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ABSTRACT
        The purpose of this study was to develop an understanding of
the relationships among principal transformational leadership, school
leadership-team transformational leadership, and school culture. Twelve
middle schools composed the sample population. Three surveys were used, each
one focusing on collecting data related to principal leadership, team
leadership, and school culture. Data were analyzed using correlational and
regression statistics. Results show that the principal seems to be the
primary source of identifying and articulating a vision and providing an
appropriate model. Leadership teams seem to be the primary source of
providing intellectual stimulation and holding high expectations. There is a
mix of principal and leadership-team influence as sources of fostering
commitment to group goals and providing individualized support. School
culture factors reveal that the leadership team, rather than the principal,
seems to exert the greatest influence upon collaborative leadership and
learning partnership. The principal, rather than leadership teams, seems to
exert the greatest influence upon teacher collaboration and unity of purpose.
These and other findings are supportive of the current movement in education
toward collaborative forms of school leadership. This study serves as a start
for further exploration of principals, leadership teams, transformational
leadership, and school culture. (Contains 65 references.) (RT)

# Transformational Leadership: Principals, Leadership Teams, and School Culture

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Transformational Leadership: Principals, Leadership Teams, and School Culture

## Introduction

### Rationale

The recent history of American education is situated within changing societal, educational, and organizational contexts that have engendered a steady stream of calls for the change, reform, and improvement of schools and school systems. While much debate has developed over the degree to which schools are or are not meeting the needs of today's students, it is commonly acknowledged that schools face a set of contexts that is characterized by unprecedented change and uncertainty (Bjork, 1996). Principals, as the designated formal leaders of schools, are faced by complex moral, interpersonal, instructional, managerial, and political demands and are recognizing that a likely avenue for their more effective exercise of leadership may lie in enabling other members of their schools, such as teachers, to assume and carry out leadership roles within the school organization (Greenfield, 1995).

The changing contexts in which schools, principals, and teachers find themselves are characterized by conditions that are often unanticipated (Beadie, 1996), as well as rapidly changing and uncertain (Murphy, 1994). Specific changes involve student demographic characteristics and values, the labor market, parental work patterns, technology, and legal requirements (Levin, 1993). Schools must be aware of these changing conditions and adapt both their goals and means in order to survive and thrive in such an environment (Goldring, 1992). While American education in the twentieth century has witnessed a steady stream of changing goals, means, and desired forms of principal leadership (Beck & Murphy, 1992), the last twenty years have seen a fairly rapid transition in the prevailing conception of principal leadership, moving from managerial, to instructional, and now transformational forms (Rothberg & Hill, 1992). This is because many of the broad objectives of the current restructuring movement place an emphasis on site-based management and the professionalization of teaching (Keedy & Achilles, 1997) and because a growing array of possible reform strategies and solutions are being presented to schools, principals, and teachers (Fowler, 1999; Johnson, 1997; Short, 1994).

Schools are also changing in response to contemporary organizational theory, which emphasizes organizations as open systems (Levin, 1993) that function most effectively when operating democratically (Slater, 1994) and when focused on honoring and raising human conduct and aspiration through mutual trust (Brouilette, 1997). While the historically bureaucratic structure of schools and school systems is still evident (Eden, 1998), school leaders are now expected to develop the abilities and skills of students, parents, teachers, and other administrators in order to facilitate more shared leadership behavior (Darling-Hammond, 1993). Principals are being asked to empower their teachers in order to take advantage of the recent moves toward site-based management and shared decision-making structures (Johnston, 1992).

Leaders in today's schools are expected to produce purpose, commitment, and creativity in the members of their organizations (Bolman & Deal, 1994). These leaders are also expected to have a broad understanding of the environmental contexts in which their schools are located and to develop and employ managerial, curricular, and instructional strategies that address those contexts (Singh, Bartlett, Rowan, Gale, & Roylance, 1997). The complexity of such requirements has led recent calls for reform to emphasize the need for collaborative leadership

shared by principals and teachers through the decentralization of management and governance, the empowerment of school-site administrators and teachers, and the development of unique, school-based solutions to classroom teaching and learning challenges (Hallinger, Murphy, and Hausman, 1992). The explicit sharing of power by principals with teachers is seen as essential to the success of site-based management and shared decision-making strategies (Keedy & Finch, 1994), and schools that are successfully restructuring seem to be typified by high levels of administrator-teacher collaboration in leadership (Leithwood & Menzies, 1998), particularly when principals take the initiative in taking the steps needed for success (Alexander & Keller, 1994).

Recent studies of such shared leadership structures point out that the shaping of school culture seems to be a key factor in school change. The impact of leadership upon student achievement, for instance, seems to be mediated by characteristics of school culture (Hallinger & Heck, 1998), including the assumptions, values, and beliefs of the school's members as evidenced in their everyday actions (Kytle & Bogatch, 2000). Successful principals are those who create a culture that accepts and encourages experimentation, risk-taking, and open dialogue that leads to norms, practices, and power relationships that are uniquely suited to their schools (Oakes, Quartz, Gong, Guiton, & Lipton, 1993). Transformational leadership emphasizes engaging leaders with followers in order to inspire them to go beyond self-interest; work toward values-driven, higher-level goals; participate in shared decision making; and develop school-based solutions to challenges. Transformational leadership, then, seems to be a leadership model well-suited to the changing contexts within which schools are located (Tucker-Ladd, Merchant, & Thurston, 1992). Principals who are transformational leaders are characterized by more flexible, versatile, and responsive leadership behavior (Duignan & Macpherson, 1993) and help their schools become more participative and democratic (Anderson, 1998).

While both researchers and practitioners are increasingly using the transformational leadership framework to examine principal leadership, there is little evidence in the literature of this framework being applied to the study of teachers providing school leadership in collaborative principal-teacher leadership teams. Additionally, while the transformational leadership model has been espoused by many educators as the preferred approach to the shaping of school culture, only recently have quantitative instruments been developed that purport to measure the constructs of school leader transformational leadership and school culture. It would seem productive to employ these recently developed quantitative measures of transformational leadership and school culture to explore the relationships among principal leadership, teacher leadership, and school culture. Applying the constructs of transformational leadership to both principals and to collaborative principal-teacher school leadership teams, and then investigating the relationships between these constructs and those of school culture, should reveal informative relationships among principal transformational leadership, school leadership team transformational leadership, and school culture.


Purpose of the Study

The purpose of this study was to develop an understanding of the relationships among principal transformational leadership, school leadership team transformational leadership, and school culture. The primary method of analysis was quantitative, with survey data being used to determine (a) if any direct relationships exist between principal transformational leadership and

school leadership team transformational leadership, (b) if any direct relationships exist between principal transformational leadership and school culture, (c) if any direct relationships exist between school leadership team transformational leadership and school culture, and (d) if school leadership team transformational leadership either moderates or mediates the relationships between principal transformational leadership behavior and school culture. Qualitative interview data were also employed to enrich the findings of the quantitative analysis.

## Research Questions

The following research questions were examined during the completion of this study:

1. What is the nature of the relationships between the factors of principal transformational leadership and the factors of leadership team transformational leadership?

2. What is the nature of the relationships between the factors of principal transformational leadership and the factors of school culture?

3. What is the nature of the relationships between the factors of leadership team transformational leadership and the factors of school culture?

4. Are there predictive linear relationships between (a) the corresponding factors of principal and leadership team transformational leadership and (b) the factors of school culture?

5. Do any factors of leadership team transformational leadership act as mediators between their corresponding factors of principal transformational leadership and factors of school culture?

6. Can a model be developed depicting the relationships among the factors of principal transformational leadership, leadership team transformational leadership, and school culture that helps explain the direct relationships between principal transformational leadership and school culture, as well as those relationships that are mediated or moderated by leadership team transformational leadership?

7. What qualitative interview evidence exists to enrich these relationships and the model developed from the quantitative analysis?

## Method

## Population

Twelve middle schools that participated in the second (1998-2000) cohort of Project ASSIST (Achieving Success through School Improvement Site Teams) comprise the population of this study. Project ASSIST is a statewide school improvement project facilitated by the Middle Level Leadership Center (MLLC) at the University of Missouri-Columbia. The project is funded through school participation fees and a grant from the Missouri Department of Elementary and Secondary Education. The schools are located across the state and represent urban, suburban, and rural settings with a variety of student socioeconomic characteristics.

