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Forecasting the Role of Enabling School Structures and
Trust on Practice in Professional Learning Communities

Julie Gray – The University of Alabama

C. John Tarter – The University of Alabama

Roxanne Mitchell – The University of Alabama

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Introduction

Over the last two decades many school districts have developed professional learning communities (PLCs) as a means of bringing teachers toward shared organizational goals and collaborative efforts (Gray, 2011). Professional learning communities offer principals and teachers a model for improving school culture and climate while increasing student achievement. Professional learning communities have had a positive effect on teachers' sense of professionalism, shared vision for the school, trust in colleagues, and participation in shared decision making (Gray, 2011; Hipp & Huffman, 2010; Hord, 1997, 2004, 2007, 2009; McLaughlin & Talbert, 2001, 2006; Louis & Kruse, 1995; Kruse & Louis, 1993a, 1993b; Kruse, Louis, & Bryk, 1994).

Statement of Purpose

The purpose of this study is to investigate the roles of trust and enabling school structures in the development of professional learning communities. For this study, the formal aspects of the school are represented by enabling school structures, while the informal aspects correspond to collegial trust and trust in principal. Each of these variables needs to be further examined in context to professional learning communities. While there is emerging research about trust and enabling school structures, none has been linked directly to PLCs (Gray, 2011). This study intends to address this gap in the literature and examine the relationships of the variables in order to guide the practice of teachers and leaders in the field.

Organizational Learning – The Origin of Professional Learning Communities

In the late 1980s Peter Senge developed the concept of organizational learning at the Massachusetts Institute of Technology, where the Center of Organizational Learning was

established in 1991. Senge defines a learning organization as a place “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured . . . where people are continually learning how to learn together” (Senge, 1990, p. 3).

Serrat further contends that organizational learning contributes to the organizational health of the school by promoting shared values, purpose, teacher leadership, open and honest communication and constructive conflict resolution (Serrat, 2009). In other words, organizational learning has a positive impact on the climate and culture of the school and collegial communication. Like many metaphors, organizational learning is borrowed from the business literature and adapted to the field of education in regard to professional development and collaboration in the form of professional learning communities (Gray, 2011).

McLaughlin and Talbert surmise that traditionally “teachers in most . . . schools were left ‘on their own’ to practice as they chose, in keeping with norms of professional autonomy in American education” (McLaughlin & Talbert, 2001, p.2). Over the last 20 years the trend has shifted to more collaborative and collective learning in schools. Teachers and school leaders are encouraged to open their classroom doors and share best instructional practices. “Organizational learning is the ability of an organization to gain insight and understanding from experience through experimentation, observation, analysis, and a willingness to examine successes and failures” (Serrat, 2009, p. 1).

“Rather than being isolated within their classroom and individual teaching practices, educators are becoming more open to collaboration and collegial learning” (Gray, 2011, p. 19). However, professional learning communities are not created automatically and without effort on the part of teachers, leaders, and staff developers. “Teachers have to learn how to successfully

interact and it requires initiatives from both teachers and principals to create conditions for rich dialogue about improvement” (Wahlstrom & Louis, 2008, p. 463). Teachers may be hesitant to relinquish classroom autonomy and resistant to changing instructional practices. Brown and Duguid found that “working, learning, and innovating are closely related forms of human activity that are conventionally thought to conflict with each other” (Brown & Duguid, 1996, p. 58). Although they “recognize a shift has occurred linking theory and practice, thus the interrelation between working, learning, and innovating” (Gray, 2011, p. 18).

Evolving from the business literature, organizational learning has evolved into professional learning communities, communities of practice or learning communities. Based upon decades of research in public schools, Sergiovanni contends that classrooms must become learning organizations, where teachers are involved in a community of learning, sharing, caring, and inquiry (Gray, 2011). “Key to community in both classrooms and schools is a commitment to inquiry and a commitment to learning as the basis for decisions” (Sergiovanni, 1996, p. 147).

Walstrom and Louis assert that there is more to professional community than support. “It includes shared values, a common focus on student learning, the sharing of practices, and reflective dialogue (Kruse, Louis, & Bryk in Wahlstrom & Louis, 2008, p. 463). The goal of PLCs is for these practices to occur without thought, almost naturally over time. Kruse, Louis, and Bryk emphasize the relationships between the variables of this study.

Human resources – such as openness to improvement, trust and respect, teachers having knowledge and skills, supportive leadership, and socialization – are more critical to the development of professional community than structural conditions . . . The need to improve the culture, climate, and interpersonal relationships in schools has received too little attention. (Kruse, Louis, & Bryk, 1994, p. 8)

Professional Learning Communities

There are many definitions of professional learning communities in the research, but none that is universally accepted. We selected the Hord definition as the best fit for this study as its research led to the development of the Professional Learning Communities Assessment – Revised (PLCA-R) instrument, which was implemented to gather empirical data for this project (Olivier, Hipp & Huffman & Hipp, 2003; See Appendix A).

Hord defines a professional learning community as a collegial group of faculty and staff who are united in their commitment to student learning (Hord, 1997). According to Hord PLCs encompass these attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). The National Staff Development Council credited Hord with defining the term professional learning communities in 1997, which was accepted by many researchers in the field of education (NSDC, 2011).

