of the International Society for Educational Planning.

The journal's audience includes national and provincial/state planners, university faculty members of educational administration, school district administrators and planners, and other practitioners.

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2. The length of the manuscript should not exceed 20 double-spaced, typewritten pages (including reference lists, tables, charts, and/or graphs).
3. Please submit two copies of each manuscript.
4. Lengthy tables, drawings, and charts should be scaled to an *Educational Planning* page and camera-ready.
5. A biographical sketch of each author should be attached to each manuscript.
6. The Editors prefer APA style.

All manuscripts will be evaluated on the basis of relevancy, substance, style and syntax, and ease of comprehension. Submission conveys permission to edit and publish as required. Authors are responsible for copyright clearance and accuracy of information presented.

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FEEs: Professional Membership and Subscription to Educational Planning \$35 US
Student Membership and Subscription to Educational Planning \$15 US
Payment by check, money order, or PO required with application.

Return membership application and payment to: The International Society for Educational Planning (ISEP)
Dr. Robert H. Beach - Treasurer
The University of Alabama
P.O. Box Q
Tuscaloosa, AL 35487
USA

<p>ORGANIZATION</p>	<p>The Society was founded on December 10, 1970, in Washington, D.C. Over 50 local, state, national and international planners attended the first organizational meeting.</p> <p>Since then its growth has demonstrated that there is need for a professional organization with educational planning as its exclusive concern.</p>
<p>PURPOSE</p>	<p>The International Society for Educational Planning was established to foster the professional knowledge and interests of educational planners. Through conferences and publications the Society promotes the interchange of ideas within the planning community. The membership includes persons from the ranks of governmental agencies, school-based practioners, and higher education.</p>
<p>MEMBERSHIP IN THE SOCIETY</p>	<p>Membership in the Society is open to any person active or interested in educational planning and the purposes of the Society. To join the Society or renew a membership, please complete and submit the enclosed form.</p> <p>Please forward check and membership form to:</p>  <p>Dr. Robert H. Beach, Treasurer Box 870302 312 Wilson Hall University of Alabama Tuscaloosa, Alabama 35487</p>

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