During their participation in the project, the schools' administrators and teachers completed a variety of survey research instruments and participated in interviews relevant to the project's objectives. The data for this study came from surveys and interviews conducted at the end of the cohort's participation in the project during the spring of 2000, and was aggregated and analyzed at the school level.

Instrumentation

Three instruments were used in this study to collect quantitative data. The Principal Leadership Questionnaire (adapted from Jantzi & Leithwood, 1996) was used to measure six factors of principal transformational leadership as perceived by the members of each school's leadership team. The Team Leadership Questionnaire (adapted from Jantzi & Leithwood, 1996) was used to measure six factors of leadership team transformational leadership as perceived by members of each school's faculty. The School Culture Survey (Gruenert & Valentine, 1998) was used to measure six factors of school culture. In addition, a protocol was developed and carried out to interview the teacher members of the school leadership teams at the end of the project.

Principal and Leadership Team Transformational Leadership. Principal transformational leadership was measured by the Principal Leadership Questionnaire (adapted from Jantzi & Leithwood, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990) and assessed each school leadership team's perceptions of the principal's transformational leadership behavior when working directly with the leadership team during Project ASSIST. Team transformational leadership was measured by the Team Leadership Questionnaire (adapted from Jantzi & Leithwood, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990) and assessed each school faculty's perceptions of the leadership team's transformational leadership behavior when working with the faculty during Project ASSIST. These two questionnaires measured perceptions of the following six factors that underlie the construct of transformational leadership:

1. Identifying and articulating a vision: behavior aimed at identifying new opportunities for the organization and developing, articulating, and inspiring others with this vision of the future. This factor has a reported reliability coefficient (Chronbach's alpha) of .88 (Jantzi & Leithwood, 1996).

2. Providing an appropriate model: behavior that sets an example for organizational members to follow consistent with the values the leadership espouses. This factor has a reported reliability coefficient (Chronbach's alpha) of .86 (Jantzi & Leithwood, 1996).

3. Fostering the acceptance of group goals: behavior aimed at promoting cooperation among organizational members and assisting them to work together toward common goals. This factor has a reported reliability coefficient (Chronbach's alpha) of .80 (Jantzi & Leithwood, 1996).

4. Providing individualized support: behavior that indicates respect for organizational members and concern about their personal feelings and needs. This factor has a reported reliability coefficient (Chronbach's alpha) of .82 (Jantzi & Leithwood, 1996).

5. Providing intellectual stimulation: behavior that challenges organizational members to reexamine some of the assumptions about their work and rethink how it can be

performed. This factor has a reported reliability coefficient (Chronbach's alpha) of .77 (Jantzi & Leithwood, 1996).

6. Holding high performance expectations: behavior that demonstrates leadership expectations for excellence, quality, and high performance on the part of the organization's members. This factor has a reported reliability coefficient (Chronbach's alpha) of .73 (Jantzi & Leithwood, 1996).

School Culture. School culture was measured by the School Culture Survey (Gruenert & Valentine, 1998) and assessed each school faculty's perceptions of the school's culture at the end of the school's participation in Project ASSIST. The development of the School Culture Survey was based upon an extensive review of the school culture literature, the creation of a initial bank of 79 survey items from that literature, the administration of the survey to a sample of 632 teachers, and the use of factor analysis to derive a final instrument comprised of 35 Likert-type items organized within six factors (Gruenert, 1998). The School Culture Survey measured faculty members' perceptions of the following six factors that underlie the construct of school culture:

1. Collaborative leadership: the degree to which school leaders establish and maintain collaborative relationships with school staff; leaders value teachers' ideas, seek their input, engage them in decision-making, and trust their professional judgments; and leaders support and reward risk-taking, innovation, and sharing of ideas and practices. This factor has a reported reliability coefficient (Chronbach's alpha) of .91 (Gruenert, 1998).

2. Teacher collaboration: the degree to which teachers engage in constructive dialogue that furthers the educational vision of the school; teachers across the school plan together, observe and discuss teaching practices; evaluate programs; and develop an awareness of the practices and programs of other teachers. This factor has a reported reliability coefficient (Chronbach's alpha) of .83 (Gruenert, 1998).

3. Unity of purpose: the degree to which teachers work toward a common mission for the school; and teachers understand, support, and perform in accordance with that mission. This factor has a reported reliability coefficient (Chronbach's alpha) of .82 (Gruenert, 1998).

4. Professional development: the degree to which teachers value continuous personal development and school-wide improvement; and teachers seek ideas from seminars, colleagues, organizations, and other professional sources to maintain current knowledge, particularly current knowledge about instructional practices. This factor has a reported reliability coefficient (Chronbach's alpha) of .87 (Gruenert, 1998).

5. Collegial support: the degree to which teachers work together effectively; trust each other and value each other's ideas; and assist each other as they work to accomplish the tasks of the school organization. This factor has a reported reliability coefficient (Chronbach's alpha) of .80 (Gruenert, 1998).

6. Learning partnership: the degree to which teachers, parents, and students work together for the common good of the student; parents and teachers share common expectations and communicate frequently about student performance; parents trust teachers; and

students generally accept responsibility for their schooling. This factor has a reported reliability coefficient (Chronbach's alpha) of .66 (Gruenert, 1998).

School Leadership Team Interview. A series of open-ended questions was developed to allow teacher members of the school leadership teams to provide, during a semi-structured group interview session, information related to the factors of the Principal Leadership Questionnaire, Team Leadership Questionnaire, and School Culture Survey. Interviews were conducted by Middle Level Leadership Center staff members at each Project ASSIST school site during May, 2000. The interviews were videotaped and transcribed verbatim for later analysis.

Data Collection. Principal leadership, leadership team leadership, and school culture data were collected at the end of each school's involvement with Project ASSIST. All school faculty members completed the School Culture Survey in February and March 2000. The Principal Leadership Questionnaire was completed by all of the teacher members of each school leadership team in May 2000. The Team Leadership Questionnaire was completed by all faculty members, excluding teacher members of the leadership team, in May 2000. Administration of the School Culture Survey and the Team Leadership Questionnaire was conducted at each school site in accordance with protocols designed by the Middle Level Leadership Center and approved by the University of Missouri Human Subjects Research Board. The schools in Project ASSIST agreed to accept responsibility to properly inform all respondents of human subjects rights and privileges, including voluntary participation, anonymity, and confidentiality. Administration of the Principal Leadership Questionnaire was conducted during the final Project ASSIST training meeting held at the University of Missouri. Middle Level Leadership Center staff informed all respondents in this session of human subjects rights and privileges, including voluntary participation, anonymity, and confidentiality. The semi-structured group interviews of the school leadership teams were conducted by Middle Level Leadership Center staff members at each school site at the conclusion of the school's participation in Project ASSIST. The interviews were videotaped and transcribed verbatim for later analysis.

## Analysis

To accomplish the purpose of this study, the following general procedures were followed. For all statistical tests the level of significance was set at $\alpha = .05$.

1. Correlational and partial correlational relationships between the factors of principal transformational leadership and leadership team transformational leadership were analyzed.

2. Correlational and partial relationships between the factors of principal transformational leadership and school culture were analyzed.

3. Correlational and partial relationships between the factors of leadership team transformational leadership and school culture were analyzed.

4. Using multiple regression analysis, predictive linear relationships between (a) the corresponding factors of principal transformational leadership and leadership team transformational leadership and (b) factors of school culture were analyzed.

5.  Using multiple regression analysis, the mediating function of factors of leadership team transformational leadership in the relationships between factors of principal transformational leaders and school culture were analyzed.

6.  From the above findings, an explanatory model among the factors of principal transformational leadership, leadership team transformational leadership, and school culture was developed.

7.  Qualitative interview data gathered from members of each school's leadership team were used to illuminate and possibly support the findings of the quantitative analyses and explanatory model.

## Results

### Descriptive

For this study, 12 middle schools, with 475 faculty members and 47 school leadership team members, participated. For the Principal Leadership Questionnaire, which was completed by the school leadership team members to assess the transformational leadership behavior of their principals, the factor "providing an appropriate model" had the highest mean (3.43), followed, in descending order, by "fostering commitment to group goals" (3.42), "providing individualized support" (3.39), "identifying and articulating a vision" (3.38), "holding high expectations" (3.29), and "providing intellectual stimulation" (3.16).

For the Team Leadership Questionnaire, completed by the non-leadership team faculty members to assess the transformational leadership behavior of their schools' leadership teams, the factor "fostering commitment to group goals" had the highest mean (3.07), followed by, in descending order, "providing an appropriate model" (3.05), "holding high expectations" (2.99), "identifying and articulating a vision" (2.95), "providing intellectual stimulation" (2.94), and "providing individualized support" (2.91).