Louis and Kruse distinguish a professional learning community as an organization with the following characteristics: “shared values, reflective dialogue, deprivatization of practice, focus and student learning, and collaboration” (Louis & Kruse, 1995, p. 25). “Broadly speaking, we use the term professional community to 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, Camburn, & Louis, 1999, p. 753). Seashore and her colleagues further summarize:

By using the term professional learning community we signify our interest not only in discrete acts of teacher sharing, but in the establishment of a school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically examining practice to improve student outcomes. ...The hypothesis is that what teachers

do together outside of the classroom can be as important as what they do inside in affecting school restructuring, teachers' professional development, and student learning. (Seashore, Anderson, & Riedel, 2003, p. 3)

Other researchers support the collaborative aspects of Hord's definition of PLCs.

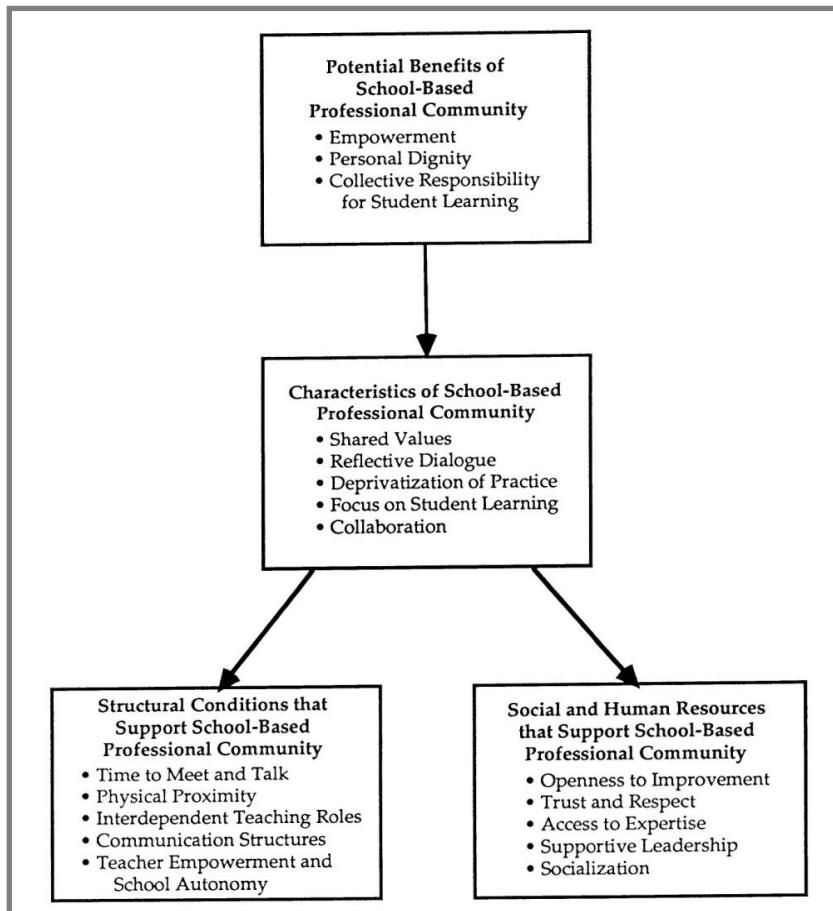
McLaughlin and Talbert further elaborate that "we use the term 'teacher learning community' to define teachers' joint efforts to generate new knowledge of practice and their mutual support of each others' professional growth" (McLaughlin & Talbert, 2001, p. 75). Stoll and her colleagues surmise "it suggests a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way" (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006, p. 223). Stoll and Louis further contend that:

The term 'professional learning community' suggests that focus is not just on individual teachers' learning but on (1) professional learning; (2) within the context of a cohesive group; (3) that focuses on collective knowledge, and (4) occurs within an ethic of interpersonal caring that permeates the life of teachers, students and school leaders. (Stoll & Louis, 2007, p.3)

In summary, Johnson (2009) offers the best "working" definition for professional learning communities. He asserts that a professional learning community is "a specific model of organizational development and learning for schools that has its ultimate aim student learning" (Johnson, 2009, p. 18). Johnson further summarizes that a PLC is a "model of school organization designed to foster collaboration and learning among school personnel and to harness this organizational learning to enhance the learning of all students" (Johnson, 2009, p. 18). This definition combines those of Hord, Louis and Kruse, McLaughlin and Talbert, and Olivier, Hipp, and Huffman and adds to the literature about PLCs.

In Table 1.1, Louis and Kruse offer a framework for analyzing school-based professional community based upon a three-year longitudinal study of schools as a part of the Office of Educational Research and Improvement's Center for Organizational and Restructuring of Schools (Louis & Kruse, 1995). They summarize the benefits of a school-based professional community, characteristics of such, structural conditions needed, and the types of support needed in the form of social and human resources (See Table 1.1). Louis and Kruse's framework provides the theoretical support for the framework of this study. Enabling school structures are represented by the structural conditions that support school-based professional community, while trust is included in the social and human resources of support.

Figure 1.1 Framework for School-Based Professional Community



FROM: LOUIS & KRUSE, (1995), p. 25

Enabling School Structures

An enabling school structure (ESS) describes the teachers' belief that the administration and rules of the school help them in their work (Hoy & Sweetland, 2001). Organizations have bureaucratic structures that vary in the extent of formalization, rules, policies, and procedures, and centralization, manner in which decisions are made (Hoy, 2002). Generally, the formalization of the organization ranges along a continuum from hindering to enabling, much in the same way as the centralization of the organization does (Adler & Borys, 1996; Hoy, 2002). Schools with enabling structures tend to encourage problem solving, enable cooperation, protect participants, and promote collaboration, flexibility, and innovation (Hoy & Sweetland, 2001).

