Analysis of School Work Culture in Schools That Implement

Comprehensive School Reform Models

Darlene Y. Bruner
Associate Professor
University of South Florida
3433 Winter Lake Rd.
Lakeland, FL 33803
dbruner@lklnd.usf.edu

and

Bobbie J. Greenlee
Assistant Professor
University of South Florida
3433 Winter Lake Rd.
Lakeland, FL 33803
greenlb@lklnd.usf.edu

Abstract - This paper used the metaphor of "grafting" to describe the relationship of comprehensive school reform designs to the work culture of the schools. This study focused on the characteristics of school work culture that embrace external school reform models. One school reform model that has widespread implementation is the Success for All (SFA) reading program. The new practice provided in the SFA reading program offered a compatible "graft" onto the existing culture found in low achieving schools. Schools adopt reform programs that offer procedural or curricular changes that fit within their existing systems. However, when the school culture becomes the catalyst for change and expertise for innovation is centered in the school, then schools can design interventions that work better than external school reform models.

Analysis of School Work Culture in Schools That Implement

Comprehensive School Reform Models

Schools have been struggling for decades to prepare students for the world of work, as well as to meet the ever-changing demands of the political agendas at the local, state and national levels that govern schooling decisions (Sarason, 1990). Schools are faced with the almost impossible challenge of educating a growing at-risk population. The social demands placed on schools raise questions about the feasibility of current programs and services. Programs and services are coming under scrutiny as schools attempt to meet the achievement levels set by their states. Consequently, more schools are looking to outside experts for help in meeting those demands

Schools have been in a state of restructuring or reform since the 1980s. The target of change and reform has been the structure of the schools (Deal & Peterson, 1994). Some reform efforts work to improve structural variables, such as governance and assignment of personnel, while others work on procedures like schedules and learning environment. Still others focus on instruction by working on content and teaching strategies. Many of these efforts overlook the fact that change requires cultural transitions and transformations in addition to the technical challenge of change. Technical approaches help manage what is happening on the surface. The impact of change on cultural patterns is often not considered as the technological and managerial changes are applauded. The changes made in schools have been incremental, are not linked to student success and do not last (Patterson, 2000). These changes barely disturb the conventional roles and practices found in the work culture of schools.

Whole school reform models are relatively new to public education. Most have come about within the last decade and vary in their approaches. Comprehensive school reform focuses

simultaneously on all elements of a school's environment and aligns them with a central, guiding vision for school improvement (Keltner, 1998). With increasingly more schools "shopping" around for the best model, we must ask, "what is it about the culture of a school that embraces externally developed comprehensive school reform models to improve student achievement?" Do schools choose reform models that are most compatible with their existing work culture? If the selected model itself promotes a culture of conformity and compliance in low achieving schools might it sustain low student performance?

The primary purposes of this paper were: 1) to explore the characteristics of school work culture that embrace external school reform models; 2) to examine if schools choose reform models that are most compatible with their existing work culture; and 3) to consider the possibility that the selected model itself promotes a culture of conformity and compliance in low achieving schools and therefore sustains low student performance. This investigation looks at the comprehensive school reform model Success for All (SFA) and the work culture of six elementary schools. In the school year following the study on school work culture, the three low achieving schools implemented the SFA program.

School work culture is defined as the psychological and social forces that influence the direction and the quality of work of the adults within the school. Bruner and Greenlee (2000) found that schools grouped by student achievement have significantly different work cultures. High achieving schools were found to be more collaborative than low achieving schools and had environments that supported the design and redesign of programs to meet the needs of students.

We use the metaphor of "grafting" to describe the relationship of comprehensive school reform designs to the established work culture of the schools. A metaphor is a figure of speech where a comparison is made between two seemingly unrelated objects. It is transference of one

object's characteristics onto another. Metaphors are used to actively construct meaning and influence thinking. Several works in qualitative research methodology (Miles & Huberman, 1994; Darling-Hammond & Snyder, 2000; Janesick, 2000) mention the importance of looking at metaphorical constructs in interpretation. The "grafting" metaphor constructs and clarifies the comprehensive school reform design concepts allowing us to reason about them in different ways.

In gardening, grafting involves attaching the cutting of a desired plant to the rootstock of another vigorous plant. It introduces a new or different "shoot" onto a healthy plant that has grown naturally in another environment. The purposes for grafting plants are: to boost productivity, to increase resistance to pests, to facilitate reproduction, to repair damage, or to grow a plant in an unfamiliar environment by combining it with a host that is well-adapted to that environment. The practices of gardeners in grafting help clarify and structure this discussion of school work culture and schoolwide reform models.