For the School Culture Survey, completed by both leadership team members and school faculty members, the factor "unity of purpose" had the highest mean (3.96), followed, in descending order, by "collegial support" (3.95), "professional development" (3.87), "collaborative leadership" (3.51), "learning partnership" (3.41), and "teacher collaboration" (3.17).

### Correlation and regression analyses

Research question 1: What is the nature of the relationships between the factors of principal transformational leadership and the factors of leadership team transformational leadership? 23 of 36 possible zero-order correlational relationships were found to be significant, and 2 of 36 possible partial correlational relationships (when factors of school culture were held constant) were found to be significant.

Research question 2: What is the nature of the relationships between the factors of principal transformational leadership and the factors of school culture? 15 of 36 possible zero-order correlational relationships were found to be significant, and 2 of 36 possible partial

correlational relationships (when factors of team transformational leadership were held constant) were found to be significant.

Research question 3: What is the nature of the relationships between the factors of leadership team transformational leadership and the factors of school culture? 34 of 36 possible zero-order correlational relationships were found to be significant; however, none of the possible 36 partial correlational relationships (when factors of principal transformational leadership were held constant) were found to be significant.

Research question 4: Are there predictive linear relationships between (a) the corresponding factors of principal and leadership team transformational leadership and (b) the factors of school culture? 24 of 36 multiple possible regression equations were found to be significant. Of the 24 significant regression equations, 3 contained a factor of principal transformational leadership that was significant as an independent variable (while the corresponding leadership team transformational leadership factor was not significant) and 14 contained a factor of leadership team transformational leadership that was significant as an independent variable (while the corresponding principal transformational leadership factor was not significant). In seven of the significant regression equations, neither the principal transformational leadership factor nor the leadership team transformational leadership factor accounted for a unique and significant proportion of the variability of the factor of school culture.

Research question 5: Do any factors of leadership team transformational leadership act as mediators between the corresponding factors of principal transformational leadership and school culture? Three factors of leadership team transformational leadership were found to mediate relationships between factors of principal transformational leadership and school culture. Specifically, (1) the team factor "identifying and articulating a vision" mediated the relationship between the principal factor "identifying and articulating a vision" and the school culture factor "collaborative leadership;" (2) the team factor "modeling appropriate behavior" mediated the relationship between the principal factor "modeling appropriate behavior" and the school culture factor "collaborative leadership;" and (3) the team factor "providing individualized support" mediated the relationship between the principal factor "providing individualized support" and the school culture factor "professional development."

Model Construction

Research question 6: Can a model be developed depicting the relationships among the factors of principal transformational leadership, leadership team transformational leadership, and school culture that helps explain the direct relationships between principal transformational leadership and school culture, as well as those relationships that are mediated by leadership team transformational leadership? Table 1 provides an overview of the relationships among factors of principal transformational leadership, leadership team transformational leadership, and school culture that were revealed through the series of regression and multiple regression analyses conducted for this study. Cells of the table were filled according to the following rules.

- If a factor of leadership team transformational leadership acted as a mediator between its corresponding factor of principal transformational leadership and a factor of school culture (as tested by hypothesis five), the appropriate cell was filled with the statement

Table 1
Summary of Relationships Among Factors of Principal Transformational Leadership, Leadership Team Transformational Leadership, and School Culture

| Culture / Leadership | Collabo-rative Leadership | Teacher Collabo-ration | Unity of Purpose | Profes-sional Develop-ment | Collegial Support | Learn-ing Partner-ship |
|---|---|---|---|---|---|---|
| Identifying and Articulating a Vision | Team ($\beta = .873$) Mediates Principal ($\beta = -.032$) | Principal Direct ($\beta = .778$) | Principal Direct ($\beta = .697$) | Principal Direct ($\beta = .846$) | Principal Direct ($\beta = .732$) | Neither |
| Providing an Appropriate Model | Team ($\beta = .803$) Mediates Principal ($\beta = .078$) | Principal Direct ($\beta = .856$) | Neither | Principal Direct ($\beta = .724$) | Principal Direct ($\beta = .642$) | Neither |
| Fostering Commitment to Goals | Team Direct ($\beta = .930$) | Principal Direct ($\beta = .584$) | Principal Direct ($\beta = .608$) | Team Direct ($\beta = .603$) | Team Direct ($\beta = .689$) | Neither |
| Providing Individual Support | Team Direct ($\beta = .874$) | Principal Direct ($\beta = .666$) | Principal Direct ($\beta = .664$) | Team ($\beta = .598$) Mediates Principal ($\beta = .309$) | Team Direct ($\beta = .714$) | Neither |
| Providing Intellectual Stimulation | Team Direct ($\beta = 1.076$) | Neither | Neither | Team Direct ($\beta = .714$) | Neither | Neither |
| Holding High Expectations | Team Direct ($\beta = .871$) | Neither | Team Direct ($\beta = .734$) | Team Direct ($\beta = .710$) | Team Direct ($\beta = .759$) | Team Direct ($\beta = .854$) |

"team mediates principal" and the betas ($\beta$) for the two factors (principal and team) that served as predictors of school culture. Three of the table's cells were filled with "team mediates principal."

- If a factor of principal transformational leadership, acting as the sole independent variable in a regression equation predicting a factor of school culture, had a significant beta ($\beta$), and the addition of the corresponding factor of leadership team transformational leadership did not account for a significant proportion of the school culture factor's

10  11

variance beyond that of the principal factor, the cell was filled with the statement "principal direct" along with the beta ($\beta$) for the principal factor when it alone was in the regression equation. Eleven of the table's cells were filled with "principal direct."

- If a factor of principal transformational leadership, acting as the sole independent variable in a regression equation predicting a factor of school culture, did not have a significant beta ($\beta$), and the addition of the corresponding factor of leadership team transformational leadership accounted for a significant proportion of the school culture factor's variance beyond that of the principal factor, the cell was filled with the statement "team direct" along with the beta ($\beta$) for the leadership team factor when it was in the regression equation along with the principal factor. Twelve of the table's cells were filled with "team direct."

- If a factor of principal transformational leadership, acting as the sole independent variable in a regression equation predicting a factor of school culture, did not have a significant beta ($\beta$), and the addition of the corresponding factor of leadership team transformational leadership did not account for a significant proportion of the school culture factor's variance beyond that of the principal factor, the cell was filled with the statement "neither." Ten of the table's cells were filled with "neither."

## Summary of Quantitative Analysis and Relevant Evidence from Interview Data

Research question 7: What qualitative interview evidence exists to enrich these relationships and the model developed from the quantitative analysis? In this section, the quantitative findings from the study are summarized briefly, and then the relevant interview data from the study are reported. This section is organized by the six factors of school culture employed in the study, with the six factors of principal and leadership team transformational leadership contained within each section of school culture.

### Collaborative Leadership

Quantitative findings. For the school culture factor "collaborative leadership," the relationship with two factors of principal transformational leadership ("identifying and articulating a vision" and "providing an appropriate model") was mediated by the corresponding factors of leadership team transformational leadership. For the four remaining transformational leadership behaviors ("fostering commitment to group goals," "providing individualized support," "providing intellectual stimulation," and "holding high expectations"), only leadership team exercise of these behaviors seems to have had a significant relationship with faculty perception of collaborative leadership in the school's culture. Relevant qualitative data. Analysis of the study's interview data supported that when both the school's principal and leadership team were able to participate fully in identifying and articulating a vision, a greater sense of collaborative leadership seemed to be present. One team stated that their principal "has strong opinions and he shares them but he doesn't expect us to necessarily agree or do what he does. He does share his opinion and listens to ours. I really respect him." Another team valued their principal's willingness to build vision collaboratively: "...the impact consists of an awareness that change can be effected from the bottom up instead of the top down....vision is what this is all about...these are the things we want to accomplish in our building and get done

and they [the faculty] get to be a part of it....the vision, whether everyone has taken it to heart or not, is important because I like to know where I'm going and when I plan to be there." Conversely, when principals did not fully include faculty in the visioning process, or leadership teams were not fully willing to take on the task, a lower sense of collaborative leadership existed. One team shared that "the faculty—not all—probably view the process with suspicion....some teachers were feeling left out....we [the team] don't mind doing the leadership for [the leadership team], but we don't want to assume responsibility for the leadership of the whole school."

