

INTERNATIONAL JOURNAL



Volume 1 Number 3
January - December 1998



COLLEGE OF EDUCATION

*Department of Educational Foundations,
Leadership, and Technology*

Department of Educational Foundations,
Leadership, and Technology
College of Education
Auburn University
Auburn, Alabama 36849
334.844.4460

J. R. Llanes, Auburn University

Mentoring and the Context for Teacher Leadership:

A Study of Twenty-four Professional Development Schools

Authors: [Marion Czaja](#), [Joan Livingston Prouty](#) and [Jerry Lowe](#)
Sam Houston State University

©Copyright University of Texas - Pan American 1998. All rights are reserved by copyright, except that authors retain intellectual property rights to their articles and may re-publish their articles in other publications. The Continuous Improvement Monitor may be reproduced in whole or in part for non-profit use for the purposes of education, research, library reference, or stored or distributed as a public service by any networked computer. Any commercial use of this journal in whole or in part by any means is strictly prohibited without written permission. Any use of this journal in whole or in part, including by authors, should include customary bibliographic citation, including author attribution, date, article title, edition, and electronic retrieval instructions.

Reference as (APA style): Czaja, Marion, Livingston Prouty, Joan, & Lowe, Jerry (1998, January-December). "Mentoring and the Context for Teacher Leadership: A Study of Twenty-four Professional Development Schools" *International Journal: Continuous Improvement Monitor*, 1, 3. Edinburg, TX, The University of Texas-Pan American. Available on the web:
<http://llanes.auburn.edu/cimjournal/Vol1/No3/czajamentoring.pdf>

Abstract

Six hundred and eighty-four teachers from 24 campuses, partners in the Sam Houston Center for Professional Development and Educator Preparation, completed a Teacher Leadership Survey that focused on teacher perceptions of 7 teacher leadership factors—Developmental Focus, Recognition, Autonomy, Collegiality, Participation, Open Communication, and Positive Environment.

Responses to these factors by campus help indicate whether or not a learning community is present. Perceptions of teachers involved with differing types of mentoring were compared to those who had not been involved. Significant differences were found in most of the comparisons. Implications are that mentoring may make a significant positive impact on teacher views. Further research will analyze a possible link of these results to student achievement.

The effectiveness of public school leadership has been increasingly challenged during the last three decades and has been a focus for disenchanted members of the general public, the media and for state and national legislatures as well. Since then, publication of *A Nation At Risk* (1983) has kept the floodgates for criticism of the public schools open. Eight national goals recently established through bipartisan legislation reflect a need for better leadership and an increase in measurement standards for student achievement.

As noted by Hart (1995) schools today are often complex, chaotic places that stretch the traditional, top-down model of leadership to the breaking point. Since teachers are an obvious, ready source of educational expertise and a logical source for new leadership, their

development as leaders follow the general trend to move to a “flatter” organization where decisions are often shared by many. Senge (1990) emphasized that the efficacy of an organization is developed when individuals’ capacities to lead are enhanced; that creating a learning community involves building a shared vision and team learning.

Katzenmeyer (1997) emphasized that when teachers are prepared as leaders, “...these teachers along with their principals have a real chance at making change in their schools... Teacher leadership and learning communities in schools are the practices that hold promise for developing the capacity within schools for change that impacts student outcomes” (p.1).

Learning communities are sometimes difficult to develop because of many barriers to change. Fullan (1993) notes that planning for successful change requires the system to change and that, in turn, requires individuals to change. Professional development centers/schools (a recent reform effort) has made the development of teacher leadership a focus (Smylie, 1996; Darling-Hammond, et al., 1996; Dempsey, 1992; Hayes, et al., 1996; Lemleck et al., 1994; Berry and Catoe, 1994; McDaniel, Rice and Romerdahl, 1996; Gehrke and Romerdahl, 1992).

A professional development center can be defined as a partnership between a public school and a university to target goals such as those outlined by Murray (1993): (1) having all students understand content, (2) having all goals of the school apply to all students, (3) using valid assessments to ascertain students’ success in use of learning in real-world contexts, (4) valuing the professional teachers who model continual learning in collaborative contexts, (5) allowing teachers to have time to reflect, plan and consult to respond to student and contextual demands, and (6) developing a “center of inquiry that contributes to scholarly literature” (p. 67).