In an earlier study, Hoy and Sweetland used the term enabling bureaucracy which evolved into what is now known as enabling school structures (Hoy & Sweetland, 2000). Hoy and Sweetland provide the constitutive definition for enabling school structures which are "characterized by principals who are disposed to help teachers solve problems, encourage open communication, and help teachers do their jobs" (Hoy & Sweetland, 2001, p. 310).

Operationally, enabling school structures will be defined by Enabling Schools Structures instrument as developed by Hoy in 2002 (See Appendix B).

Hoy describes enabling structure as "a hierarchy of authority and a system of rules and regulations that help rather than hinder the teaching learning mission of the school" (Hoy, 2002, p. 91). In contrast, a hindering school structure would be more strictly managed or controlled by a leader with a top-down approach. Enabling school structures consider creative, innovative alternatives to problem solving rather than doing such in a traditional manner. Supportive conditions must exist in the form of administrative support, time for collaboration 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 surmised that “more effective schools, as perceived by teachers, are characterized by (a) more participative organizational processes, (b) less centralized decision making structures, (c) more formalized general rules, and (d) more complexity or high professional activity” (Miskel, Fevurly, & Stewart, 1979, p. 114). In other words, teachers perceive the school to be more effective when they are involved in shared decision making and collegial relationships, the rules are more formalized, and professional activity is encouraged (Gray, 2011).

Trust - Collegial Trust and Trust in Principal

Trust in schools has also evolved from the business literature over the last fifty years. Hoy and Tschannen-Moran provide the constitutive definition for trust. “Trust involves taking risk and making oneself vulnerable to another with confidence that the other will act in ways that are not detrimental to the trusting party” (Hoy & Tschannen-Moran, 1999, p. 189). They continue that “benevolence, reliability, competence, honesty, and openness are all elements of trust” (Hoy & Tschannen-Moran, 2003, p. 183). Operationally, trust, collegial trust, and trust in principal will be defined by the Omnibus Trust instrument (Omnibus T Scale) which was developed by Hoy and Tschannen-Moran in 1999 and revised in 2003 (Hoy & Tschannen-Moran, 1999, 2003) (See Appendix C).

For this study, the constitutive definition for collegial trust is that “the faculty believes that teachers can depend on one another in a difficult situation; teachers can rely on the integrity of their colleagues” (Hoy, Tarter, & Kottkamp, 1991, p. 93). Those who view their colleagues as honest, open, competent, reliable, and professional tend to have greater collegial trust. 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 supervisory role of the principal over the teacher and power structure of the organization (Gray, 2011).

The constitutive definition for trust in principal is also based upon the research of Hoy, Tarter, and Kottkamp (1991). The terms as related to faculty trust were expanded from the earlier research of Hoy and Kupersmith (1985). 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 colleagues” (Hoy et al., 1991, p. 93). Moreover, “the principal who is friendly, supportive, open, and collegial in interactions with teachers is able to command respect and trust from teachers, and trust is further enhanced by protecting teachers from unreasonable community and parental demands” (Hoy et al., 1991, p. 96).

Wahlstrom and Louis summarize that “Tschannen-Moran’s (2004) work on trust implies, 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” (Wahlstrom & Louis, 2008, p. 482). In other words, trust in the principal has an indirect effect on teacher practice, while trust in colleagues may directly influence classroom practice as teachers collaborate and share instructional strategies.

Theoretical Framework

This study hypothesizes that enabling school structures, teacher collegial trust, and teacher trust in the principal will individually and jointly predict the development of professional learning communities. We assume that professional learning communities are an effective approach to restructuring, that enabling school structures enhance PLCs, and that trust is an integral aspect of PLCs (Gray, 2011). Also, we are assuming that the schools in this study are seeking change through the model of PLCs and are open to the benefits of such.

One of the assumptions underlying the theoretical framework is that trust is an essential aspect of developing a PLC. Forsyth, Adams, and Hoy maintain that “trust is the keystone of successful interpersonal relationships, leadership, teamwork, and effective organization” (Forsyth, Adams, & Hoy, 2010, p. 3). While there is emerging research about trust and enabling school structures, none has been linked directly to PLCs (Gray, 2011). The theoretical knowledge base can be expanded in order to allow theory to guide classroom instructional practice.