Analysis of the interview data also showed that principals and teams that provided an appropriate model consistent with the school's vision developed a sense of collaborative leadership. One team shared that over the course of two years they had seen their principal "go from 'I think we should do this' to 'what do you think we should do?' Instead of dictatorship decisions....he asked us before he made decisions. And that gives us more ownership in our school as a faculty." Another team appreciated that "even when we first came together [the principal] just stepped back to be another team member. He just kind of nurtured us and let us make decisions." One team summed up the importance of the principal modeling appropriate behavior by stating that "in terms of being effective, I see a leader as being: 'Don't follow me. Come with me.' He's like that." Some principals, however, had difficulty modeling this kind of behavior: "I think he [the principal] has a very difficult time letting others take the lead. So he's had a hard time letting us decide on anything as a team....so many of our ideas were disregarded by him throughout the whole project....he just kind of beat us down. I think he listened to us but the whole time he knew what he wanted to do....that was a terrible disservice to us." Teams that were led by principals who modeled appropriate behavior seemed to also model appropriate behavior: "There were times when we had the final revision [of a school change document], but once we gave it back we said, 'Do you approve this?' We're not going to put it in if everyone doesn't agree with it." Another team indicated that "they [the faculty] feel a sense of ownership. I think they see us as facilitators. I always bring it to their attention when someone mentions something positive that the reasons it's being done is because that's what they said they wanted."

Analysis of the interview data showed that behavior by leadership teams seen as fostering commitment to groups goals was related to the development of collaborative leadership, while there was little evidence supporting the principal's role. One school's leadership team asserted that "everything we've done has facilitated and involved everyone and connected everything. I think we've gotten everyone's participation." Another school's team stated that "we took a back seat in the focus groups and let somebody else lead. When people see the finished product I think they'll be pleased." By contrast, there was very little interview data that supported the principal's direct positive influence on collaborative leadership through the exercise of fostering commitment to group goals. Some principals evidently felt that delegating in a somewhat laissez faire fashion was sufficient, but their teams did not: "He's not assertive in leading us as a team....I guess he just feels like since he delegated to us he's done....but that's not leading." Others, however, chose not to delegate and seemed to miss the opportunity to foster commitment: "He [the principal] has taken on so much of the managerial responsibilities....and he does not delegate....it hurts us when we say he hasn't delegated these tasks....or when he hasn't followed through." The same team, however, also admitted that they avoided helping the principal foster commitment: "He [the principal] decides when or when not we should do something....we could have...if we would have just been willing to move ahead, but we didn't."

Analysis of interview data also supported that the team's <u>provision of individualized support</u> was more important than the principal's. One team reported that "A lot of times we [the team] get together as a group...but then when we take it to the faculty we give them the information and let them decide for themselves how to interpret it....it gave them ownership." Another team shared that "there were some people [faculty] who were concerned with change...and then saw this as a way to express their opinions as a way to make some changes....after they saw that we weren't going to tell them what to do, but that it was going to be a collaborative thing, they thought 'isn't this refreshing?'" On the other hand, at least one team reported that when the principal provided what he thought was individualized support, it was perceived as favoritism: "...there were some [faculty] who were closer to him and he made more opportunity to talk to them, and they had more impact....that has been a problem in our culture. Special treatment. Some people really get shook up about this."

There was a small amount of interview data that linked <u>providing intellectual stimulation</u> to collaborative leadership; all of it seemed to relate to the leadership team, rather than the principal. One team reported that they had challenged the assumptions of their faculty in an ineffective way, and that the faculty felt that this was an instance of "one more person telling us what we're doing wrong." Another team, however, was more successful: "At the beginning people didn't understand. But this is 'let's plan together what we want. Let's make our own culture and involve everybody.' People don't want change and then we start talking about change. But they feel like they have some say and input into this...that's been a change." The interview data yielded no evidence of relationships among the principal and team holding high expectations and the presence of collaborative leadership.

Teacher Collaboration

Quantitative findings. For four of the six transformational leadership behaviors, principal exercise of the behavior, by itself, was significantly related to the presence of the school culture factor "teacher collaboration." These four behaviors were: "identifying and articulating a vision," "providing an appropriate model," "fostering commitment to group goals," and "providing individualized support." For the remaining two transformational leadership behaviors ("providing intellectual stimulation" and "holding high expectations"), principal exercise of the behaviors, taken alone, did not significantly predict "teacher collaboration," nor did the addition of the corresponding leadership team behavior.

Relevant qualitative data. Of the six factors of school culture, analysis of the interview data seemed to yield the least amount of evidence regarding teacher collaboration. In regard to <u>providing and articulating a vision</u>, the arrival of one principal, after a relatively rapid succession of several principals, was seen to be important in this area: "At that time, teachers were leaving in droves....[now] pretty much the same staff has stayed together about three years. In [the principal's] first year a lot of us were just starting out and we weren't very tight as a faculty. Now I'd say people talk about the issues a lot more. I think that makes a big difference." The same leadership team attributed at least part of this positive change to its own efforts: "When we started asking teachers what they thought our mission, vision, and goals should be, we all seemed to be pointing in the same direction....I think a lot of that is due to teachers talking more to each other." Another school's team attributed increased teacher collaboration to the principal's actions: "We've been given the opportunity [by the principal] to work with each other on our

goals and objectives....I think we've become more collaborative.... before, we got along—collegial but didn't collaborate. There weren't personality problems or anything like that, but now we are much more aware of what is going on in other people's classrooms." Yet another team related how the principal's vision influenced how they as leaders interacted with the non-leadership teachers: "When the faculty comes griping about something we try to say, 'What would [the principal] think?' We tend to look at it so focused."

Analysis of the interview data revealed little positive evidence of the principal or team modeling appropriate behavior in a way that impacted teacher collaboration. Instead, in a number of schools that were struggling, instances of the principal not modeling appropriate behavior were seen as being damaging to teacher collaboration. At one school, the team stated that "there have been times where [the principal] was criticized and he made it perfectly clear that he did not want to hear it....[now] there's going to be a whole new set of problems next year....we're afraid our action plans are going to dry up." Another leadership team expressed frustration at their principal's apparent lack of support for their efforts: "We have a principal who is leading us but if this is something that really needs to be done this is not being expressed. I'll bring it up but I'm not backed. We have strong people on our team who could really make things happen but we haven't been given the opportunity this year. That kind of goes back to our leader....from my observations I don't think our [principal] has been assertive enough."

With respect to fostering commitment to group goals, one team reported that their efforts as leaders were very effective: "We did a very good job incorporating everyone's ideas for our vision statement and mission statement. We got feedback and we gave feedback to them. We had people sign up for what committee they wanted to serve on and then when school started we put everybody in their committees and that was so neat. It was really impressive to see how people respected each other's responses. Everyone was so attentive." On the other hand, when the principal did not provide adequate time for teacher collaboration, leadership team members were frustrated: "I think we have a ways to go with the teachers collaborating...more needs to be done in collaborating.... there aren't that many opportunities for teachers to work together."

Analysis of the interview data yielded no evidence regarding the relationship between providing individualized support, providing intellectual stimulation and teacher collaboration. In one instance, however, the principal's exercise of holding high expectations was seen as important to the development of teacher collaboration: "It's gotten better since [the principal] came in and he set some strong rules that needed to be set because, before, people did whatever they wanted to. When he first came in there was a lot of resistance to that, but now people see it as a real positive....there used to be a lot of competition between the teams. I don't see that as much anymore."

## Unity of Purpose

Quantitative findings. For three of the six transformational leadership behaviors, principal exercise of the behavior, by itself, was significantly related to the presence of the school culture factor "unity of purpose": "identifying and articulating a vision," "fostering commitment to group goals," and "providing individualized support." In one instance ("holding high expectations"), the team exercise of transformational leadership behavior alone was significantly related to school unity of purpose. For the remaining two transformational leadership behaviors ("providing an appropriate model" and "providing intellectual

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stimulation"), principal exercise of the behaviors, taken alone, did not significantly predict "teacher collaboration," nor did the addition of the corresponding leadership team behavior.