Roles for teacher leaders is one of five ways the impact of professional development schools, schools collaborating with professional development centers, has been examined (Book, 1996). In the schools associated with professional development centers, “... teachers are decision makers, committee members, and collaborators, involved with finance, placement of student teachers, public relations, curriculum development, and so forth” (Teitel, 1996). Darling-Hammond (1995) highlights some of the same areas and adds others by noting that through professional development schools teachers have become collaborative decision-makers, peer coaches, mentors, teacher-educators, curriculum and assessment developers, researchers, university adjuncts, and problem solvers.

Roland Barth suggests that the “...key to improving schools from within lies in improving the interactions among teachers and between teachers and principals” (1990, p. 28). Principals who work with parents, teachers, students and others as colleagues help create a community of learners. In support of this notion, Katzenmeyer and Moller (1996) point out that a healthy climate or context supportive of teacher leadership is critical.

Seven teacher leadership dimensions developed by Katzenmeyer and Moller (1996) measure teacher perceptions of the support they receive for their teacher leadership at their school.

The survey was validated through administration to more than 4,000 teachers in Florida and in December, 1997, the survey was revised to increase its reliability to .9 or higher for all combined factors (Katzenmeyer, personal communication, December 12, 1997).

The seven factors are:

1. *Developmental focus* - A learning community is in evidence. Administrators, teachers and staff assist one another in learning new knowledge and skills.
2. *Recognition* - Teachers are acknowledged in such a way that they believe others have confidence in them. Mutual respect exists. Processes of formal recognition are in place as well as informal means.
3. *Autonomy* - Initiative is encouraged and support and encouragement is offered to teachers who want to make changes to best serve students.
4. *Collegiality* - Collaboration is evident in solving instructional as well as behavior problems. Teachers often discuss instructional strategies, share materials and impact the teaching and learning processes of all in the school.
5. *Participation* - Input of teachers is critical to decision making. "A consensus process involving representatives of the entire faculty, parents, students, and other stakeholders is used to guide the work of the teachers and administrators" (p. 100).
6. *Open communication* - Communications are open and honest and people are not blamed when things go wrong. Teachers feel informed about what is happening in their school.
7. *Positive Environment* - A positive climate and effective administrators are in place. Teaming is often used as part of the learning process. Teachers are generally satisfied with the environment and are well respected by all.

Because mentoring is one clear way teachers serve as leaders, this study surveyed 684 teachers working in 24 professional development schools (PDSs). Seventeen of the PDSs were rural schools, 5 were suburban schools and 2 were urban schools. For all of these schools opportunities to mentor pre-service and student teachers increased greatly over a three-year period from 1995-1998, as the university teacher educator preparation program was restructured. All teachers in the 24 campuses received a Teacher Leadership School Survey (Katzenmeyer & Katzenmeyer, personal communication, 1997) to complete during the last semester of the 3-year grant from the State of Texas.

During this three-year period, no systematic effort was made to gather data about mentor roles that public school teachers assumed, but informal conversations and reflections with public school teachers, university students and professors revealed that several definitions found in the literature for mentoring were modeled. Professional and personal growth appeared as a focus of the nurturing role of mentoring (Anderson & Shannon, 1988).

Collegial support as highlighted by Playco (1990) became evident as a major component in the Reading/Language Arts Block and the methods Block interaction among classroom teachers, preservice teachers, and the on-site university teachers. Finding the skills preservice teachers did not know existed and then demanding more than they thought available (Bennis, 1994) surfaced often in mentors' descriptions of their experiences.

Mentors also spoke of their role as guiding and overseeing the activities of the preservice teachers, much like Zey's (1991) concept of a mentor as an overseer of protégés. All of the roles mentioned by Schein (1978) were in place as well—teacher coach, trainer, positive role model, developer of talent, opener of doors, protector, sponsor, and successful leader.