Schools, like other organizations, develop a culture of behavioral norms that respond to the environment, to the people who work in the organization, and to those they serve (Deal & Peterson, 1998). Culture is the "it" that survives and produces continuity. It persists, even after the organizational structure, physical assets, and people change (Hurst & Zimmerman, 1994). It shapes a school's motivation, commitment, effort, expectations, and focus (Peterson, 1999). Culture is the "rootstock" of the organization and supports or rejects any new growth. In gardening, when the shoot of one plant is successfully grafted to the rootstock of another, the combined plant has the strength of the old roots and the vitality of the new shoots. Any "graft" onto the "rootstock" of schools, therefore, has to be compatible with and is dependent upon the vigor of the culture.

School reformers, or the "gardeners," have been very productive. Through their models, reformers propagate their own unique and sometimes hybrid plants. One school reform model that has had widespread implementation is the Success for All reading program. Robert Slavin, Nancy Madden, and a team of developers from Johns Hopkins University created the Success for All reading program in 1986. SFA restructures elementary schools (usually high poverty Title I schools) to ensure that all students learn to read. The program uses a research-based reading curriculum, effective practices for beginning reading (Adams, 1990) and cooperative learning strategies (Slavin, 1995). SFA prescribes specific curricular and instructional strategies for teaching reading including shared story reading, listening comprehension, vocabulary building, sound blending exercises, and writing. School personnel are provided with detailed materials for use in the classroom and receive intensive training prior to implementation that prepares all certified staff to teach a daily 90-minute reading class. Reduced class size is achieved by having all certified teachers - media specialists, music teachers, art teachers, special education teachers, and the like - trained to teach the program (Slavin & Madden, 2001).

SFA requires strict adherence to a structured reading curriculum with supervision and coordination by a reading facilitator. The school's reading facilitator works to oversee the operation of the SFA model and helps teachers with implementation. Each session is highly scripted, so that at any given minute, an observer should be able to hear virtually the same thing in every class from both teachers and students (Slavin & Madden, 2001).

Existing Rootstock

In a study that examined the features of school work culture and student achievement, Bruner (in Snyder, Acker-Hocevar, & Snyder, 2000) found that schools with more developed and responsive work cultures generate more effective school-wide responses to the changing

needs of students. These responses result in greater levels of student success. The study

addressed the work culture patterns found in both high and low achieving schools. The

achievement levels in these schools were identified by the state based on their standardized test

scores in reading, writing, and math.

Using the School Work Culture Profile (SWCP) (Snyder, 1988), field observations,

archival data, teacher and parent surveys, and principal interviews, Bruner found low achieving

schools were constrained within bureaucratic cultures and were reliant on models of conformity

and compliance. The SWCP provides descriptive information on levels of staff involvement in

the work culture. It was designed to obtain a measure of professional involvement in the school's

work patterns that have developed over time.

Method

Participants

Six elementary schools were studied to help identify overall work culture trends and

patterns. These schools reflected high and low student achievement based on Florida Vital Signs

criterion. The academic indicators are the school scores for two years on nationally normed

standardized tests for Reading Comprehension, Math Concepts and Applications, and the Florida

Writes test. Three of the schools studied were high achieving schools and met the criteria (33%

of the students at the 50th percentile or above) for at least five of the six academic indicators.

Three schools studied met the criteria for only one or two of the six academic indicators and

were considered to be low achieving schools. The designation of low and high achieving was

made by the researchers and was not a label used by the state of Florida.

Demographic information characterized high achieving schools as having higher student

and staff attendance, and lower levels of poverty and minority students. However, one school in

the high achieving group had a relatively high proportion of students eligible for free and

reduced lunch (60%) and a high percentage of minority students (41%). This school had been

receiving Title I services. Title I provides additional money from the federal government to

enhance personnel and material resources for schools with high poverty rates. All low achieving

schools were Title I schools with higher than the district average eligible for free or reduced

lunch.

Instrument

The School Work Culture Profile (SWCP) was used with teachers and administrators

from the six elementary schools. Participation was voluntary and of those surveyed, 144 or 69%

participated.