Relevant qualitative evidence. Analysis of the interview data strongly supported that the principal's exercise of identifying and articulating a vision was very important in regard to unity of purpose. One team stated that their principal "keeps us focused. I'm not sure that we met as often as we should have. When we had to have things done he was on track and he kept us focused. I felt like we needed to regroup once in a while….and talking about it makes me feel like I haven't done my part because [the principal's] awfully busy." Another principal was characterized as "a real visionary….he's a processor and makes sure that we're all on the same page….he has such a good balance between relationship and task." As the result of their principal's focus on the school's vision, another team reported that it was now common for "people at faculty meetings to ask 'Is that part of our values and goals?'" By contrast, principals unable to identify or articulate a strong vision seemed to hamper unity of purpose. One team reported that they thought their principal "really does have a vision and direction for us, but he gets so busy and gets overwhelmed with all he has to do and doesn't know where to take us." Another team reported that because of a lack of cohesive vision on the principal's part, "nothing is together….this is what is tearing this school apart."

Analysis of the interview data yielded no information regarding providing an appropriate model in relation to unity of purpose. With regard to fostering commitment to group goals, there was a small amount of evidence. At one school, the principal was apparently unable or unwilling to more fully involve his leadership team and faculty in the school improvement process; the leadership team characterized the faculty's perception of the school's direction in a negative manner: "I don't think they [the faculty] are positive about it. I think they are waiting to see if this is really going to happen or if things are going to fizzle out. They don't want to spend too much time—waste too much time." In a more successful school, however, the principal's efforts to fully involve the faculty seemed to be paying dividends: "I think [the project] gave us some focus and direction and, in turn, reflecting on that, some of the goals we had and how they can help us in working with the students."

No interview data were relevant to providing individualized support or providing intellectual stimulation in relation to unity of purpose. However, the holding of high expectations by the principal seemed to be important. At one school the principal "ticked off a lot of teachers because they were used to doing whatever. There were a couple of teachers at the beginning of this year that were out to have his job because he drew the line. But now they realized what his expectations were and decided they could live with them." At another school, the principal communicated high expectations that led to unity in a more collaborative manner: "Most of the challenges don't come from him saying…but from building up to that because he expects that of himself so it tends to trickle down. He keeps coming back to get commitments from people. He also wouldn't ask us to do things if he didn't think they would be helpful."


Professional Development

Quantitative findings. For the school culture factor "professional development," the influence of one factor of principal transformational leadership ("providing individualized support") was mediated by the corresponding factor of leadership team transformational leadership. For two of the remaining five transformational leadership behaviors, principal

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leadership, rather than team leadership, seemed to be more important: "identifying and articulating a vision," and "providing an appropriate model." For the three remaining transformational leadership behaviors ("fostering commitment to group goals," "providing intellectual stimulation," and "holding high expectations"), only leadership team exercise of these behaviors seems to have had a significant impact upon faculty perception of professional development in the school's culture.

Relevant qualitative evidence. While analysis of the study's quantitative data indicated a relationship between the principal identifying and articulating a vision and professional development, analysis of the interview data provided little support for the relationship. Several of the school leadership teams mentioned that their principals inspired them to improve in a general way, but the teams did not provide any specific examples of that inspiration being directly linked to the faculty's commitment to professional development. In one case, a team blamed a principal's lack of vision for hampering the faculty's ability to grow professionally: "It has to start with the administrative team. We feel like something needs to be gotten rid of so we can focus on this...something that really needs to be done. I don't feel like our principal likes drastic change." Another team, however, felt that they (as a team) had been key in helping their faculty develop a commitment to professional development: "...we've done book studies and several teachers have just come and volunteered. In the summers, our workshops, we have 90% or more of our teachers here....our team looked at it and thought we needed to get everybody involved in it. Then we went to the faculty and presented it. We didn't make it mandatory. Most of the middle school teachers participated."

Analysis of the interview data supported the quantitative finding linking the principal providing an appropriate model to professional development. In one instance, a leadership team described their principal as "open to change and suggestions....and he will participate in it [professional development] actively. He cared about making our school better." The same team praised their principal for modeling an openness to receiving critical feedback from the faculty: "He wanted us to show the results of the surveys. He said 'If it hurts them, it hurts them. If it hurts me, it hurts me, but they need to see what's going on....Let's show the faculty.'" In a more general sense, another principal's willingness to model enthusiasm was recognized by his team as being important to the school's continued commitment to growth: "[The principal] constantly inspires you to want to get things done. He is enthusiastic, and even when things are rough he can see the good on the other side." By contrast, one principal's failure to model a focused commitment to the leadership team's efforts to lead professional development was damaging to their efforts: "I get really frustrated because you get all excited and come back to school and then we can't get on the agenda....he's very supportive, but I think we just have too many things going on at the same time."

Analysis of the interview data supported the quantitative finding that the leadership team seemed to be more influential than the principal in fostering commitment to group goals in relation to professional development. One team described how they developed an activity related to this: "...teachers don't have a chance to mix because our paths don't cross. But we've made progress with this through staff development. One of the icebreakers was when we broke the faculty into three groups and talked about our goals for the year. We were with people we never see. We talked about how things were going for everyone and it made you want to go to all of the classrooms and see what was going on. It opened the door." Another team fostered commitment to professional development by facilitating the participation of individual teachers:

"...we had study groups in place. Even though all of the groups were pretty much doing the same thing more people participated because they could talk in the small groups instead of in front of the whole faculty."

Analysis of the quantitative findings revealed that leadership teams mediated the effect of the principal providing individualized support upon professional growth. Analysis of the interview data strongly supported the principal's role in this relationship, but the evidence for the leadership teams' role was less evident. One team stated that "...[the principal] was a big influence into getting me to step out into a lot of new things. He didn't come to me and say, 'Hey, you're doing this wrong.' He just told me what his experiences were. As the three years I've been here have progressed, I feel very comfortable going to him and saying, 'I'd like to try this new thing in the classroom' and he's very reasonable about letting us try things. He's gotten more trusting in what we do and in letting us explore a little bit. I think he's been very open to exploration." Another team complimented their principal's balance: "I think it's to [the principal's] credit that he pushed so we could get the best we can from these kids. If you hear or see something or bring in some research and want to try it out, you are encouraged to. We experiment." By contrast with the principals' effective use of providing individualized support, the interview data seemed to reveal that leadership teams had difficulty doing so. One team shared that "We're still at that real tough spot where we are still trying to pull a lot of the staff on board and the more it gets crammed down their throat, the more resistance we see." Another team described an unsuccessful effort to engage their faculty in a professional growth activity: "If we would have been smarter, we could have turned it around into a positive presentation. Instead, they [the faculty] got hammered [by us]."

Analysis of the interview data supported the quantitative finding of the effect of the leadership teams providing intellectual stimulation upon professional development; there was also evidence that the principal played an important role in this relationship as well. One team contrasted a previous principal with their current one: "[The former principal] was not confrontational. She was more 'politically correct.' [The current principal] will be confrontational." Another team attributed their commitment to professional growth to their principal's involvement in his own growth activities: "...sometimes he'll just stop by the room and chat. He's involved right now in classes and stuff so I'm sure it keeps him informed and knowledgeable." Another principal encouraged both leadership team members and faculty to engage in professional development by providing opportunities to learn and share: "[The principal] asked a couple of teachers who had never presented anything to the faculty before to present some information they had learned at a conference....once other faculty members know about a certain area they share with each other. I think he's trying to push that without people realizing it." The leadership teams also saw themselves as being key to providing intellectual stimulation that led to professional growth. One team described how this was difficult to do at times: "When we had to present some negative information to the faculty we just didn't want to do it. We weren't having conflict within ourselves. We did present it and got over it." Another team stated "[our] first year here we felt like people didn't want change. Some people didn't want to listen to new ideas....there's been a lot of professional development required with this." Yet another team reported that their school's professional development program was starting to be closely identified with the leadership team's activities: "It's all so tightly woven that it's hard to tell whether it's staff development or [the leadership team]. Once we really got going on this [being a leadership team], they [they faculty] started getting the sense that we were going

somewhere." Analysis of the interview data yielded no evidence linking either the principals' or the leadership teams' holding high expectations to professional development.

## Collegial Support

Quantitative findings. For two of the six transformational leadership behaviors, principal exercise of the behavior, by itself, was significantly related to the presence of the school culture factor "collegial support": "identifying and articulating a vision," and "providing an appropriate model." In three instances ("fostering commitment to group goals," "providing individualized support," and "holding high expectations"), the team exercise of transformational leadership behavior alone was significantly related to school collegial support. For the one remaining transformational leadership behavior ("providing intellectual stimulation"), principal exercise of the behaviors, taken alone, did not significantly predict "collegial support," nor did the addition of the corresponding leadership team behavior.