Context for the Study: Sam Houston Center for Professional Development

In this professional development center, a partnership was initiated in 1995–96 with nine different organizations — Sam Houston State University, four school districts (which has grown to 28 districts), a regional education service center and three community colleges. A grant from the Texas Education Agency provided funds for a three year restructuring process. Goals of the Sam Houston Center for Professional Development (SHCPD) were to:

1. Implement extensive, sequenced, field-based learning experiences for preservice teachers which focus on research-based practices in such areas as instruction, classroom management, assessment, and human development that are mutually beneficial for preservice teachers, classroom teachers, and children in the public schools, especially children in low-performing sites...
2. Facilitate, in partnership schools and across the university, technology use that is integrated with effective teaching practices and enhances preservice teacher preparation and professional staff development...
3. Implement mentoring (authors' emphasis) and other learning activities that enable preservice teachers, public school staff, and university faculty to better understand, respect, and meet the learning and social needs of a diverse population of students...
4. Develop and implement a rigorous internal and external evaluation plan for the continuous qualitative and quantitative assessment of student and teacher outcomes using a variety of public school and university accountability indicators...
5. Promote the collaboration of all stakeholders in planning, implementing, and assessing preservice teacher preparation and professional staff development activities" (SHSU, 1995). In the restructuring of the educational program, four levels or tiers of learning were originally identified for preservice teachers—those university students enrolled in the teacher education program. Each of the levels involved several key players that worked collaboratively.

In the restructuring of the educational program, four levels or tiers of learning were originally identified for preservice teachers—those university students enrolled in the teacher education program. Each of the levels involved several key players that worked collaboratively.

- 1. Pre-college and Career Exploration:* The purpose of this level is to recruit future educators (especially minorities) at the high school level. Exploration of teaching as a career through active assistance to classroom teachers and career awareness fairs are typical activities at the high school level.
- 2. Career Exploration and Personal Development:* During students' freshman and sophomore years preservice teachers have field-based learning experiences through several required courses such as Multicultural Influences on Learning and Introduction to Special Education. Community agencies such as YMCA programs, public library programs, day care centers, nursing homes, and grandparent centers were sites as well as public schools.

3. Field Based Methods: During the junior year, thirty to forty hours of experience is gained through application of classroom learning in a school setting. Elementary preservice teachers are supervised by professors and mentor teachers in a Reading/Language Arts block. Secondary students are not involved in parallel experiences as more depth in subject matter is required.

4. Field Based Methods: During the senior year, teaching mathematics and science, social studies and reading provide experience for elementary preservice teachers in planning a series of lessons using current best teaching practices.

Again, professors and mentor teachers are involved with supervising the preservice teachers. Secondary preservice teachers must take 3 courses—each of which has 12 hours of field experience.

Student teaching occurs during the second semester for both elementary and secondary university students.

Although restructuring of the teacher preparation program began earlier, the state grant funding then accelerated this process allowing the university to schedule more field-based involvement at all levels starting in the fall semester, 1995.

A dramatic increase occurred in the contexts for interactions of public school teachers and preservice teachers, university faculty and public school teachers, and among public school teachers, preservice teachers, and university faculty. A learning community was created.

The transactions among this community of learners helped to foster the grant's far reaching goals. Mentors assisted in the professional development of future teachers and also had the opportunity to experience further professional growth for themselves through mentoring. Preservice teachers had in-depth classroom teaching/learning experiences with small and large groups of students and also gained understandings about campus organization and climate.

These field experiences focused on the last three semesters of the teacher preparation program. For the first field-based course, a Reading/Language Arts block of six credit hours involved the preservice teachers in assigned classrooms for approximately one and one-half to two hours twice a week.

The mentors guided preservice teachers in their roles as teaching assistants and as tutors of an assigned child.

Mentors also supported preservice teachers in several whole class interactions.

In the following semester, preservice teachers had blocked Methods courses of math, social studies, science, and reading wherein they spent approximately ten to twelve full days in assigned classrooms.

One day a week two preservice teachers took responsibility as teaching assistants. Each of them acting alone taught short activity lessons to one-half of the class.

In addition each tutored a child who needed assistance in reading and writing. They also taught a full week of an integrated unit covering all content areas and continued to tutor their assigned student an hour each day. The mentor teachers assisted as needed,

debriefed with them daily, and also assessed their performance in a conference setting and with written evaluations.

In the final student teaching semester, the mentor teachers through daily, ongoing interactions helped the student teachers gradually take over responsibility for teaching the class for three to four weeks in the six-week assignment. The student teachers then moved to another grade level and repeated the experience of assisting, preparing, and then teaching for three to four weeks. Each of the mentors worked daily with the student teacher, offering suggestions, assisting, debriefing, and also evaluating with the state teacher appraisal instrument.