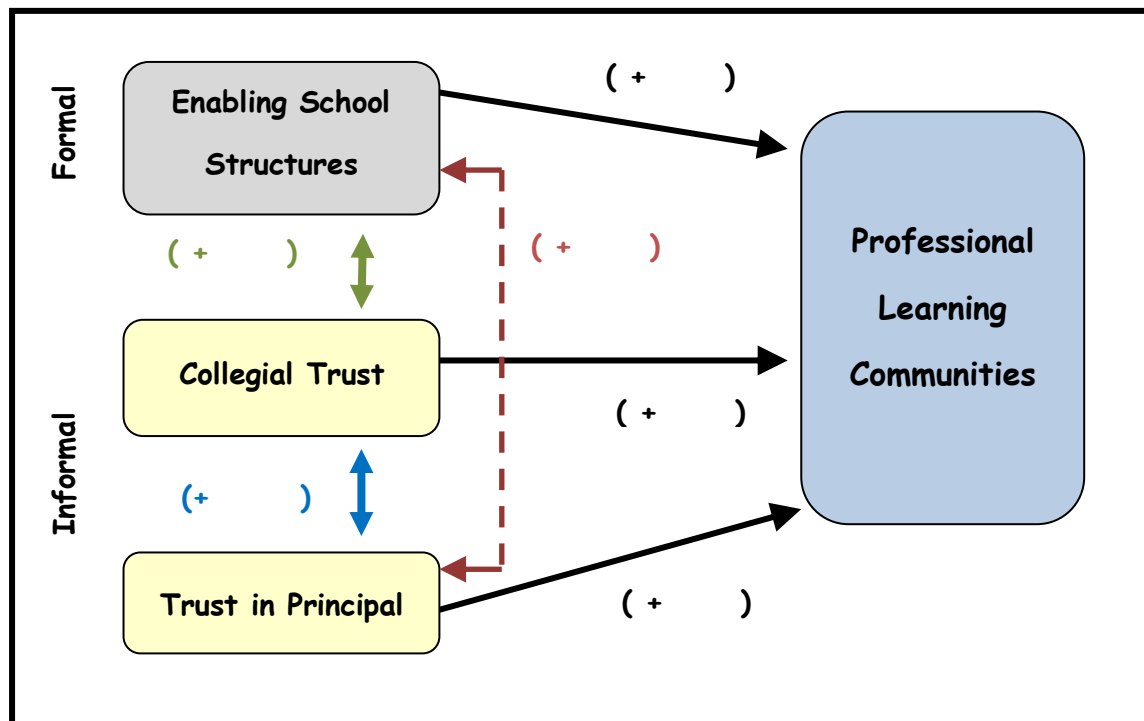
Enabling school structures represent the formal aspect of the organization, while trust, in colleagues and in the principal, corresponds to the informal part of the organization (Gray, 2011). In other words, a school with enabling school structures provides the “supportive leadership” and “supportive conditions” needed to sustain a professional learning community (Gray, 2011, p.16). Enabling school structures support these logistical conditions and resources, while trust builds the strength of the relationships amongst teachers and school leaders. Without trust in colleagues and school leader, “shared values,” “collective learning,” and “shared practice” are difficult, if not impossible, to attain (Hord, 2004, p. 7). Hargreaves argues that “the backbone of a strong and sustaining PLC is trust” (Hargreaves in Stoll & Louis, 2007, p. 187).

Hord purports 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). Stoll and her colleagues further theorize that “creating and developing PLCs appears to depend on . . . focusing on learning processes; making the best of human and social resources; managing structural resources; and interacting with and drawing on external agents” (Stoll et al., 2006, p. 231).

Hoy and Miskel 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 punishes failure” (Hoy & Miskel, 2008, p. 110). Hoy and Sweetland define formalization as “the degree to which the organization has written rules, regulations, procedures, and policies” (Hoy & Sweetland, 2001, p. 297). In contrast, “centralization of authority is the locus of control for organizational decision making; it is the degree to which employees participate in decision making” (Hoy & Sweetland, 2001, p. 299).

This study hypothesizes that enabling school structures are likely to exist in professional learning communities and that a relationship exists between the two. Secondly, trust plays an integral role in the relationships between colleagues and school principals in PLCs. Finally, there is a collective relationship among enabling school structures, collegial trust, trust in principal, and the development of professional learning communities as seen in Figure 1.2.

Figure 1.2 Conceptual Diagram of Hypothesized Relationships



Methodology

Pilot Study

A shortened version of the Professional Learning Communities Assessment – Revised (PLCA-R, 2003) was developed and a pilot study was completed in order to validate the items of the revised instrument (Gray, 2011; See Appendix A). The pilot study included eight schools from a small southeastern school district ranging from elementary to high school level. Each of the eight principals completed the principal survey, while 78% (219/282) of teachers completed the survey. Of the approximate 300 teachers invited to participate, 41% had a bachelor's degree, while 52% had a master's degree and 6% had advanced degrees beyond a master's degree. The final sample consisted of 4 elementary schools, 3 intermediate schools, and 1 high school.

The revised version of the Professional Learning Communities Assessment (PLCA-R) contained 52 items, while the Professional Learning Communities – Short Instrument included two items from each subscale, for a total of 12 items. For this study, the two items selected for each of the six subscales were reviewed by a panel of experts, using a face-validity approach, and determined to be representative, yet a factor analysis was still recommended (Gray, 2011).

The first order factor analysis was conducted and the 12 items loaded into two groups or factors. The items that clustered together for Factor One consisted of shared and supportive leadership, shared values and vision, collective learning and application, and supportive conditions related to relationships and were labeled “Collaborative Practices” (Gray, 2011). Four items clustered together for Factor Two included shared personal practice and supportive conditions as related to structure and were named “Supportive Structures” (Gray, 2011).

To determine the internal consistency of the factors, collaborative practices and supportive structures, a test of reliability using the Cronbach's Alpha was performed and both

factors were reliable. Finally, a second-order factor analysis was conducted to determine if the two factors would load on a single factor, which they did not. The overall variance shows that Factor One, Collaborative Practices, accounts for 84% of the variance and Factor Two, Supportive Structures, for the remaining variance of 16% (Gray, 2011).

Main Study

An existing database from a large southeastern school district provided the data for this study. The sample consists of 66 public elementary, middle or high schools in the large metropolitan district. Approximately 3,700 teachers and 190 principals and other administrators were invited to participate in this study. The final sample consisted of 44 elementary schools, 16 middle schools, and 6 high schools, all of which were developing professional learning communities. Teachers completed surveys online via the Qualtrics Research Suite™ software, which were exported to Excel and then SPSS for statistical analysis (Qualtrics, Appendix D).