Relevant qualitative evidence. While analysis of the study's quantitative data indicated a relationship between the principal identifying and articulating a vision and collegial support, analysis of the interview data yielded no evidence supporting that relationship. Analysis of the quantitative data also indicated that the principal providing an appropriate model was related to collegial support; the interview data weakly supported this relationship but also supported the leadership teams' influence. One team reported that after three years "[the principal] trusts us too. I think sometimes he needs our support too and he knows he can come to any of us. The other day he asked me to come into his office and he told me something and I said, 'I agree with you.' He said, 'I feel so bad...'" Another team, however, reported that their principal was unable to model this kind of behavior, and as a result there was a diminished sense of trust within the faculty: "We had one faculty member who tried to talk to him one on one, but it ended up severing the relationship." By contrast, one team felt that their role as leaders was important to the building of collegial support among the faculty, even though there was initial resistance to their efforts: "I think we started out and the resistance was there and now there doesn't seem to be any. I think that shows that we grew as a team and our faculty is more positive." Another team reported that "as a faculty we trust each other enough and we [the leadership team] don't really have to push everybody to go along with us. We didn't have to sell much. Everybody just kind of said, 'OK, what do we need to do?'"

Analysis of the interview data provided little evidence supporting the quantitative finding of the relationship between leadership team fostering commitment to group goals and collegial support. One team described their efforts in this way: "In a summer institute we [the leadership team] talked about not trusting all of the other teachers. So we agreed to make a concerted effort that if you are going to teach here you are going to know everyone's name. I feel like people know each other now. We did activities to familiarize everyone. Plus, we tried to increase our socialization outside the school. Staff development played a role in this."

Analysis of the study's quantitative data indicated that the leadership team's providing individualized support was related to the development of collegial support, and analysis of the interview data moderately supported that finding. One leadership team reported that their growth as a team seemed to be related to increased trust among the school's faculty as a whole: "I think that as a group we have a fairly healthy social environment. I'd say the trust has gotten better. Three years ago we really had a big issue of not trusting each other. There used to be a feeling of looking over your shoulder. I don't feel that anymore." Another team reported that they "have

gained a respect for every teacher. Respect for their individual talents and even though they may not be perceived as the best teacher in the world, there are strengths that a lot of us [the leadership team] weren't aware of."

Analysis of the study's quantitative findings did not indicate any relationship between either the principal's or the leadership team's providing intellectual stimulation and collegial support, and neither did analysis of the qualitative data. While analysis of the quantitative data supported a relationship between the leadership team's holding high expectations and collegial support, analysis of the qualitative data did not yield any evidence of that relationship.


Learning Partnership

Quantitative findings. For one transformational leadership behavior ("holding high expectations"), only leadership team exercise of this behavior was significantly related to faculty perception of learning partnership in the school's culture. For the remaining five transformational leadership behaviors ("identifying and articulating a vision," "providing an appropriate model," "fostering commitment to group goals," "providing individualized support," and "providing intellectual stimulation"), principal exercise of the behaviors, taken alone, did not significantly predict "learning partnership," nor did the addition of the corresponding leadership team behaviors.

Relevant qualitative evidence. While analysis of the quantitative data indicated little or no relationships between principal and leadership team transformational leadership behavior and the learning partnership aspect of school culture, analysis of the qualitative data yielded a fair amount of evidence—some positive and some negative. In identifying and articulating a vision, one team reported that "We had always been afraid of change. But systemic change comes from within. It's more of an intrinsic change. It's not handed down from above. We [the leadership team and the faculty] now see things in a student-centered model that is going to make the school better for students and faculty. None of us have a job without the kids. This has realigned my thinking....I think at different levels I can affect more student lives than just in my classroom." The qualitative data, like the quantitative findings, yielded no evidence for a relationship between either the principal or leadership team providing an appropriate model and learning partnership.

Some teams reported a sense of frustration in their efforts to foster commitment to group goals in relation to learning partnership. One team asserted: "The culture of the home really does have an influence on the culture of our school and that's one of our frustrations. We are searching for ways to increase the involvement of the community." Another team reported that "[the school] has a twenty to one ratio of parents more interested in athletics than what [the students] are doing in the classroom. There is a lot more emphasis on the extracurricular than the academics. In our classes we've done something where the teacher writes home to the parents and the parents write back...but when they do it's not usually asking questions....as soon as we stop asking for their input I think it will be gone."

While analysis of the quantitative data did not establish a relationship between the principal or the leadership team providing individualized support and learning partnership, analysis of the qualitative data yielded some evidence for these relationships. One team reported that their principal "does a good job....I get overloaded with teaching and coaching, and he's

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very sensitive to that. He can sense when it's not a good time for you, he's good at encouraging you. He'll make you feel like your job is really important, and it's genuine." Another team reported that they felt that their efforts as leaders had been important in linking individualized support and learning partnership: "There are teachers in this school with very different teaching styles but we are all trying to do what's best for particular students. We all accept that not all students learn the same way, and I think that the teachers are really working harder on changing lessons so that they meet the needs of students." The same team reported that "the longer the staff has been here the more comfortable the parents seem to be....it becomes an easier relationship the longer you know these people. It goes both ways. As you get to know people it makes the relationship that much better."

Analysis of the study's quantitative data did not establish a relationship between principals or teams providing intellectual stimulation and learning partnership. However, analysis of the qualitative data did support a relationship between leadership teams holding high expectations and learning partnership, and the qualitative data did as well. One team reported that they "are people who are driven to do well. We are energetic, very reliable. We have a different kind of drive. We want to be proud of our school." The same team shared that "we frequently heard that we had a redneck, blue-collar neighborhood and we don't do academics here. I do think I have heard a definite move in expectations from parents. Families are very conscious that that's an effort we make. Teachers are on top of it....I see our staff as being very active and progressive. We have very high expectations for our students, yet we understand socio-economically where their parents are at.." One team, however, failed to see the connection between their high expectations and learning partnership: "Different classes have different personalities. I just don't know how much you can attribute that to the school system. It's luck of the draw." Finally, one team reported that their holding of high expectations was attributable to their principal's behavior: "He [the principal] has a commitment to his students. I think he wants the best for the students so it makes me want to do what's best for the students. I think some administrators become so worried about how we look to people on the outside it becomes such a sham. You don't want to forget about the students. We don't have that here because students are important to him."


## Discussion: A Model of Collaborative Transformational Leadership and School Culture

Examining the summary of relationships among factors of principal transformational leadership, leadership team transformational leadership, and school culture (Table 1) reveals some interesting patterns. Viewing the table from the perspective of the factors of transformational leadership reveals that:

- The principal seems to be the primary source of identifying and articulating a vision and providing an appropriate model, although in two instances—both within the culture factor of collaborative leadership—the leadership team mediates the principal's influence upon school culture.

- The leadership team seems to be the primary source of providing intellectual stimulation and holding high expectations; however, providing intellectual stimulation seems to be the weakest, or least predictive, factor of transformational leadership within the study.

- There is a mix of principal and leadership team influence as sources of <u>fostering commitment to group goals</u> and <u>providing individualized support</u>. For both factors, the leadership team seems to have the greatest influence upon collaborative leadership, professional development, and collegial support, while the principal seems to have the greatest influence upon teacher collaboration and unity of purpose.

Viewing the findings as summarized in Table 1 from the perspective of the factors of school culture reveals that:

- The leadership team, rather than the principal, seems to exert the greatest influence upon <u>collaborative leadership</u> and <u>learning partnership</u>; however, it should be noted that the leadership team mediates the impact of two principal transformational leadership behaviors—identifying and articulating a vision and providing an appropriate model—upon collaborative leadership. Additionally, <u>learning partnership</u> had the weakest relationships in the study with the factors of transformational leadership.

- The principal, rather than the leadership team, seems to exert the greatest influence upon <u>teacher collaboration</u> and <u>unity of purpose</u>.

