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ORGANIZATIONAL AND RELATIONAL FACTORS IN PROFESSIONAL LEARNING COMMUNITIES

The roles of organizational and relational factors in regard to professional learning communities (PLCs) have been investigated by many, yet none have considered enabling school structures, trust, and collective efficacy as variables. We take a deeper look at the formal or organizational aspects of the school represented by enabling school structures, and the relational aspects characterized by collegial trust, trust in principal, and collective efficacy. Our empirical findings demonstrate the importance of establishing enabling school structures as an antecedent of PLCs. It is essential that school leaders provide enabling school structures in the form of leadership opportunities, shared decision making, and a hierarchy that supports teachers performing their jobs more effectively, as well as promoting healthy collegial interaction for teachers.

Statement of Purpose

Many studies have investigated the roles of organizational and relational factors in regard to professional learning communities (PLCs), however none have considered the role of enabling school structures, trust, and collective efficacy in the development of PLCs. We argue that there is enough research to date to give credence to the view that the formal aspects of the school, rules, regulations, and the hierarchy of authority that enable teachers to do their jobs, along with the informal aspects of the organization, such as collegial trust, trust in principal, and collective efficacy, are essential to the development and maintenance of PLCs. Furthermore, this study lends empirical data to support the explanatory framework. While the theory represents what we know, the empirical extends the knowledge to the real world and thus the practical.

Although a relatively new concept, research about PLCs conducted by Hord, McLaughlin, Louis, Kruse, Bryk, and their colleagues demonstrates the positive influence this approach can have for teachers’ sense of professionalism, participation in shared decision-making, and vision for the school, and trust in colleagues (Hipp & Huffman, 2010; Hord, 1997; Hord, 2004; Hord, 2007; Hord, 2009; Kruse & Louis, 1993; Kruse, Louis, & Bryk, 1994; Louis & Kruse, 1995; McLaughlin & Talbert, 2001; McLaughlin & Talbert, 2006). This study hypothesizes that enabling school structures, collegial trust, trust in the principal, and collective efficacy will individually and jointly predict the development of PLCs.
Theoretical Framework

One of the assumptions underlying the theoretical framework is that trust is an essential aspect of building a professional learning community. While there is emerging research about trust, enabling school structures, and collective efficacy, to our knowledge, none has been applied to PLCs. In light of the fact that PLCs are being put forth as a major restructuring effort for schools (Hipp, Huffman, Pankake, & Olivier, 2008; Hord, 1997; Hord 2004; McLaughlin & Talbert, 2001), we suggest that it is important to understand how enabling school structures, trust, and collective efficacy can enhance the development of PLCs. Furthermore, "research examining parents' perceptions of trust in teachers, principals, and schools has recently begun to emerge, with relationships found between parental trust and school structure, collective efficacy, parental involvement, and student achievement" (Goddard, Salloum, & Berebitisky, 2009, p. 297) (Adams & Forsyth, 2006; Forsyth, Barnes, & Adams, 2006).

Professional Learning Communities (PLCs)

According to Hord (1997) a professional learning community (PLC) is a collegial group of faculty and staff who are united in their commitment to student learning (Hord, 1997). Further PLCs maintain the following attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). Finally, Hord (2007) contends that there are "two types of supportive conditions necessary for PLCs to function productively: (1) logistical conditions such as physical and structural factors and resources, and (2) the capacities and relationships developed among staff members so that they may work well and productively together" (Hord, 2007, p. 3).

Hord's research supports the theoretical framework for this study with the formal aspects of structure represented by enabling school structures and the informal aspects characterized by the various aspects of trust and collective efficacy. Bryk, Camburn, and Louis (1999) contend that PLCs refer to "schools in which interaction among teachers is frequent and teachers' actions are governed by shared norms focused on the practice and improvement of teaching and learning" (Bryk et al., 1999, p. 753). In summary, teachers move away from individualism, isolation, and privacy of practice as they engage in the community with their colleagues.