The SWCP contains 60 five point Likert-type items ranging from 1 = Strongly Disagree

to 5 = Strongly Agree. The items pertain to school work practices and are organized into four

subscales: 1) Organizational Planning; 2) Professional Development; 3) Program Development,

and 4) School Assessments. Each subscale has 15 items such that scores range from 15 to 75,

with scores indicating levels of staff involvement in the school's work patterns. These scores can

be summed to obtain a total score that ranges from 60 to 300, measuring the construct of work

culture within an organization or system. According to Snyder (1988), school's work culture

refers to the collective practices of planning, organizing, delivering, monitoring, and assessing as

related to teaching and learning. The combined score provides information regarding the work

patterns found in high and low achieving schools.

The SWCP has been subject to several validation and reliability studies. These studies

provide high reliability estimates and evidence for construct validity of the SWCP (Johnson,

Snyder & Johnson, 1992; Parkinson, 1990). For the present sample, reliability coefficients, as

measured by Cronbach's Coefficient Alpha were as follows: low achieving schools (.96), high

achieving schools (.99), and the total sample (.98). The magnitude of these reliability estimates

of the total scale was consistent with the alphas reported in previous reliability studies (.95 and

above).

The SWCP provides information on the strength of the school's interaction system in the

planning, development, delivery and assessment of programs and services. The SWCP was

developed based upon a systems model of collaborative school management, and assesses the

level of staff involvement (Snyder & Anderson, 1986).

Data Analysis

School Work Culture Profile

Using the SWCP, an instrument that measures work cultures in distinct ways, we have

found that schools grouped based on student achievement have significantly different work

cultures. High achieving schools had a higher overall mean score (244.15) than the low

achieving schools (231.72) on the SWCP (Bruner & Greenlee, 2000). Schools with lower

achievement had primarily moderately developed school work cultures, while the schools with

higher achievement had primarily highly developed school work cultures. There was a

significant difference ($p<0.0002$; df=2) between the high and low achieving schools on the

SWCP.

It has been suggested that an index of the practical significance can be derived from an

effect size estimate (Cohen, 1977; Harris & Rosenthal, 1985; Rosenthal, 1983). The effect size

represents the magnitude of the difference between the means of the two groups. It is figured by

taking the difference of the means and then dividing by the standard deviation for the high

achieving schools group. Using Cohen's (1988) criteria, that a correlation of 0.5 is large, 0.3 is

moderate, and 0.1 is small, all effect sizes corresponding to the differences in means between the

high and low achieving schools were moderate to large. The effect size statistics suggest notable

differences between the two groups (Table 1).

Table 1

SWCP Subscale Means by Performance Group

SWCP Subscales	Low Schools		High Schools		Effect Size
	M	SD	M	SD	
Planning	57.54	7.26	61.29	10.87	.52
Program Development	60.25	7.47	63.10	11.76	.38
Staff Development	58.59	7.87	60.98	11.97	.30
Assessment	55.35	8.28	58.79	10.24	.41

The Planning subscale of the SWCP examines goal setting, work group planning, and

staff performance. The difference in subscale scores suggested high achieving schools aligned

people to accomplish goals while the low achieving schools established structures for the people

to follow. Planning in low achieving schools focused on efficiency rather than effectiveness.

The dimensions probed in the Program Development subscale are instructional

management and resource development. The teachers in high achieving schools focused on

improving student performance and searching for solutions. Improving instruction in the low

achieving schools relied on a "teacher proof" instructional program.

The Staff Development subscale investigates staff development, clinical supervision and

work group development. Teaching teams in high achieving schools worked to meet the needs of

students and explored alternative methods of instruction. Teacher training focused on student

achievement rather than teacher interests. In the low achieving schools, teachers tended to work

in isolation and were trained in standardized methods of instruction.

The Assessment subscale examines quality control and assessment. The high achieving

schools monitored student performance in a variety of ways throughout the school year and

revised their action plans in response to feedback. Low achieving schools monitored teacher

performance and deviations from the school's plan. Their actions were revised based on events.

Field Data Analysis

In addition to the SWCP, data sets consisted of multiple sources of evidence. Information

was gathered through interviews of school personnel, direct observations, analysis of school

system documents, and analysis of existing school survey data. When analyzed across data sets,

clear distinctions appeared in the work culture of the high and low achieving schools.