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 teacher data was 74% (66 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. The final sample consisted of 44 elementary schools, 16 middle schools, and 6 high schools. Of the 89 principals invited to provide feedback, 69 completed the Qualtrics

Research Suite™ survey online, representing a 78% completion rate for principal surveys (See Appendix G).

Hypotheses

The preceding literature makes a case for a zero-order correlation of all the variables. Structure by itself as well as each dimension of trust should correlate with each other and with professional learning communities. The independent variables represent the formal and informal elements of organization and should be connected to any organizational element of the school. Therefore, we hypothesized:

H1: Enabling structure, trust in colleagues, trust in the principal, and professional learning communities will vary together.

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 used the phrasing of simultaneous regression and hypothesized only the following:

H2: Enabling school structure, trust in colleagues, and trust in the principal will form a linear composite that will be significantly related to professional learning communities.

Data collection

Approximately 3,700 teachers from 66 schools completed the Qualtrics Research Suite™ survey online. The local teachers union as well as the district supported the data collection and reminders were sent out. The final sample consisted of 66 schools altogether: 44 elementary schools, 16 middle schools, and 6 high schools. For this study, the school was the unit of analysis.

Data Analysis

The independent variables for this study are enabling school structures and trust, in colleagues and principal, the dependent variable is development of professional learning communities, and control variables are school level and SES. The unit of analysis is the school; therefore individual respondent scores will be aggregated to the school level for the independent and dependent variables of this study.

The Pearson Correlation Coefficient will be used to consider the relationship between enabling school structures and professional learning communities and trust and professional learning communities. Multiple regression analysis will be used to determine the individual and collective relationships between the independent variables, enabling school structures and trust, to the dependent variable, professional learning communities.

Statement of Findings

Hypothesis 1 was supported; all the independent variables were significantly correlated with one another and with the dependent variable as demonstrated in Table I.

Table I. Pearson Correlations of All Variables (N=70)

	Trust in Principal	Trust in Colleagues	Enabling Structures	School Level (control)	SES (control)
Professional Learning Community	.57**	.57**	.73**	-.36**	-.07
Trust in Principal		.66**	.49**	-.01	.07
Trust in Colleagues			.35**	-.24*	.16
Enabling Structures				-.17	-.14
School Level					.15

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

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

There was a very strong and unique relationship between enabling school structures and professional learning communities. In short, the greater the enabling structure is, the greater the development of professional learning community is. There was a strong Beta and significant association between enabling school structures and professional learning communities.

Although enabling school structure made a stronger contribution to PLC implementation than trust in colleagues, jointly and individually, each made a significant contribution. While trust in principal was related to the development of PLCs as a zero-order correlation, it did not make a significant contribution to PLCs in the regression analysis. However, trust in colleagues was significantly related to trust in principal. In summary, both hypotheses were supported by the research findings that confirm the theory that there is a relationship between enabling school structures, trust in principal, and collegial trust in professional learning communities.

Hypothesis 2 was supported. The independent variables together explained about 65% of the variance in professional learning communities as shown in Table II. Enabling school structures made a significant contribution to professional learning community ($\beta = .73, p < .01$) as did collegial trust ($\beta = .37, p < .01$) as demonstrated in Table III. Teacher trust in the principal did not make a significant contribution as seen in Figure 1.3.

Table II: Regression Model (PLCS regressed on All Variables)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension 1	.822 ^a	.675	.649	.20522

a. Predictors: (Constant), SES= 1 -FRL, Trust_Principal, School_Level, Enabling_Structures, Trust_Colleagues

In summary the strongest relationship is that of professional learning communities and enabling school structures, while trust in principal and enabling school structures also share a strong correlation. In contrast, socioeconomic status (SES) was not significantly correlated with

nor did it have a significant effect on PLC development. Since the majority of schools in the district shared low SES, it is not unexpected that there was little or no effect.