Enabling School Structures (ESS)

An enabling school structure (ESS) represents the teachers' belief that the administration and rules of the school help them in their work (Hoy & Sweetland, 2001). Hoy and Miskel (2008) assert that "an enabling school structure is a hierarchy that helps rather than hinders and a system
of rules and regulations that guides problem solving rather than punish­
es failure” (Hoy & Miskel, 2008, p. 110). In contrast, a hindering school structure would be more controlled or managed by a principal with a top­
down approach. Schools with enabling structures tend to encourage prob­
lem solving, enable cooperation, protect participants, and promote collabor­
oration, flexibility, and innovation (Hoy & Sweetland, 2001). Supportive conditions exist in the form of administrative support, time for collabora­
tion and planning, and open communication among all faculty members regarding instructional goals in order to sustain a professional learning community over time (Hord, 1997).

Miskel, Fevurly, and Stewart (1979) summarized that “more ef­
fective schools, as perceived by teachers, are characterized by (a) more participative organizational processes, (b) less centralized decision-mak­
ing structures, (c) more formalized general rules, and (d) more complexity or high professional activity” (Miskel et al., 1979, p. 114). In other words, if teachers work in a structured environment that is enabling, share in de­
cisions that affect them, and view themselves as professionals, then they perceive the school to be effective (Miskel et al., 1979). Louis and Kruse (1995) assert that for PLCs certain structural conditions must be in place: “time to meet and talk, physical proximity, interdependent teaching roles, communication structures, and teacher empowerment and school autono­
my” (Louis & Kruse, 1995, p. 25).

Trust in the Organization

Trust has been described as being an essential ingredient in the work of schools (Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 1999). Because the work of schools rests on the establishment of trusting relationships, we suggest that the more trust there is between teachers and their colleagues and between teachers and administrators the more likely that the PLC will function effectively and efficiently. For this study trust is defined as “an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, compe­
tent, honest, and open” (Hoy & Tschannen-Moran, 1999, p. 189).

We will focus on two aspects of trust, trust in colleagues (TC) and trust in principal (TP). Collegial trust is the faculty belief “that teach­
ers can depend on one another in a difficult situation; teachers can rely on the integrity of their colleagues” (Tschannen-Moran & Hoy, 1998, p. 342). Faculty members who trust the principal “have confidence that the principal will keep his/her word and will act in the best interests of their col­
leagues” (Tschannen-Moran & Hoy, 1998, p. 342). Those who view their colleagues as honest, open, competent, reliable, and professional tend to have greater trust in their colleagues (Tschannen-Moran & Hoy, 1998). Furthermore, collegial trust is based upon the teacher’s willingness to be vulnerable to his fellow teachers, while trust in principal varies because of
the power structure of the organization and supervisory role of the principal over the teacher.

Building upon the research on trust by Tschannen-Moran (2004), Wahlstrom and Louis (2008) assert that “creating trust among teachers, which happens within professional communities, may be more significant in stimulating change in practice than does having a trusting relationship with the principal” (p. 482). In other words, trust in the principal has an indirect effect on teacher practice, while trust in colleagues may have a direct influence classroom practice as teachers collaborate and share instructional strategies. Hord concludes that building trusting relationships with colleagues takes a substantial amount of time when a person has the opportunity to experience another’s trustworthiness and to reciprocate (Hord, 2007).

Collective Efficacy

Collective efficacy is “the groups’ shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments” (Bandura, 1997, p. 477). Goddard, Hoy, and Woolfolk Hoy (2000) further state that “teachers’ beliefs about the faculty’s capability to successfully educate students constitute a norm that influences the actions and achievements of schools” (p. 496). In schools, collective efficacy (CE) refers to the teacher perceptions of their colleagues’ ability to affect student outcomes in a positive way (Goddard et al., 2004).

Bandura (1997) described four ways to shape individual efficacy: mastery experience, vicarious experience, social persuasion, and affective state. Goddard et al. (2004) contend that these same sources are essential for developing collective efficacy beliefs. We believe that the more efficacious the teachers are as a group the more likely they will sustain the efforts needed to develop and maintain the PLC and to reach their conjoint goals regarding student achievement.

Hypotheses

We assert that these three factors; enabling school structures, trust, and collective efficacy are essential elements in the development of PLCs. Prior research has shown that there is a relationship between enabling school structures, trust, and collective efficacy (Goddard, 2002; Gray, 2011; Hord, 1997; Hord 2004; Hoy & Sweetland, 2000). This study will investigate the effect of these variables on PLC development. Therefore we hypothesized that:

H1: Enabling School Structure, teacher trust in colleagues, teacher trust in principal, and collective efficacy will be correlated with PLC development.
While each of the independent variables would logically contribute to the development of the learning communities, there was no guiding literature as to which elements would be greater contributors. Consequently, we hypothesized that:

H2: Enabling school structure, trust in colleagues, trust in the principal, and collective efficacy will individually and jointly contribute to an explanation and be predictive of professional learning community development.