The school improvement plans in low achieving schools focused on providing material

resources, reducing adult-pupil ratio by adding staff, and training faculty in various teaching

strategies. The action plan depended on external resources and the implementation of programs

designed by outside experts. Evaluation of the success of the plan was not tied to student

performance, but rather to improved teacher performance. These institutionalized improvement

plans led to an emphasis on mechanisms such as prescriptions, tightly specified resource

allocations, and teacher performance measures as indicators of success. The assumption was that

reduced class size, abundant materials, and training teachers to implement programs would

improve student performance.

Leaders in low achieving schools functioned as managers of processes, not as change

agents exploring new ways to ensure student success. Mandates from the state maintained the

bureaucratic orientation toward schooling and called for consistency and standardization of

content as the means to excellence and achievement. These principals saw their roles as

providing procedures to limit deviations from school improvement plans. Deviations were

viewed as problems, rather than opportunities. These principals delegated responsibility for

carrying out plans and then monitored their implementation.

Teachers in the low achieving schools were more likely to work in isolation. Working in

isolation did not lend itself to the sharing of successful ideas and strategies, nor did it cultivate

innovation. Rather than initiating innovations, these teachers looked to experts for program

development in their schools. There did not appear to be a systematic process in place to promote

new learning. Less discussion, less sharing of knowledge translated into protecting the status quo

and kept many desired improvements from becoming institutionalized. Isolationism was a barrier

to new learning and change.

At the time of this study, the SFA reading program, a whole school reform model, was

introduced to the low achieving schools. Teachers in these schools were given time to learn

about the program and to visit SFA schools. The SFA program was implemented in all of these

schools the following year after a vote by secret ballot showed that more than 80 percent of the

teaching staff favored its adoption.

Grafting On to Existing Rootstock

The Success for All reading program, like other reform models, can only be grafted onto

existing systems. Grafting combines the strength and persistence of the old and the energy and

hope of the new. As in gardening, there must be compatibility with the existing root system in

order for the new graft to thrive. The new practices provided in the SFA reading program offered

a compatible graft onto the existing culture of these low achieving schools.

The SFA program fits into the culture of compliance and predictability found in low

achieving schools and offered a way to standardize teaching. The allure of ready-made materials

and lesson plans used in the program eased demands on teachers' time. Teachers only had to

learn how to implement the program and follow its components. The success of the program

depended upon a teacher's willingness and ability to implement it. The responsibility for student

learning was then shifted from the teacher to the program since compliance with the script was

expected to improve achievement.

It was easy for these schools to adopt the training model provided in SFA. SFA training

provided detailed manuals and sessions that focused on the implementation of the reading

program (Slavin & Madden, 2001). The SFA experts made the decisions regarding the workshop

design and the knowledge base needed by the teachers. The role of the teacher was to listen,

learn and implement. Fidelity to the SFA program shaped any decisions the teachers might make

while teaching the program. Teachers were required to limit deviations from the program. Their

task was to become implementers of the program.

The principals in low achieving schools emphasized inspecting teacher behavior and

advancing school goals through teacher training. By purchasing an off-the-shelf program,

overburdened administrators recognized they would gain relief from some of the pressures to

perform well on state-mandated tests and the teachers would only have to learn how to

implement the program. Schools contracted support from the developer to assist in the

monitoring of teachers as they implemented the program.

SFA offered these schools a reading program that was a "complete" package – a research-

based, scripted, teacher-proof curriculum and training. It structured the use of personnel and

schedules, monitored the implementation, and assessed the progress of students. The program

was not really a significant change from the way these schools had been operating. It was whole-

group instruction that followed a textbook, was time driven, and subject specific. Within the

context of their own school's culture, teachers grafted on what they considered appropriate

strategies for change. It was easier to encourage what grew naturally within the school than to radically alter the environment.

Did these low achieving schools choose the reform model that was most compatible with their existing work culture? A pre-packaged program like SFA allowed the school to incorporate instructional change without fundamentally changing the organization. It was prescriptive, not creative and offered structures to schools that relied on conformity and compliance. The focus was not about improving a teacher's capacity to teach reading, but rather about teacher compliance to a scripted program.

Implications

Clearly, not every school culture would embrace the Success for All reading program and expect it to thrive. Teachers who are encouraged to make their own diagnoses and judgments are not likely to welcome the new role of implementers rather than innovators. A salient predictor of success of the SFA program is teacher buy-in. The very act of voting for a prescriptive program may be an indicator of a school culture that is unable to sustain teacher involvement in curricular decisions.