Over the three years of the grant, it was possible for a classroom teacher to mentor in one, two or all three of these formats, therefore, creating seven different categories of teacher experience with mentoring.

Design of the Study

Research Questions

The following research questions were addressed to determine if mentoring experiences afforded any benefit to teachers and to cooperating schools in the SHCPD. Evidence already accumulated by the SHCPD indicated that the university students were better prepared with the restructured program. Evidence also indicated that administrators who have hired the graduates now perceive the university program as being more effective (D. K. Owens, personal communication, May 2, 1998).

1. How do teachers who mentor pre-service teachers in Reading/Language Arts and those who do not mentor pre-service teachers in Reading/Language Arts or who do not mentor at all vary in their perceptions of the 7 school teacher leadership factors?
2. How do teachers who mentor pre-service teachers in Methods and those who do not mentor pre-service teachers in Methods or who do not mentor at all vary in their perceptions of the 7 school teacher leadership factors?
3. How do teachers who mentor student teachers and those who do not mentor student teachers or who do not mentor at all vary in their perceptions of the 7 school teacher leadership factors?
4. How do teachers trained in mentoring and teachers not trained in mentoring vary in their perceptions of the 7 school teacher leadership factors?
5. What relationship does time taught on a campus, total years of experience, age, gender, and level taught have with the scores on the 7 school teacher leadership factors?

Limitations of the Study

A limitation of the study is that variables other than mentoring experience or training in mentoring that impact the perception of teachers—variables indigenous to the situation—were not considered. Current administrative and work environments of a district as well as that of an individual school interact with the principal and the teaching staff. Therefore each school is a small part of a larger organizational unit, the district. Also university professors in the educator preparation program interacting with individual teachers assisting in the

mentoring experiences might impact teacher perceptions of any of the school teacher leadership variables.

Methods and Data Analysis

Six hundred and eighty-four teachers in 24 PDSs in partnership with Sam Houston State University completed the Teacher Leadership School Survey (Katzenmeyer & Katzenmeyer, 1997). All teachers at each of the 24 campuses were provided a survey and a Scantron sheet to bubble in answers. Seven hundred and ten of 1225 surveys were returned for an overall return rate of 58%. Twenty-six of the returned surveys had to be discarded because of many incomplete answers.

In addition to scoring the 7 dimensions of teacher leadership at their schools, respondents provided demographic information including age, gender, overall teaching experience, length of time teaching at the same campus, and mentoring experience and training.

Four hundred and four respondents were serving grades PK-6 and 280 respondents were serving at the junior or senior high school level, grades 7-12.

All scoring was completed using the Scantron machine to yield ratings for each of the seven dimensions of teacher leadership. Subsequently all data was entered into the GB-STAT Macintosh program for a one-way analysis of variance.

Results

Analysis by Question

Question 1. How do teachers who mentor pre-service teachers in Reading/Language Arts and those who do not mentor pre-service teachers in Reading/Language Arts or who do not mentor at all vary in their perceptions of the 7 school teacher leadership factors?

Eighty-seven teachers (Group 1) indicated experience in mentoring pre-service teachers in Reading/Language Arts. Five hundred and sixteen teachers (Group 2) indicated that they had not mentored pre-service teachers in Reading/Language Arts or had not mentored at all. A one-way analysis of variance indicated a significant difference between the groups when scoring teacher leadership factors Developmental Focus ($p < .001$), Recognition ($p < .01$), and Collegiality ($p < .01$). The difference in scores for the dimension Participation approached significance.

Variance between Groups 1 and 2 were not significant for teacher leadership factors Autonomy, Open Communications, Positive Environment, and Participation.

Question 2. How do teachers who mentor pre-service teachers in Methods and those who do not mentor pre-service teachers in Methods or who do not mentor at all vary in their perceptions of the 7 school teacher leadership factors?

One hundred and thirty-four teachers indicated that they had mentored pre-service teachers in Methods (Group 1) during the last three years. Four hundred and eighty-seven teachers (Group 2) indicated that they had not mentored pre-service teachers in Methods or that they had not mentored at all during the last three years. A one-way analysis of variance indicated significant differences between Groups 1 and 2 when regarding teacher leadership factors Developmental Focus ($p < .05$), Recognition ($p < .05$), and Collegiality ($p < .01$). Factors that did not show a significant difference were Autonomy, Participation, Open

Communication and Positive Environment, although the scoring differences for factor Open Communication approached significance.