Methodology

The independent variables were enabling school structures, collegial trust, trust in principal, and collective efficacy. The dependent variable was professional learning communities, while the control variables were school level, and SES. Individual teacher responses were aggregated to the school level with the school being the unit of analysis.

Sample

Data were collected from a large southeastern school district. Approximately 3,700 teachers from 67 schools completed the Qualtrics Research Suite™ survey online. The final sample consisted of 67 schools altogether: 44 elementary schools, 17 middle schools, and 6 high schools.

Student enrollment for this large school district was over 62,000 students, ranging from 90 to 2,123 students, with a mean of 685 students per school. The number of teachers employed at each school ranged from 12 to 126 teachers, with a mean of 41 teachers per school. Of the 3,700 teachers invited to participate, 42% had a bachelor’s degree, while 51% had a master’s degree and 4% had advanced degrees beyond a master’s degree.

The completion rate for school data was 75% (67 participated out of 89 schools invited). Of the respondents represented 42% (1713 surveys completed out of 4082 teachers) participated, however the school was the unit of analysis. The principals who chose not to participate mentioned time constraints, busy schedules, and voluntary nature of the survey as reasons for nonparticipation.

Instrumentation

Professional learning community was measured using an abbreviated version of the Professional Learning Community Assessment (PLCA) instrument which was developed by Olivier, Hipp and Huffman in 2003 and revised in 2010. The subscales of the PLCA-R include the following: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions—relationships, and supportive conditions—structures (Olivier et al., 2003). The reported
alphas for the subscales ranged from .82 to .94 (Hipp & Huffman, 2010). Sample items include: “Leadership is promoted and nurtured among staff members,” “Opportunities exist for coaching and mentoring,” and “Time is provided to facilitate collaborative work.”

The school district superintendent requested that the 52-item instrument be shortened to 12 items. To meet this request, two items were selected from each of the six subscales of the PLCA-R, making up a 12-item, four point Likert-type scale with a response range from “strongly disagree” to “strongly agree.” A pilot study was conducted in a small school district of eight schools (elementary, middle and high) in a small southeastern school district in order to validate the shorter version of the instrument. Finally, factor analysis was performed for the shortened version of the PLCA-R and two factors were loaded. The items that clustered for Factor One included shared and supportive leadership, shared values and vision, collective learning and application, and supportive conditions. These items explained 84% of the variance and were called “collaborative practices.” Factor Two consisted of shared personal practice and supportive conditions as related to structure, which explained the remaining 16% of the variance and was named “supportive structures.” The Cronbach’s alpha for collaborative practices was .93, for supportive structures was .75, and for the shortened version of the PLCA-R was .92.

Enabling school structure was measured using a 12-item, five point Likert-type scale that ranges from “never” to “always” with a reported Cronbach’s alpha of .80 to .90 (Hoy & Sweetland, 2001). For this study the Cronbach’s alpha was .95. Sample items from the instrument are: “Administrative rules help rather than hinder,” “Administrative hierarchy enables teachers to do their job,” and “Administrative rules in this school enable authentic communication between teachers and administrators.”

Operationally, trust, collegial trust, and trust in principal were defined by the Omnibus Trust (Omnibus T) scale (Hoy & Tschannen-Moran, 1999; Hoy & Tschannen-Moran, 2003). Each subscale included eight items on a six-point, Likert-type scale, ranging from “strongly disagree” to “strongly agree.” The reported alpha coefficients of reliability for faculty trust in principal was .93 and for collegial trust is .94 (Hoy & Tschannen-Moran, 1999). The reliability of faculty trust in principal was .87 and .95 for collegial trust for this study. Sample items include, “Teachers in this school trust each other,” “The teachers in this school have faith in the integrity of the principal,” and “Teachers in this school are open with each other.”