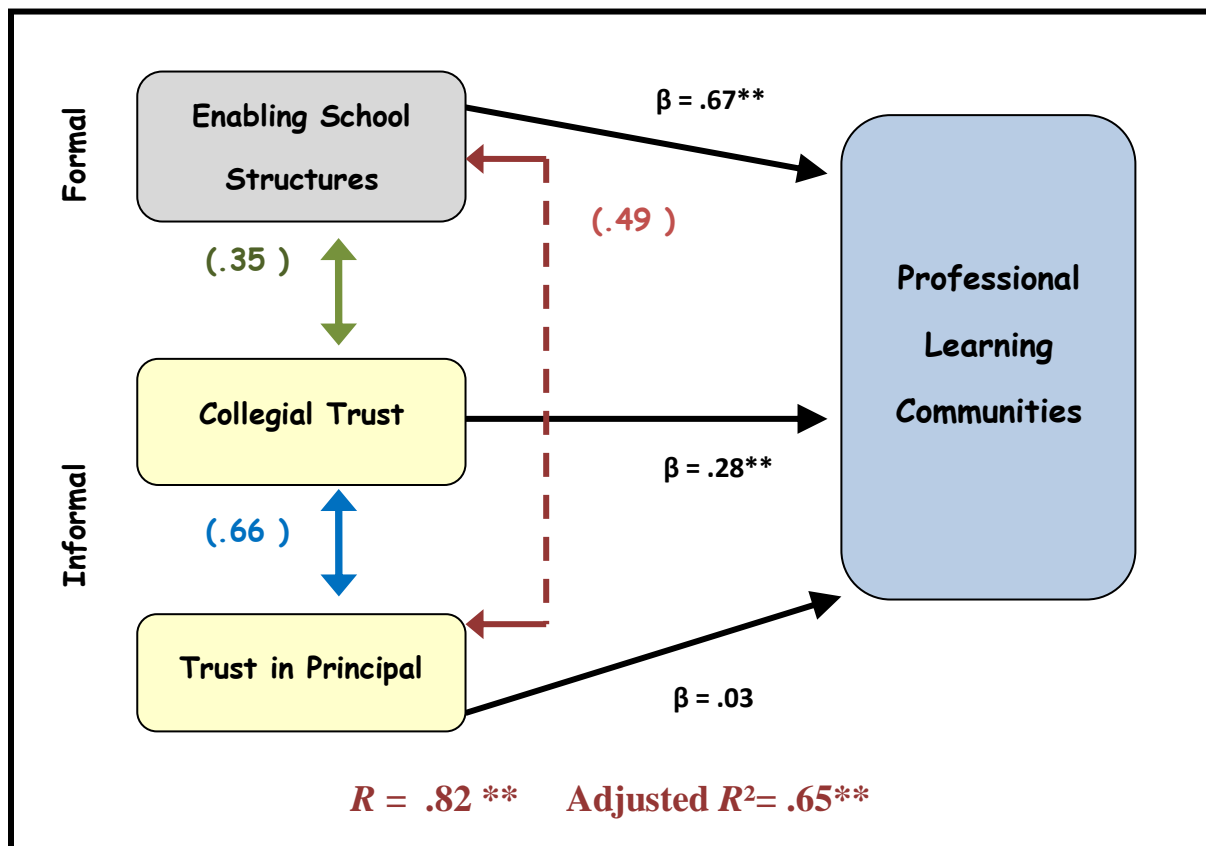
Table III: PLCs Regressed on Independent and Control Variables

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
¹ (Constant)	.42	.26		1.64	.107
Trust Principal	-.02	.06	-.03	-.27	.785
Trust Colleagues	.18	.06	.28	3.09	.003
Enabling Structure	.50	.07	.67	7.25	.000
SES (control)	-.12	.12	-.07	-1.06	.291
School Level (control)	-.10	.04	-.19	-2.62	.011

a. Dependent Variable: Professional Learning Community

Figure 1.3 Revised Conceptual Diagram of Hypothesized Relationships



Note: $** p < 0.01$

There were unhypothesized findings related to the control variables, school level and SES. School level was inversely related to PLC implementation. In other words, professional learning communities tend to be more developed at the elementary level. This finding is supported by the research of Herriot and Firestone, who investigated school level (Herriot & Firestone, 1984). Furthermore, there was no relationship between SES and PLCs. The majority of students in the school district was eligible for free and reduced lunch services; therefore the district has overall low socioeconomic status (Gray, 2011).

The results may have been different if there was a greater range of SES in the district. The normal distribution is demonstrated in Figure 4.2, with a bold line showing the skewed representation of students in this school district who were eligible for Free and Reduced Lunch Services. The fact that it is skewed to the right shows that a normal distribution pattern is not followed. In other words the majority of students in this district are of lower socioeconomic status. This restriction of range, which is negatively skewed, which may explain the insignificant effect of this control variable, SES. If there was a greater range of SES, then its effect may have been significant.

In looking at each variable in regard to PLCs, only collegial trust, enabling school structures, and school level were significant. When PLCs is regressed on trust in principal and SES, the results are not significant and could be occurring by chance. School level had a small relationship with PLCs, yet demonstrates a significant effect in Table 12. Furthermore, the negative beta for school level indicates that professional learning communities are more likely to be developed at the elementary level, then middle, and finally high school level. Since elementary schools tend to be more centralized and less departmentalized than middle or high

schools, it is understandable that PLCs are more developed at the elementary level (Herriot & Firestone, 1984).

Theoretical Implications

This study is based upon the notion that any structural implementation, in this case, professional learning communities (PLCs), must be built upon a foundation from both the informal and formal organization. The formal structure allows change to be accepted as a permanent part of the organization. Change, although many are resistant to such, becomes more routine (Hord, 2004). The principal acts as a change agent within the school (Hord, 2004). For change to occur the principal relinquishes some of the power of the formal organization through shared decision making and encouragement of leadership opportunities for teachers (Hord, 2004).

According to Hord, certain physical and structural conditions must be in place for a professional learning community to be established in a school (Hord 2004; Hord 2007). Further, open and trusting relationships must exist between teachers and with the principal (Hord, 2007). This study asserts that enabling school structures represent the formal aspect of the organization while the informal is represented by collegial trust and trust in principal. In other words, enabling school structures and the two types of trust are antecedents to the development of a professional learning community.

Hoy contends that “when school structure was enabling, teachers trust each other, demonstrate professional autonomy, are not bound by rigid rules, and do not feel powerless” (Hoy, 2002, p. 91). Enabling school structures allow the principal to “foster trust and value differences” in order to promote organizational learning (Hoy, 2002, p. 89). There is a relationship between enabling school structures and collegial trust and trust in the principal. In

other words, as the enabling school structures are stronger, trust in colleagues and principal become stronger. In an earlier study, Hoy and Sweetland surmised that “enabling school structures encourage trusting relations among teachers and between teachers and the principal” (Hoy & Sweetland, in Hoy, 2002, p. 91).