Question 3. How do teachers who mentor student teachers and those who do not mentor student teachers or who do not mentor at all vary in their perceptions of the 7 school teacher leadership factors?

Three hundred and seventeen teachers (Group 1) indicated that they had mentored student teachers during the 3-year period. Three hundred and twenty-three teachers (Group 2) indicated that they had not mentored student teachers or that they had not mentored at all during the same time period. Significant differences were found in scores on Developmental Focus ($p < .0001$), Recognition ($p < .0001$), Autonomy ($p < .001$), Collegiality ($p < .05$), and Participation ($p < .05$). No significant differences between the groups were found in views of Open Communication and Positive Environment.

Question 4. How do teachers trained in mentoring and teachers not trained in mentoring vary in their perceptions of the 7 school teacher leadership factors?

One hundred and ninety-one teachers indicated that they had some type of mentor training. Four hundred and twenty teachers indicated that they had no mentor training. Significant differences in views were found between the two groups on all 7 teacher leadership school factors. Probabilities for these differences were Developmental Focus, $p < .0001$, Recognition, $p < .0001$, Autonomy, $p < .001$, Collegiality, $p < .01$, Participation, $p < .001$, Open communication, $p < .01$, and Positive Environment, $p < .05$.

Question 5. What relationship does time taught on a campus, total years of experience, age, gender, and level taught have with the scores on the 7 school teacher leadership factors?

A simple Person r correlation was used to determine that teaching experience was the only factor that showed a significant, positive relationship with any of the 7 school teacher leadership dimensions. The greater the teacher experience, the higher the score for both Recognition and Participation. Both correlations indicated a probability level of $p < .01$.

Discussion

The group of teacher mentors perceived support for teacher leadership dimensions much differently than those teachers who had not mentored.

Mentor training, per se, seemed to provide the greatest variance in views toward each of the seven dimensions when comparing mentors and non-mentors.

Three of the dimensions were perceived by mentors as significantly more supportive of teacher leadership than perceptions by non-mentors.

Two additional dimensions were perceived quite differently by teachers who mentored student teachers or who had received some mentor training when compared to views of those who had not had such experiences.

The dimensions of Autonomy and Participation were viewed as significantly more positive by mentor teachers when compared to views of teachers who had not mentored student teachers or who had not had mentor training.

Developmental Focus as a dimension of support for teacher leadership focuses on providing assistance in learning new skills. By definition, mentoring matches this dimension. Therefore, finding that the views of mentors are significantly more positive than those of non-mentors is not surprising.

Although Katzenmeyer and Moller (1996) defined Mentoring as a shared experience between practicing teachers and administrators, the same definition applies to mentoring between pre-service and inservice teachers. University professors in educator preparation teamed with practicing teachers to provide assistance, guidance and coaching to pre-service and student teachers. In some cases professors provided direct mentor training to public school teachers. Mentor training was also provided through modeling in interactions of the professor with the student teacher and the pre-service teachers.

Recognition, the second dimension of support for teacher leadership, was also viewed more positively by those who had mentored. Daresh and Playco (1993) note that mentors are reinforced in the importance of their work.

The 3 year partnership (1995 -1998) within the Sam Houston Center for Professional Development and Educator Preparation (SHCPDEP) provided increasing numbers of opportunities for mentoring as the restructuring of the teacher preparation program progressed. Principals, colleagues, university professors and even public school students had opportunity to recognize that certain teachers had been chosen to serve as mentors to pre-service teachers and/or student teachers.

The realization that others had a great deal of confidence in them and had respect for them helped to create positive feelings in individual mentors. This perception is not so easily gained when teachers are not involved in the visible forms of teacher leadership.

Collegiality or friendship is one of the assets gained by being involved in mentoring (Roche, 1979). A network of ideas may also be gained (Daresh & Playco, 1993). Collaborating on student learning often involves "...teachers discussing strategies, sharing materials, or observing in one another's classrooms.... Time is spent by teachers discussing teaching and learning" (Katzenmeyer & Moller, 1996). This type of exchange is at the heart of a professional development center and is clearly stated as one of the SHCPDEP goals. Normally, those teachers who are identified as non-mentors would not interact with pre-service and student teachers and/or with university professors as colleagues. At least no regular, structured discussion of teaching and learning would be anticipated although casual, infrequent contact might engender related conversation. The weaker perception of support for collegiality by non-mentors might be a natural outcome of this set of factors.