Collective efficacy was measured using the short version of the Collective Efficacy (CE) Scale, a 12-item on a six-point, Likert-type scale ranging from “strongly disagree” to “strongly agree” with a Cronbach’s alpha of .96 (Goddard et al., 2000). Sample items are: “Teachers can count on the parents in this school,” “Students in this school are reliable,” and “Teachers in this school trust the parents to support them.”
Data Analysis

We used descriptive analysis to preliminarily evaluate our data (Table 1). The first level of analysis involved bivariate correlational analysis using the Pearson Correlation Coefficient to test the relationships between enabling school structures, trust in colleagues, trust in principal, collective efficacy, and professional learning community development (Table 2). The second level of analysis used multiple regression to determine the individual and collective relationships between the independent variables, enabling school structures, trust, and collective efficacy, and the dependent variable, professional learning communities (Table 3).

Descriptive Analysis

Our first level of analysis involved obtaining descriptive statistics and bivariate correlations of the variables in our study (Table 1). The findings represent teacher perceptions of trust in their colleagues and principal, collective efficacy, enabling school structures, and the development of PLCs. Teacher trust in colleagues (4.61) was slightly higher than trust in principal (4.26), while perceptions of collective efficacy was slightly lower (4.00). Opinions about enabling school structures were also slightly lower (3.97).

Table 1

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Professional Community (PLC)</td>
<td>67</td>
<td>2.17</td>
<td>3.81</td>
<td>3.019</td>
<td>.3462</td>
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<tr>
<td>Enabling School Structures (ESS)</td>
<td>67</td>
<td>2.43</td>
<td>4.77</td>
<td>3.971</td>
<td>.4625</td>
</tr>
<tr>
<td>Trust in Colleagues (TC)</td>
<td>67</td>
<td>3.29</td>
<td>5.80</td>
<td>4.617</td>
<td>.5268</td>
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<tr>
<td>Trust in Principal (TP)</td>
<td>67</td>
<td>2.79</td>
<td>5.15</td>
<td>4.265</td>
<td>.4980</td>
</tr>
<tr>
<td>School Level (Level)</td>
<td>67</td>
<td>1.00</td>
<td>3.00</td>
<td>1.417</td>
<td>.6548</td>
</tr>
<tr>
<td>Collective Efficacy (CE)</td>
<td>67</td>
<td>2.50</td>
<td>5.34</td>
<td>4.083</td>
<td>.6300</td>
</tr>
<tr>
<td>% Free/Reduced Lunch (SES)</td>
<td>67</td>
<td>.34</td>
<td>.99</td>
<td>.7425</td>
<td>.1895</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>67</td>
<td></td>
<td></td>
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</tbody>
</table>

Bivariate Correlational Analysis

Hypothesis 1 which stated that “enabling school structure, teacher trust in colleagues, teacher trust in principal and collective efficacy will be correlated with professional learning community development” was confirmed as demonstrated in Table 2. PLC development was positively correlated with ESS ($r = .72, p < .01$), Collective Efficacy, CE ($r = .62, p < .01$), and TC ($r = .57, p < .01$). PLC was negatively correlated with School
Level \((r = -0.36, p < .01)\) indicating that PLC development was higher at the elementary school level and tended to progressively decline at the middle school and high school levels. Herriot and Firestone’s (1984) research about the effect of school level explains this finding as elementary schools are less departmentalized and centralized than middle or high schools. There was no significant correlation between PLC and the percentage of students eligible for free and reduced lunch services, which was a proxy for SES \((r = -0.07, p < .01)\).

Our independent variables were also highly correlated with each other TC and TP \((r = 0.65, p < .01)\); TC and CE \((r = 0.59, p < .01)\); TC and ESS \((r = 0.35, p < .01)\); TP and CE \((r = 0.39, p < .01)\); TP and ESS \((r = 0.49, p < .01)\); and ESS and CE \((r = 0.41, p < .01)\). There was a significant correlation between school level and TC \((r = -0.29, p < 0.05)\) and between school level and CE \((r = 0.46, p < 0.01)\) indicating that teacher trust in colleagues and collective efficacy both were higher at the elementary school level and also progressively declined at the middle and high school levels. The percentage of students eligible for free and reduced lunch services was not significantly correlated with any of the variables in our study. Table 2 displays the bivariate correlations between the variables in this study.