- There seems to be a mix of principal and leadership team influence upon the school culture factors of <u>professional development</u> and <u>collegial support</u>.
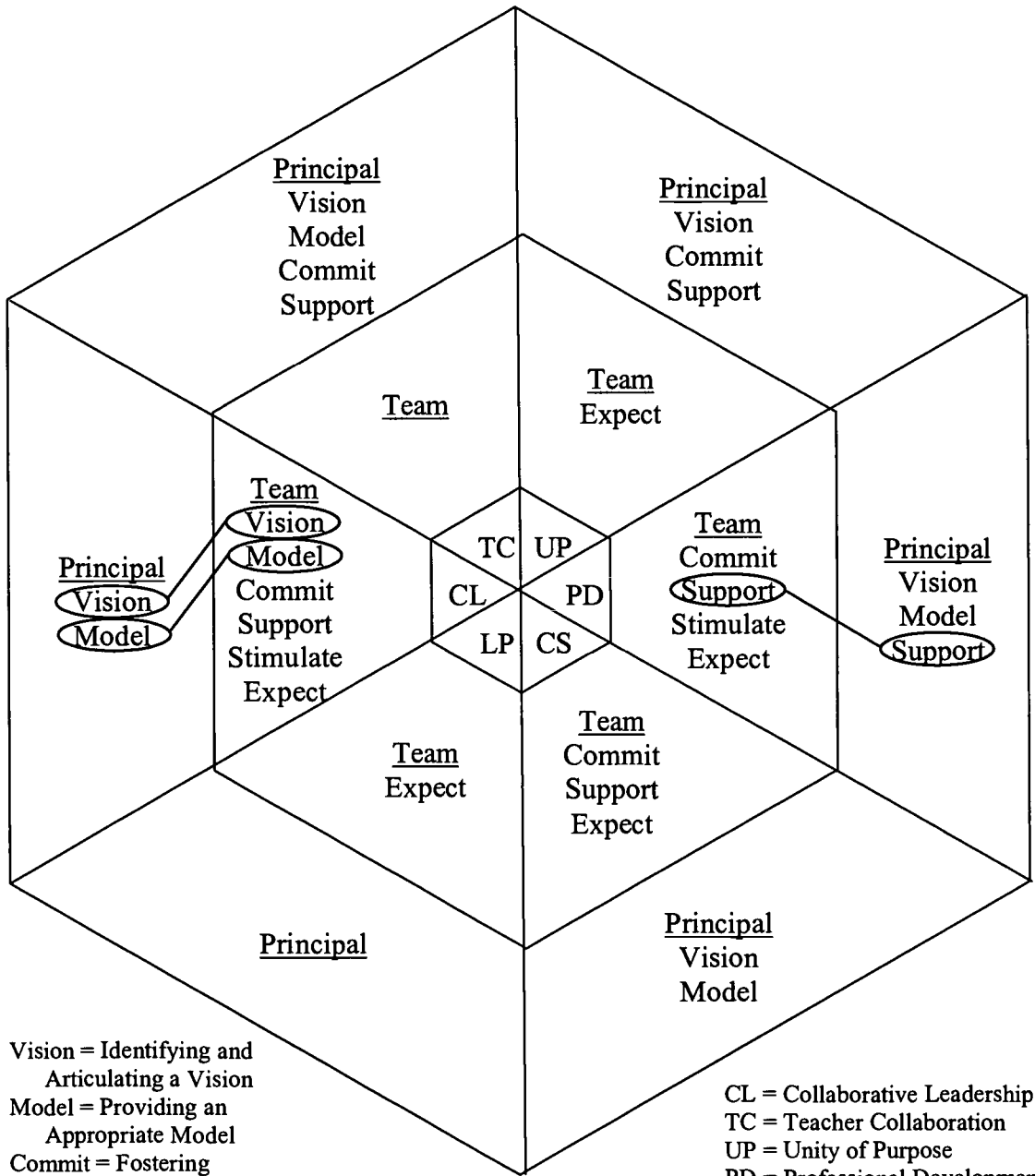
Figure 1 serves as a graphic representation of the relationships among principal transformational leadership behavior (in the outer ring), leadership team transformational leadership behavior (in the middle ring), and school culture (in the inner ring).

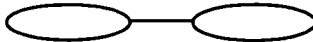## Implications

### Implications for Theory

<u>Is there a relationship between principal transformational leadership and leadership team transformational leadership?</u> The study's findings revealed that, for the most part, principal transformational leadership was related to leadership team transformational leadership. These findings support the theoretical literature regarding principal transformational leadership as a significant influence upon the development of teachers and teacher leaders. Alexander and Keller (1994) assert that transformational principals need to proactively recognize the leadership abilities of others in the school, help bring about a shared vision for the school, and foster training for both leadership and change. In doing so, the principal acts as an enabler, helper, guide, and assistant to teachers who are changing and improving their school (Prestine, 1993). They authentically empower teacher leaders by providing professional development relevant to decision-making processes, share school-related information needed for good decisions, encourage development and commitment to a commonly-held school vision, and act primarily as a facilitator throughout all decision-making processes (Robertson, Wohlstetter, & Mohrman, 1995). Transformational principals realize that their active support of teacher leadership is essential (Weiss, Cambone, & Wyeth, 1992), particularly as teacher leaders are beginning to learn the necessary skills of inquiry, reflection, and metacognition (Shields & Newton, 1994).

Figure 1: Model of Collaborative Transformational Leadership and School Culture

Principal
Vision
Model
Commit
Support

Principal
Vision
Commit
Support

Team

Team
Expect

Team
Vision
Model
Commit
Support
Stimulate
Expect

Principal
Vision
Model

TC | UP
CL | PD
LP | CS

Team
Commit
Support
Stimulate
Expect

Principal
Vision
Model
Support

Team
Expect

Team
Commit
Support
Expect

Principal

Principal
Vision
Model

Vision = Identifying and
   Articulating a Vision
Model = Providing an
   Appropriate Model
Commit = Fostering
   Commitment to Group
   Goals
Support = Providing
   Individualized Support
Stimulate = Providing
   Intellectual Stimulation
Expect = Holding High
   Expectations

CL = Collaborative Leadership
TC = Teacher Collaboration
UP = Unity of Purpose
PD = Professional Development
CS = Collegial Support
LP = Learning Partnership

Indicates team factor mediates
relationship between principal and
culture factors

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The transformational principal's focus, then, is on the development of teacher leaders and the use of the resulting synergy in order to improve the school's effectiveness (Amatea, Behar-Horenstein, & Sherrard, 1996). By acting transformationally, the principal is free to increase the capacity of the school's teacher leaders through enhancing their knowledge, talents, and expertise (Dunlap & Goldman, 1991). In doing so, the principal is better able to elicit and share the values of the entire school's members, which results in a sharing of power and responsibility (Leithwood, Jantzi, & Fernandez, 1993). The full potential of principal-teacher collaboration and democratic participation is realized when principals engage in such transformational behavior (Anderson, 1998), and both the power and status of both teachers and teacher leaders, which has been a significant focus of the school reform movement, is improved (Zeichner, 1991).

Is there a relationship between principal transformational leadership and school culture? The study's findings revealed that there was a relationship between principal transformational leadership and school culture, although not as strong as the relationship between principal transformational leadership and leadership team transformational leadership. These findings are supportive of the recent school leadership literature, which calls for principals to focus less on the managerial aspects of their role and more on shaping the culture of their schools in order to increase organizational capacity to change positively (Kytle & Bogotch, 2000; Heck, Larsen, & Marcoulides, 1990). Principals who engage in successful reform of their schools seem to be those who are able to understand their schools' unique culture and create a setting for experimentation and open dialogue about norms, practices, and power relationships (Oakes, Quartz, Gong, Guiton, & Lipton, 1993). In acting in transformational ways, principals become more facilitative than directive, and exercise influence through the purposes, goals, structures, and networks embedded in the school's culture (Hallinger & Heck, 1998). This exercise of indirect influence is accomplished through greater empowerment of teachers within a positive school culture (Bolin, 1989; Maher, 2000).

Principal transformational leadership impacts school culture by raising teachers' level of awareness of developing valuable outcomes as well as strategies for accomplishing those outcomes; this is done by inspiring faculty to transcend their own limited self-interests to work for the greater good of the school as a whole (Bass, 1985). As a consequence, an environment characterized by a commitment to organizational learning develops, which is necessary for, and antecedent to, school improvement (Leithwood & Louis, 1998; Verdugo, Greenberg, Henderson, Uribe, & Schneider, 1997). In such an environment, both principals and faculty cease to focus primarily on the concrete structures of the school and focus instead upon improving the culture, from which concrete improvements then flow (Deal & Peterson, 1999). The transformational principal facilitates this focus upon culture by creating parallel learning systems that promote organizational reflection and change (Schein, 1992). Leaders who can embody and put into practice these transformational behaviors create school cultures that engender purpose, commitment, and creativity (Bolman & Deal, 1994).