Autonomy as defined by Katzenmeyer and Moller (1996) means that "Teachers are encouraged to take the initiative to make improvements and to be innovative [and that]...time is provided to encourage teachers to try new ways of improving teaching and learning in school" (p.100). This dimension was not viewed differently by mentors and non-mentors except for those involved in mentor training and in mentoring student teachers.

Findings from an earlier study with teachers involved in other professional development schools (Czaja & Prouty, 1998) noted no significant differences of views of teachers who had had different types of mentoring experiences. Barriers to change are often significant and unless teachers are real risk-takers and know well that they have the support of the principal, they will not change the approach currently being taken with students. Mentors or trained mentors feel more strongly supported in other dimensions.

Participation relates to the active involvement that teachers have in making decisions whether in departments, in team meetings, or in site-based decision committee meetings (Katzenmeyer & Moller, 1996). The definition of participation includes involvement of other stakeholders such as parents and students. It would seem that perhaps mentor teachers participated in the decision to be involved in mentor training as well as whether or not to mentor student teachers. These two types of mentoring experiences showed a significant variance in the scores of mentors and non-mentors when the other two types did not.

The last two dimensions necessary for full support of teacher leaders, Open Communications and Positive Environment, did not demonstrate significant variance between scores of mentors and non-mentors. A significant difference in scoring these two factors was noted only with teachers who had mentor training. Both dimensions include an element of trust and comfort with the environment and teaming at the campus.

With Open Communication no blame is assigned to individuals when things go wrong. Problem solving occurs with teachers working together to focus on how to do things better next time.

With a Positive Environment "...school personnel frequently function together as teams" (Katzenmeyer & Moller, 1996). The structure of a building as well as the imposed structure by schedule, by budget, and/or by personalities can hinder team building and the development of open communications and a positive environment. Administrators, teachers, professors and others currently active in the SHCPDEP were sometimes not involved in the planning or implementation of change so that their commitment to the vision differed from those in charge. Without sensing support from the principal and other leaders, mentor teachers had approximately the same perception of Open Communications and Positive Environment that other teachers had.

The power structure must allow mentor teachers to exercise their leadership qualities. Administrators must trust and communicate openly to overcome barriers to teacher leadership in order to boost to school climate.

Conclusions and Implications

The experience of mentoring seems to change the way teachers view their own efficacy and professionalism. Among teachers who have mentoring experiences, a more positive outlook is demonstrated and there appears to be greater focus on continual improvement for individuals and communities of learners. In this study, benefits of mentoring as evidenced in the literature seem to be verified and even enhanced. Mentoring is clearly associated with a more positive view of collegiality, recognition, developmental focus, and, in two cases, autonomy. With mentor training the dimensions of open communications and a positive environment were also viewed as significantly more positive.

The opportunities for mentoring in education are abundant. Given the salubrious effects, more emphasis should be given to reform efforts that encourage mentoring processes. Peer coaching, expanded mentoring through field-based courses (as in this study), efforts that can lead to mentoring such as shadowing, and/or various partnerships should be examined for learning possibilities and for possible impact on climate. Because of the positive views of mentoring teachers, a more positive school climate can result. That climate, in turn, may lead to improved student outcomes as noted by Brookover, et al. (1979).

A qualitative study detailing relationships of the variables is needed. Mentors and mentees could add new insights to the data. As defined in the Teacher Leadership School Survey by Katzenmeyer and Katzenmeyer (1997), the relationship of school context or climate to student achievement should be examined.