**Table 2**

**Bivariate Correlations Among All Variables (N=67)**

<table>
<thead>
<tr>
<th>Enabling Structures</th>
<th>Trust in Colleagues</th>
<th>Trust in Principal</th>
<th>Collective Efficacy</th>
<th>School Level</th>
<th>SES (1-FRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Community (PLC)</td>
<td>.72**</td>
<td>.57**</td>
<td>.57**</td>
<td>.62**</td>
<td>-0.36**</td>
</tr>
<tr>
<td>Enabling School Structures (ESS)</td>
<td>1.00</td>
<td>.35**</td>
<td>.49**</td>
<td>.41**</td>
<td>-0.16</td>
</tr>
<tr>
<td>Trust in Colleagues (TC)</td>
<td>1.00</td>
<td>.65**</td>
<td>.59**</td>
<td>-0.29*</td>
<td>.15</td>
</tr>
<tr>
<td>Trust in Principal (TP)</td>
<td>1.00</td>
<td>.39**</td>
<td>-0.01</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Collective Efficacy (CE)</td>
<td>1.00</td>
<td>-0.46**</td>
<td>.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Level</td>
<td>1.00</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

**Hierarchical Regression Analysis**

The second level of analysis involved a hierarchical regression in which the control variables (school level and percentage free and re-
duced lunch) were entered in step 1 and the independent variables (enabling school structures, collective efficacy, trust in principal, and trust in colleagues) were entered simultaneously in step 2. School level had a significant negative effect on PLC development ($\beta = -0.37, p < .01$). The percentage of students eligible for free and reduced lunch services did not have a significant effect on PLC development ($\beta = 0.05, p > .05$). Together school level and percentage of students eligible for free and reduced lunch services explained approximately 14% of the variance in PLC development (Table 3).

Table 3

Hierarchical Regression of PLCs on Control and Independent Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>3.23</td>
<td>.198</td>
<td>16.256</td>
<td>.000</td>
</tr>
<tr>
<td>School Level</td>
<td>-0.193</td>
<td>.062</td>
<td>-0.365</td>
<td>-3.104</td>
</tr>
<tr>
<td>% Free and Reduced Lunch</td>
<td>0.100</td>
<td>.219</td>
<td>0.053</td>
<td>.455</td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>-0.007</td>
<td>.271</td>
<td>-0.027</td>
<td>.978</td>
</tr>
<tr>
<td>School Level</td>
<td>-0.067</td>
<td>.037</td>
<td>-0.126</td>
<td>-1.816</td>
</tr>
<tr>
<td>% Free and Reduced Lunch</td>
<td>0.156</td>
<td>.115</td>
<td>0.084</td>
<td>1.358</td>
</tr>
<tr>
<td>Enabling School Structures</td>
<td>0.515</td>
<td>.061</td>
<td>0.649</td>
<td>8.485</td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>0.118</td>
<td>.045</td>
<td>0.215</td>
<td>2.625</td>
</tr>
<tr>
<td>Teacher Trust in Principal</td>
<td>-0.024</td>
<td>.065</td>
<td>-0.034</td>
<td>-0.367</td>
</tr>
<tr>
<td>Teacher Trust in Colleagues</td>
<td>0.122</td>
<td>.059</td>
<td>0.187</td>
<td>2.063</td>
</tr>
</tbody>
</table>

When the independent variables were entered in step 2 all but TP had a significant effect on PLC development, ESS ($\beta = 0.65, p < .01$), CE ($\beta = 0.22, p < .01$), TC ($\beta = 0.19, p < .05$), and TP ($\beta = -0.03, p > .5$). Together ESS, CE, and TC explained approximately 66% of the variance in PLC development over and above school level and SES, with ESS making the largest contribution followed by CE. Together school level and the independent variables explained roughly 78% of the variance in PLC development (Table 3).

The insignificant beta for the effect of TP on PLC development, the change in sign, and the zero-order correlation between TP and PLC development ($r = 0.57, p < .01$) led us to suspect a suppression effect. Cohen, Cohen, West, and Aiken (2003) and Cohen and Cohen (1983) state that this problem can occur when independent variables are highly correlated because the independent variables are laying claim to the largely the same variance in the dependent variable.
Hypothesis 2, which stated that the independent variables would individually and jointly contribute to an explanation and be predictive of professional learning community development, was only partially confirmed. While enabling school structures, collective efficacy, and trust in colleagues explained approximately 68% of the variance in PLC development, we take caution in interpreting these findings (Table 3). Finally, the conceptual diagram of the hypothesized relationships of the independent and dependent variables demonstrates the overall results of the study (Figure 1). In summary, our predictions about the relationships between the independent and dependent variables of Hypothesis 1 were confirmed; however Hypothesis 2 was only partially confirmed.