Because PLCs are sub-organizational elements, they retain features of organizations generally; in varying degrees they have centralization, specialization, and formalization (Hoy & DiPaola, 2008; Mintzberg, 1983). Enabling structure is necessary for the formalization and centralization within professional learning communities. The principal empowers teachers by encouraging initiative and fostering trust via formalization, while promoting cooperation, innovation, and collaboration via centralization of the organization (DiPaola & Hoy, 2008).

This study demonstrates the importance and necessity of enabling school structures and trust in colleagues, yet the regression indicates that the structural dimension has more effect than the trust variable. The empirical findings emphasize the importance of established enabling school structures as an antecedent of professional learning communities. One cannot exist or be sustained without the others. 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, had not be addressed. Therefore, this research adds to our knowledge about PLCs as well as to the field of literature.

Practical Implications

Schools need effective models for school reform and improvement for student success. Professional learning communities encompass the following traits: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared

personal practice (Hord, 1997). Several studies provided statistical data that support the benefits of professional learning communities on student learning and achievement. McLaughlin and Talbert reference other research including the National Longitudinal Study (NELS), Newmann (1996), Louis and Marks (1998), and their 2001 study. They summarize:

Positive effects of teacher learning community measure on student achievement for both regional and nationally represented school samples; strong correlations of teacher learning community with teaching practices that predict students learning gains; and strong correlations of teacher learning community and student experiences of their school and class. (McLaughlin & Talbert, 2006, p. 9)

Louis and Kruse contend that “professional community can reinforce a collective sense of efficacy as well as that of individuals” (Louis & Kruse, 1995). Newmann (1991) “suggests that that giving teachers more individual autonomy, discretion, and control in conducting their work will encourage a greater sense of ownership of and responsibility for quality in student learning” (Newmann, in Louis & Kruse, 1995, p. 26).

Traditionally teachers worked in isolation, with little or no opportunities for collaboration (Louis & Kruse, 1995). They may or may not be willing collaborators of instructional practices, so relationships need to be nurtured and opportunities for sharing allowed. Once educators are open to collaboration, then professional learning is more apt to occur (Hord, 1997). Bryk argues that more time should be allocated for professional development and sharing of best practice as “very little time is available in most U.S. schools for professional collaboration” (Bryk & Schneider, 2002, p. 130).

Kruse, Louis, and Bryk offer five critical elements for strong professional learning communities (Kruse, et al., 1994). In summary:

1. Teachers must participate in reflective dialogue about their beliefs and values related to learning and instruction;
2. There should be a “deprivatization of practice” in which teachers observe colleagues, share practices, and provide support for one another;
3. Teachers maintain a “collective focus on student learning” and maintain high expectations for student achievement;
4. Teachers have opportunities to work together collaboratively; and
5. School leaders and teachers share norms and values for the school and their students
(Kruse, et al., 1994, p. 3).

Our research appears to support the statement that specific structural conditions must exist: “time to meet and talk, physical proximity, interdependent teaching roles, communication structures, teacher empowerment, and school autonomy” (Kruse, et al., 1994, p.4).

Recommendations for Future Research

This section proposes several areas for future research as related to professional learning communities and various organizational factors, including: collective efficacy, organizational citizenship behavior, trust in colleagues, the role of socioeconomic status, and parent involvement. Professional learning communities “change culture in a way difficult to accomplish in any profession, but most especially in the isolated, individualistic lives of schoolteachers” (McLaughlin & Talbert, 2006, p. 11).

McLaughlin and Talbert contend that professional learning communities vary in three ways: technical culture (student perception, subject area content, effective pedagogy, and beliefs about student learning), professional norms (how teachers work together and beliefs on professional expertise and professionalism), and organizational policies (course assignments,

logistics, and allocation of resources) (McLaughlin & Talbert, 2006). Each of these types of cultures could be studied further in regard to collective efficacy, organizational citizenship behaviors, collegial trust, trust in clients, and SES. Investigating the role of individual teacher and collective efficacy, teacher's perception of abilities of colleagues, within a professional learning community could provide valuable research for the field.

Summary

It can take years for a school to develop an effective professional learning community with much effort on the part of the teachers and school leaders. Bolam and his colleagues contend that "the idea of a PLC is one well worth pursuing as a means of promoting school and system-wide capacity building for sustainable improvement and pupil learning" (Bolam, et al., 2005, p. 3). This study demonstrates the relationships between enabling school structures and trust in developing professional learning communities and addresses a gap in the literature. If professional learning communities offer schools a model for reform and school improvement, and we believe the literature supports their potential, then educators should work together to develop the structures and trust necessary to build these communities of learning.

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Appendix A - Professional Learning Communities – Short instrument

Professional Learning Communities Assessment – Revised

Directions: This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. This questionnaire contains a number of statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement.