Is there a relationship between leadership team transformational leadership and school culture? The study's findings revealed that the strongest relationship was between leadership team transformational leadership and school culture. These findings serve to extend the existing literature concerning the impact of teacher leadership upon school culture. While the literature on transformational leadership asserts that it is characterized by principals using participative decision-making structures related to school improvement (Tucker-Ladd, Merchant, & Thurston,

1992), research has not been conducted that delineates the specific transformational behaviors in which teacher leaders can engage in order to impact school culture. This study's findings indicate that teacher leaders are important in fostering commitment to the goals of the school, providing individualized support and intellectual stimulation to teachers, and holding high expectations for the performance of their peers. These findings seem to be congruent with some of the proposed benefits of teacher leadership found in the literature, including the development and distribution of teacher expertise, an increase in teacher commitment to change, and the growth of teacher professionalism (Hart, 1995).

The study's findings also serve to extend the concept of teacher involvement in school leadership beyond the ideas of passive assent or contrived "buy-in." Instead, the findings support the concept of proactively making use of the hard-won expertise of those closest to the students and families of schools—the teachers (Lipman, 1997). Doing so not only helps improve the school itself, but engenders teacher psychological commitment to change, more positive teacher self-regard, higher staff morale, open communication, and the development of future formal and informal school leaders (Spindler & George, 1984). Even for teachers who are not teacher leaders, the impact of teacher leadership on school culture should not be overlooked, as it seems to improve individual teacher development, the democratic operation of schools, and learning outcomes (Anderson, 1998).

<u>Taken together, does the presence of principal transformational leadership and leadership team transformational leadership predict positive school culture?</u> The study's findings revealed that there was a strong predictive relationship between principal and leadership team transformational leadership behavior, taken together, and school culture. These findings serve to clarify the domains of principal influence and leadership team influence in the shaping of school culture. While the literature has repeatedly asserted that there is a strong relationship between collaborative leadership and positive school culture, little or no research has been done to delineate the roles of principals and teacher leaders in the shaping of school culture (Leithwood, Jantzi, & Steinbach, 1999). The results of this study seem to indicate that, in regard to the shaping of school culture, there are instances in which principal transformational behavior has the greater influence, there are other instances in which leadership team transformational behavior is more important, and there are yet other instances in which the principal and the leadership team seem to share influence. This is important, because the literature indicates that employing only some transformational behaviors, rather than all of them, seems to be ineffective in bring about school change (Leithwood, 1993; Leithwood & Jantzi, 1997).

The study's findings indicate that considering the leadership teams' exercise of transformational leadership, along with that of the principal, provides a better prediction of school culture than when the principals' exercise of transformational leadership is considered alone. This is congruent with the literature, which asserts that principal power is multiplied, rather than diminished, when it is shared with teachers (Henkin, Wanat, & Davis, 1996). Authentically transformational principals are those who recognize the potential of sharing power and are willing to invest the time and effort to enable their teachers to assume leadership roles (Leithwood & Menzies, 1998). The principal remains the key figure in this sharing of leadership, as he or she must continuously work to create sustained conversations and a sense of relatedness among the leaders and the faculty (Beck, 1999). As this is done, followers are transformed into leaders (Bass, 1985) and an effective school culture emerges—one that is characterized by vision, collegiality, trust, values, broad member participation, positive personal

and organizational growth, empowerment, and continuous innovation (Cunningham & Gresso, 1993).

It would seem, then, that principals and teacher leaders acting collaboratively and transformationally have great potential to fulfill one of the major reconceptualizations of the school reform era: the movement toward school-based management and shared decision making (Hallinger, 1992). The school leadership team seems to hold a key role here, as it serves as an advance agent for change in the school and ensures the involvement of the whole faculty in the change process (Maeroff, 1993). Although the establishment and operation of leadership teams may bring some ambiguity about the relationships between principal and teacher roles (Smylie & Brownlee-Conyers, 1992), principals and teachers who are willing to move beyond their traditional comfort zones should be able to engage in professionally critical dialogues oriented toward both individual and collective improvement (Robbins & Alvy, 1995). In such settings—which are exemplified by true collaboration (Fullan & Hargreaves, 1996)—mutual agreement, support, and work are centered on a set of commonly-held personal and educational values, and the principal, the leadership team, and the faculty work to continuously elevate one another's aspirations and achievement. The need for external or hierarchical control is lessened as the school's members rely upon mutually-developed norms, purposes, values, professionalism, collegiality, and interdependence (Sergiovanni, 1994).

Does leadership team transformational leadership either mediate or moderate the relationship between principal transformational leadership and school culture? The study's findings revealed that in three instances leadership team transformational leadership behavior mediated the influence of principal transformational behavior upon school culture. Two of the mediational relationships were concerned with the school culture factor "collaborative leadership," where the principal behaviors "identifying and articulating a vision" and "providing an appropriate model" were both mediated by the corresponding leadership team behaviors. The third instance was in the relationship between principals "providing individualized support" and "professional development."

These findings indicate that in some instances the leadership team serves as a necessary conduit through which the principal's influence impacts the school's culture. This is consistent with Maeroff's (1993) assertion that the leadership team acts as an advance agent for change in the school. The study showed that the leadership teams were particularly important in mediating the principals' shaping of the faculty's perceptions of collaborative leadership and commitment to professional development. The mediational status of the leadership team in regard to identifying and articulating a vision and providing an appropriate model of collaborative leadership is consistent with Blase and Blase's (2000) assertion that school-based management can be implemented successfully when principals encourage teacher expression, develop formal structures for participation, and encourage collegiality and partnership with teachers. The mediational status of the leadership team in regard to providing individualized support related to professional development is consistent with Wonycott-Kytle and Bogotch's (1997) assertion that successfully restructuring schools are those that reflect upon and question practice and provide continuous, comprehensive, and purposeful professional development programs.

## Implications for Practice and for the Preparation of Educational Leaders

The relationship between principal and leadership team transformational leadership. In working with leadership teams, principals should focus upon issues concerned with school vision, behaving in accordance with that vision, providing intellectually challenging experiences, and providing support in accordance with the needs of each individual on the team. Those charged with preparing future principals should seek to develop within their students the knowledge, dispositions, and skills related to these behaviors.

The relationship between principal transformational leadership and school culture. Pwho seek to positively shape the culture of their schools should concentrate upon actions that, in concert, collaboratively elicit and shape a strong vision for the school. Principals should also take care to model behavior that is congruent with that vision. The preparation of principals should increasingly emphasize the principal's transformational role in shaping school culture.

The relationship between leadership team transformational leadership and school culture. Principals should increasingly acknowledge, facilitate, and employ the potentially transformational leadership abilities of teacher leaders. While principal leadership seems more important in "identifying and articulating a vision" and "providing an appropriate model," it seems important to recognize that the application of that vision and model—in terms of faculty commitment, support, challenge, and expectations—seems to be heavily dependent upon the presence of a successful and transformational body of teacher leaders. The preparation of principals should emphasize, then, the role of the principal in selecting, developing, and empowering teachers to collaboratively lead the shaping of school culture.

The influence of principal and leadership team transformational leadership together upon school culture. Principals should realize that the creation, training, and enablement of school leadership teams have great potential for extending and multiplying the impact of the principal upon school culture. Principals should spend significant time, energy, and resources in their work with leadership teams, and should allow those teams to assume major roles in leading schools. While sharing leadership may lead to role ambiguity for both principals and teachers, the long-term benefits for producing healthy, innovative schools would seem to outweigh the short-term difficulties that might need to be overcome. Those who prepare educational leaders should emphasize the importance of collaborative forms of leadership, and should teach future principals how to work productively with teacher leadership teams.

The mediation of principal transformational leadership behavior by the leadership team. At times the principal should concentrate upon developing transformational characteristics in the leadership team and then empower that team to exercise positive influence upon the school culture. Principals should recognize that acting collaboratively with the leadership team and providing support for their professional development will translate into similar benefits for the school as a whole as the leadership team engages the faculty in school improvement efforts. The preparation of principals should emphasize the mediational role of leadership teams in shaping collaborative leadership and professional development in schools with positive cultures, and should equip principals with the needed collaborative and developmental skills.

## Conclusion

The analysis of both quantitative and qualitative data established the importance of both principals and leadership teams exercising transformational leadership behaviors related to the development of positive school cultures. These findings are supportive of the current movement in education toward collaborative forms of school leadership. An analysis of the findings also indicated that principals and leadership teams may have different roles to play in the exercise of transformational leadership and in the shaping of school culture. This study serves as a starting point for further exploration of principals, leadership teams, transformational leadership, and school culture. Further study that will more closely examine the mechanisms by which principals and teacher leaders exercise transformational leadership, and the various kinds of impact such leadership has upon school culture, is warranted.

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