References

- Anderson, B. M., & Shannon, A. C. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education*, Jan-Feb, 38-42.
- Barth, R. S. (1990). *Improving schools from within: Teachers, parents, and principals can make the difference*. San Francisco: Jossey Bass.
- Bennis, W. (1994). *On becoming a leader*. New York: Addison-Wesley.
- Berry, B., & Catoe, S. (1994). Creating professional development schools: Policy and practice in South Carolina's PDS Initiative. In L. Darling-Hammond (Ed.), *Professional development schools: School for developing a profession* (pp. 176-202). New York: Teachers College Press.
- Book, C. L. (1996). Professional development schools. In J. Sikula, T. Buttery, E. Geyton (Eds.), *The handbook in teacher education* (2nd ed.). New York: MacMillian Library References.
- Brookover, W., Brady, C., Flood, P., Schweitzer, J., & Wisenbaker, J. (1979). *School social systems and student achievement: Schools can make a difference*. New York: Praeger.
- Czaja, M., & Prouty, J. L. (1998). *Developing Leadership for the 21st Century. A Study of a Professional Development Center and Its Partnership with One School District*. Paper presented at the 7th National Conference in Creativity the Quality School, March, 1998. Submitted for publication.
- Czaja, M., Prouty, J. L., & Lowe, J. (1998). Mentoring and Its Relationship to the Context for Teacher Leadership. An unpublished paper. Sam Houston State University, Huntsville, Texas
- Darling-Hammond, L. Bullmaster, M. L., & Cobb, V.L. (1995). Rethinking teacher leadership through professional development schools. *The Elementary School Journal*, 96(1), 21-40.
- Dempsey, R. (1992). *Teachers as Leaders: towards a conceptual framework*. *Teaching Education*, 5(1), 113-120.
- Fullan, M. (1993). *Changes forces: Probing depths of educational reform*. New York: The Falmer Press.
- Gay, L. R. (1996). *Educational research: Competencies for analysis and application* (5th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Gehrke, N. J., & Romerdahl, N. S. (1992, April). *Role of teacher leaders in a professional development school*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco.
- Gehrke, N. J., & Romerdahl, N. S. (1997). *Teacher Leaders: Making a Difference in Schools*. West Lafayette, Indiana. Kappa Delta Phi.

Hart, A. W. (1995). Reconceiving School Leadership: Emergent views. *The Elementary School Journal*, 96(1), 9-28

Hayes, H., Wetherill, K., Tyndall, R. E., Hayes, A., & Calhoun, D. (1996). *A New Vision for Schools, Supervision, and Teacher Education: The Professional Development System and Model Clinical Teaching Project*. Paper presented to annual meeting of the special interest group: Instructional supervision. American Educational Research Association. New York.

Katzenmeyer, M., & Moller, G. (1996). *Awakening the sleeping giant: Leadership development for teachers*. Thousand Oaks, CA: Corwin Press.

Katzenmeyer, M. (1997, April). *Teacher Leadership and Learning Communities Hold Promise for Improving Student Achievement*. Paper presented to a Professional Development Conference, Louisiana State University, Baton Rouge LA.

Katzenmeyer, M. & Katzenmeyer, W. (1997). FAX of survey on December 12, 1997.

Lemleck, J. K., Hertzog-Folliart, H., & Hackl, A. (1994). The Los Angeles professional practice school: A study of mutual impact. In L. Darling-Hammond (Ed.), *Professional development schools: School for developing a profession* (pp. 156-175). New York: Teachers College Press.

McDaniel, J. E., Rice, C., & Romerdahl, N. S. (1990, April). *Building teacher leadership in an emerging professional development center*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco.

Murray, F. B. (1993). "All or None" criteria for professional development schools. In P. G. Altbach, et al. (Eds), *Educational Policy: Volume 7 Number 1 Professional Development Schools* (pp. 61-73) Newbury Park: Corwin Press.

National Commission on Excellence in Education. (1983). *A nation at risk*. Washington, DC: Education Department.

Playco, M. (1990). What it means to be mentored. *NASSP Bulletin*, 74, 526, 29-32.

Sam Houston State University. (1995). Sam Houston Center for Professional Development, Grant Proposal for the Texas Education Agency, Huntsville, Texas.

Schein, E. (1978). *Career dynamics: Matching individual and organization needs*. Reading, MA: Addison-Wesley.

Senge, P. M. (1990). *Fifth discipline: The art and practice of learning organization*. New York: Doubleday.

Smylie, M. A. (1995). New Perspectives on Teacher Leadership. *The Elementary School Journal*, 96(1) 3-8.

Teitel, L. (1996). Leadership in Professional Development Schools: Lessons for the Preparation of Administrators.

Zey, M. G. (1991). *The Mentorship Connection*. New Brunswick, NJ: Transaction Books.