Key Terms:

- Principal = Principal, not Associate or Assistant Principal
- Staff/Staff Members = All adult staff directly associated with curriculum, instruction, and assessment of students
- Stakeholders = Parents and community members

Scale: 1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = Agree (A) 4 = Strongly Agree (SA)

STATEMENTS		SCALE			
		SD	D	A	SA
	Shared and Supportive Leadership				
1.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
2.	Leadership is promoted and nurtured among staff members.	0	0	0	0
	Shared Values and Vision				
3.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
4.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
	Collective Learning and Application				
5.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
6.	Professional development focuses on teaching and learning.	0	0	0	0
	Shared Personal Practice				
7.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0
8.	Opportunities exist for coaching and mentoring.	0	0	0	0
	Supportive Conditions – Relationships				
9.	Caring relationships exist among staff and students that are built on trust and respect.	0	0	0	0
10.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
	Supportive Conditions - Structures				
11.	Time is provided to facilitate collaborative work.	0	0	0	0
12.	Appropriate technology and instructional materials are available to staff.	0	0	0	0

Shortened version of PLCA-R, adapted by Gray, J. (2011) © Copyright 2010 Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2010). Assessing and analyzing schools. In K. K. Hipp & J. B. Huffman (Eds.). *Demystifying professional learning communities: School leadership at its Best*. Lanham, MD: Rowman & Littlefield.

Appendix B – Enabling School Structures instrument

Form ESS

Directions: The following statements are descriptions of the way your school is structured. Please indicate the extent to which each statement characterizes behavior in your school from **never** to **always**.

	Never	Once in a while	Sometimes	Fairly Often	Always
1. Administrative rules in this school enable authentic communication between teachers and administrators.	①	②	③	④	⑤
2. In this school red tape is problem.	①	②	③	④	⑤
3. The administrative hierarchy of this school enables teachers to do their job.	①	②	③	④	⑤
4. The administrative hierarchy obstructs student achievement.	①	②	③	④	⑤
5. Administrative rules help rather than hinder.	①	②	③	④	⑤
6. The administrative hierarchy of this school facilitates the mission of this school.	①	②	③	④	⑤
7. Administrative rules in this school are used to punish teachers.	①	②	③	④	⑤
8. The administrative hierarchy of this school obstructs innovation.	①	②	③	④	⑤
9. Administrative rules in this school are substitutes for professional judgment.	①	②	③	④	⑤
10. Administrative rules in this school are guides to solutions rather than rigid procedures.	①	②	③	④	⑤
11. In this school the authority of the principal is used to undermine teachers.	①	②	③	④	⑤
12. The administrators in this school use their authority to enable teachers to do their job.	①	②	③	④	⑤

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Appendix C – Omnibus Trust instrument

Omnibus T-Scale

DIRECTIONS:

The following are statements about your school. Please indicate the extent to which you agree with each statement along a scale from strongly disagree (1) to strongly agree (6).

	Strongly Disagree	Strongly Agree
1. Teachers in this school trust the principal	1	6
2. Teachers in this school trust each other.....	1	6
3. Teachers in this school trust their students.....	1	6
4. The teachers in this school are suspicious of most of the principal's actions.....	1	6
5. Teachers in this school typically look out for each other	1	6
6. Teachers in this school trust the parents	1	6
7. The teachers in this school have faith in the integrity of the principal.....	1	6
8. Teachers in this school are suspicious of each other	1	6
9. The principal in this school typically acts in the best interests of teachers	1	6
10. Students in this school care about each other	1	6
11. The principal of this school does not show concern for the teachers.....	1	6
12. Even in difficult situations, teachers in this school can depend on each other.. ..	1	6
13. Teachers in this school do their jobs well	1	6
14. Parents in this school are reliable in their commitments	1	6
15. Teachers in this school can rely on the principal.....	1	6
16. Teachers in this school have faith in the integrity of their colleagues	1	6
17. Students in this school can be counted on to do their work	1	6
18. The principal in this school is competent in doing his or her job.....	1	6
19. The teachers in this school are open with each other.....	1	6
20. Teachers can count on parental support.	1	6
21. When teachers in this school tell you something, you can believe it.....	1	6
22. Teachers here believe students are competent learners.....	1	6
23. The principal doesn't tell teachers what is really going on.....	1	6
24. Teachers think that most of the parents do a good job.....	1	6
25. Teachers can believe what parents tell them.....	1	6
26. Students here are secretive.....	1	6

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Appendix D - Qualtrics Research Suite Software description (2011)

Qualtrics Research Suite

Qualtrics is the easiest and most sophisticated online survey software in the world. The Qualtrics Research Suite is the tool we provide to customers to bring the research process in-house.

When we set out to create an online research suite, we could not have imagined the route that would lead us to where we are now. In the old days, paper surveys were tedious and limited. Online solutions were complicated, cumbersome and equally limited.

Our goal from the very beginning was to create a tool that had the capacity to create the most complex survey but was simple enough that anyone with a mouse, a keyboard, an imagination and at least one index finger could build it.

And so we started - trying to expand and simplify the existing tools. Over the years these tools have been used by thousands of customers, each suggesting new features and improvements. The result was an extremely elegant tool that makes survey creation easy enough for an intern while at the same time sophisticated enough for the most demanding academic or corporate researcher.

The Qualtrics Research Suite was built for researchers by researchers.

Survey Design

- Qualtrics offers the easiest user interface of all online survey solutions. The entire survey software system is based on a point-and-click edit system that rivals the simplicity of drawing on a white board. If you want the best online survey software, there is no better tool than Qualtrics.

Distribution

- Qualtrics offers several modes of delivery to get online surveys to your audience. It also offers the ability to track panels so that you can record who answered your surveys, when, and how often.

Analysis & Reporting

- Qualtrics does more than just create surveys. It is an entire research suite, with the ability to generate custom reports of your data. Complete with graphs, tables, statistics, cross tabulations and more, all of your reports dynamically update themselves to include new data.

Information retrieved from: <http://www.qualtrics.com/survey-software/>