Cultures that embraced externally developed programs were found in schools with low student achievement. The work culture of these schools was bureaucratic and, in practice, authoritarian. Changes did not reflect the initiative of teachers, but came from reform programs that used strategies that maintained the conventional roles and practices of teachers. The work culture endorsed compliance to authority and rules, and teachers conformed to what was expected of them. In an effort to improve, they looked to the experts and their reform models for assistance.

An externally developed program was grafted onto the unhealthy "rootstock" of these

schools. Both the schools and the program failed to produce high quality results (Greenlee &

Bruner, 2001). In fact, there is now a large and consistent set of independent studies concluding

that there is no effect from SFA or any other schoolwide reform model (Pogrow, 2002). In

schools, as in gardening, the graft cannot repair a damaged root. Rather, the growth of a

successful graft is strengthened by a hearty rootstock, and the best "rootstock" is a healthy and

supportive culture.

Certain fixed truths in the science of grafting persuade our understanding of the temporal

nature of school reform. The growth of a successful graft is sustained by the rootstock, but the

genetics of the roots will persist. In other words, if a shoot forms beneath the graft it will reflect

the genetics of the root. Unless those "wild shoots" are pruned out, the rootstock will nurture the

shoots, resulting in the profusion of the parent plant and the gradual decline of the grafted plant.

When schools "graft" on the externally developed strategies of school reform models,

there is usually a profusion of the "wild shoots" of teacher adaptations to the program. Some of

the schoolwide models use scripted lessons and teacher-proof curriculum as a way of "pruning

out" the persistent new growth from the "root." However, reform efforts usually give way to the

persistence of school culture. The dynamics of the culture alters any innovation to the point that

ten years after any school implements change, regardless of the type, no trace can be found of

that change except in the memories of those who were there at the time (Tye, 2000).

Schools possess a clear sense of identity, which is the values, traditions, competencies,

and culture that guide the work. There is a tendency to think that isolation and strong boundaries

preserve that identity. When the environment demands a change, the organization changes in

such a way that it remains consistent with what has gone on before (Wheatley, 1999). Schools

adopt reform programs that offer procedural or curricular changes that fit within their existing

systems. The grafting on of a new program will be successful as long as its requirements do not

stray from the existing traditions of the system (Schlechty, 2001).

It seems that guiding change can only be done by challenging the natural tendencies of

the cultures in low achieving schools to new ends. Changing the work culture requires more than

implementing a program, rather, it demands creating a new work culture by redefining the roles

and practices of the teacher. The new work culture is information oriented and flexible with more

organizational communication and participation. It is characterized by personnel who seek

greater autonomy and control over their work. Sharing, collegiality, empowerment, and

leadership are characteristics commonly found in schools attempting to generate and sustain

cultural improvement.

Studies have found compelling evidence for improving school culture. Fyans and Maehr

(1990) found that students are more motivated to learn in schools with strong cultures. Thacker

and McInerney (1992) found significant effects on student achievement in elementary schools

when the school focused on creating a new mission statement, created goals based on outcomes

for students, aligned the curriculum to meet those goals, and provided professional growth

opportunities. School culture also correlates with teacher productivity and satisfaction. Cheng

(1993) found that school cultures with strong commitment, shared participation, intimacy, and

strong leadership had more motivated teachers.

For schools to flourish, the culture of the school must be nurtured to the point that the

grafted reform initiatives will take hold and grow and produce the desired outcomes. Grafting

reform efforts presume that the rootstock is prepared, willing and able to offer the nutrients

required for high yields. Reform efforts require the best that the particular school context is

capable of delivering. What is the best context? It is a school context with people that have

visions and expectations and contribute to the growth of new methods. The best context is a

school that recognizes and nurtures quality. The school culture becomes the catalyst for change,

and expertise for innovations is centered in the school. If a robust culture is in place, then a

school can propagate its own innovations and design interventions that are more successful than

external school reform models.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA:

   MIT Press.

Bruner, D. Y. & Greenlee, B. J. (2000). Measures of work culture in high and low performance

   schools. *Research in the Schools, 7* (2), 71-76.

Cheng, Y. C. (1993). Profiles of organizational culture and effective schools. *School*

   Effectiveness and School Improvement, 4 (2), 85-110.

Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. New York: Academic

   Press.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York:

   John Wiley Publishing.