In summary, our predictions about the relationships between the independent and dependent variables of Hypothesis 1 were confirmed; however Hypothesis 2 was only partially confirmed.

![Conceptual Diagram](image)

**Note.** **p<0.01, * p<0.05.**

**Figure 1.** Conceptual Diagram of Hypothesized Relationships with Results

**Scholarly and Practical Significance of the Study**

This study supports the importance and strength of the relationships of enabling school structures, trust in colleagues and collective efficacy, yet the regression indicates that the structural dimension has more effect than the relational dimension as represented by the trust variable. The empirical findings emphasize the importance of establishing enabling school structures as an antecedent of professional learning communities. This reciprocal relationship confirms the hypotheses, yet further extends what is known about professional learning communities. Prior to this study, the importance of establishing enabling school structures in
professional learning communities, as described by Hord (1997), had not been explored empirically. Therefore, this research adds to our knowledge about PLCs as well as to the field of literature. In summary, it is essential that school leaders provide enabling school structures in the form of leadership opportunities, shared decision making, and a hierarchy that supports teachers performing their jobs more effectively (Gray, 2011).

McLaughlin and Talbert (2001) summarized the benefits of teacher participation in PLCs. They found that teachers who worked in innovative communities had more enriched careers in education and professional growth. They further posited that there are "positive effects...on student achievement for both regional and nationally represented school samples; strong correlations teacher learning community with teaching practices that predict student learning gains" (p. 9). PLCs provide opportunities for increased student achievement, greater teacher job satisfaction, and overall improvement for schools (Hord, 2007; McLaughlin & Talbert, 2006).

As sub-organizational elements, PLCs retain features of organizations generally; in varying degrees they have centralization, specialization, and formalization (Hoy & DiPaola, 2008; Mintzberg, 1983). Enabling structure is essential for the formalization and centralization within PLCs (Gray, 2011). Hord (2004) asserts that certain physical and structural conditions must be in place for a professional learning community to be established and thrive in a school.

Trust plays an essential role in the functioning of the informal relationships of teachers, especially with each other and the principal (Hoy & Tschannen-Moran, 1999; Tschannen-Moran & Hoy, 2004; Tschannen-Moran, 2004). We would argue that teacher trust in colleagues is the most important type of relationship in a PLC (Forsyth, Adams, & Hoy, 2011). When teachers trust their colleagues, they are more likely to trust the principal and vice-versa (Bryk & Schneider, 2002). Generally speaking, teacher trust in the principal is generally necessary, but likely plays an indirect role in PLCs (Forsyth et al., 2011).

The principal is also responsible—but not solely—for building physical and structural conditions that support the development of the professional learning community and establishing enabling school structures (Gray, 2011). The school leader sets the tone for participative decision making and collaboration within the PLC and relies upon the teachers to do the work of the school, teaching, learning, and encouraging student achievement. Furthermore, a principal empowers teachers by fostering trust via formalization, while promoting cooperation, innovation, and collaboration via centralization of the organization (DiPaola & Hoy, 2008).

**Limitations & Recommendations for Future Research**

While the findings of this study are provocative and offer preliminary evidence for the importance of trust, collective efficacy, and en-
abling school structures, this study took place in one large southern district and may not be generalizable to other contexts. We also take caution in interpreting our findings because of the problem with multicollinearity between our independent variables. Cohen and Cohen (1983) and Cohen et al. (2003) advise combining these variables into a single latent variable structural model. Future studies that explore the relationships in this study using confirmatory factor analysis and structural equation modeling may prove to be more informative.

References


Hord, S. (1997). *Professional learning communities: What are they and why are they important?* Austin, TX: Southwest Educational Development Laboratory (SEDL).


Julie Gray is an Assistant Professor in the School of Education at the University of West Florida, Pensacola.

Roxanne Mitchell is an Associate Professor in the Department of Educational Leadership, Policy, and Technology Studies at The University of Alabama, Tuscaloosa.

C. John Tarter is a Professor in the Department of Educational Leadership, Policy, and Technology Studies at The University of Alabama, Tuscaloosa.