Deal, T. E. & Peterson, K. D. (1994). *The leadership paradox: Balancing logic and artistry in*

   schools. San Francisco: Jossey-Bass.

Deal, T. E. & Peterson, K. D. (1998). *Shaping school culture: The heart of leadership*. San

   Francisco: Jossey-Bass.

Darling-Hammond, L. & Snyder, J. (2000). Authentic assessment of teaching in context.

   Teaching and teacher education, 16, 5-6, 523-545.

Fyans, M. G. & Maehr, M. L. (1990). *School culture, student ethnicity, and motivation*. Urbana,

   IL: The National Center for School Leadership. ED 327947.

Greenlee, B. J. & Bruner, D. Y. (2001). Effects of schoolwide reform strategies on Title I

   schools using Success for All compared to Title I schools using other literacy enhancing

   strategies. *Education, 122* (1), 177-188.

Harris, M. J. & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 meta-

   analyses. *Psychological Bulletin, 97*, 363-386.

Hurst, D. & Zimmerman, B. (1994). From life cycle to ecocycle: A new perspective on the

   growth, maturity, destruction, and renewal of complex systems. *Journal of Management

   Inquiry, 3* (4), 339-354.

Janesick, V.J. (2000). The choreography of qualitative research design. In N. K. Denzin and Y.S.

   Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) (pp. 379-399). Thousand

   Oaks, CA: Sage Publications.

Johnson, W. L., Snyder, K. J., & Johnson, A. M. (1992). Developing instruments for educational

   administration: An exposition using primary and second-order factor analysis. *National

   Forum for Applied Educational Research Journal, 6* (1), 3-11.

Kauffman, D. L. & Hirumi, A. (1992). Ten steps to "TQM Plus". *Educational Leadership, 50*

   (3), 33-34.

Keltner, B.R. (1998). *Funding comprehensive school reform*. Santa Monica, CA: RAND.

Miles, M. B. & Huberman, A.M. (1994). Qualitative data analysis – an expanded sourcebook

   (2nd ed.). Thousand Oaks, CA: Sage Publications.

Parkinson, A. (1990). *An examination of the reliability and factor structure of the school work

   culture profile instrument.* Tampa, FL: A dissertation at the University of South Florida.

Patterson, W. (2000). Grounding school culture to enable real change. *Education Digest, 65* (9),

   4-8.

Peterson, K. (1999). Time use flows from school culture: River of values and traditions can

   nurture or poison staff development hours. *Journal of Staff Development, 20* (2).

Retrieved on-line January 26, 2002, from

http://www.nsdc.org/library/jsd/peterson202.html

Pogrow, S. (2002). Success for all is a failure. *Phi Delta Kappan, 83* (6), 463-468.

Rosenthal, R. (1983). Assessing the statistical and social importance of the effects of

psychotherapy. *Journal of Consulting and Clinical Psychology, 51*, 4-13.

Sarason, S.B. (1990). *The predictable failure of educational reform: Can we change course*

before it's too late? San Francisco: Jossey-Bass.

Schlechty, P. C. (2001). *Shaking up the schoolhouse: How to support and sustain educational*

innovation. San Francisco: Jossey-Bass Inc.

Slavin, R. E. (1995). *Research on cooperative learning and achievement: What we know, what*

we need to know. Office of Educational Research and Improvement, U.S. DOE: No.

OERI-R-117-D40005.

Slavin, R. E. & Madden, N. (2001). *Success for all: Research and reform in elementary*

education. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers. pp.1-15.

Snyder, K. J. (1988). *School work culture profile*. Tampa, FL: Managing Productive Schools

Training Programs.

Snyder, K. J., Acker-Hocevar, M., & Snyder, K. S. (2000). *Living on the edge of chaos: Leading*

schools into the global age. Milwaukee, WI: ASQ Press. P. 226-232

Snyder, K. J. & Anderson, R. H. (1986). *Managing productive schools: Toward an ecology*.

Orlando, FL: Academic Press.

Thacker, J. L. & McInerney, M. (1992). *Changing academic culture to improve student*

achievement in the elementary schools. ERS Spectrum, 10(4), 18-23.

Tye, B. B. (2000). *Hard truths: Uncovering the deep structure of schooling*. New York:

Teachers College Press.

Wheatley, M. J. (1999). *Leadership and the new science: Discovering order in a chaotic world*

(2nd ed.). San Francisco: Berrett-Koehler Publishers, Inc.