Enabling School Structures, Trust, and Collective Efficacy in Private International Schools

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Abstract This article explores the role of enabling school structures, collegial trust, and collective efficacy in 15 pre-Kindergarten to 12th grade international, private schools in South and Central America and Mexico. While most of these schools shared an “American” curriculum the local culture and school norms affected the climate of the school and the likelihood of the development of a professional learning community (PLC) in each school and country accordingly. As enabling school structures, trust in the principal, collegial trust, and collective efficacy were more established, the PLC was more likely to be developed based upon teacher perceptions in this quantitative study.

Keywords Professional learning communities; Private international schools; Trust; Collective efficacy; Enabling school structures

Introduction
How do professional learning communities (PLCs) in private international schools in Mexico and South and Central America differ from those in the United States? We will explore this question, as well as the role of enabling school structures, collegial trust, and collective efficacy in 15 pre-Kindergarten to twelfth grade schools. Are collaboration and collegiality encouraged among teachers in these schools? While
the schools in our sample share an “American” curriculum that is taught predominantly in English, we believe that local culture and school norms will affect the development of PLCs in each school and country.

Much research exists about PLCs in Europe, Canada, South Africa, and Japan; however, there is a gap in the literature about PLCs in South and Central America and Mexico (Toole & Louis, 2002). We will explore the role of enabling school structures, collegial trust, and collective efficacy, based upon teacher perceptions of each. We further hypothesize that enabling school structures, collegial trust, and collective efficacy will individually and jointly predict the development of professional learning communities in international schools.

**Theoretical framework**

In studying PLCs in an international context, we are making the assumption that despite geographic location, certain common characteristics will be found amongst PLCs in international private schools. Enabling school structures need to be established for PLCs to be developed and sustained over time (Gray, 2011). Teachers need the opportunity to collaborate, develop instructional strategies, and share best practices in order to work together in a PLC and increase student achievement (Hord, 1997). Kruse, Louis, and Bryk (1994) describe certain “preconditions” that are needed for the development of a PLC. These preconditions include “openness to improvement, trust and respect, access to expertise, supportive leadership, and socialization ... time and places to meet and talk; interdependent teacher roles, communication structures, teacher empowerment and school autonomy” (Kruse et al., in Toole & Louis, 2002, p. 249).

As teachers learn and plan together, their relationships with each other influence the level of trust and efficacy they have with their colleagues. Collegial trust plays an essential role in the maintenance and sustenance of PLCs in schools. How can teachers truly collaborate without trust? We contend that as teachers work together, collegial trust increases, and vice versa. Forsyth, Adams, and Hoy (2011) surmise that trust is the “keystone of successful interpersonal relationships, leadership, teamwork, and effective organizations” (p. 3). Furthermore, we assert that teachers will have greater collective efficacy in these collaborative learning environments. Finally, we believe that PLCs are an effective model for school improvement if built upon a foundation of enabling structures, trust, and efficacy. In other words, the structures of the school must enable or help teachers to do their jobs more effectively; teachers should have trust in each other and belief in the ability of their colleagues (Gray & Summers, 2012).

**Conceptual framework**

The formal part of the organization, in this case the school, is represented by enabling school structures, while the informal aspects of the organization are characterized by collective efficacy and collegial trust (Gray, 2011). Schools with enabling structures offer supportive leadership and collaborative conditions critical to the maintenance and sustenance of a PLC (Gray, 2011). Principals and teachers alike should model trustworthy behavior in order to gain the trust of their colleagues. It takes time to develop trust relationships among colleagues and school leaders. Without
such trust, it is very difficult to promote shared values and practices and collective learning among teachers within a school community (Hord, 2004).

Cultural values and norms may vary from country to country. Therefore, it is important for school leaders in private international schools to be “cognizant of and adapt for the cultural meaning and level of support for collaboration that exists within each country” (Toole & Louis, 2002, p. 258). Teachers may be accustomed to working in isolation rather than collaboratively, so school leaders may need to be “sensitive to local context to successfully shepherd professional learning communities” (Toole & Louis, 2002, p. 259). Being a “good colleague” in one country or school “may be perceived very differently in another school or national culture” (Toole & Louis, 2002, p. 259). Finally, Toole and Louis (2002) assert that “the empowering values inherent in the notion of professional learning communities may conflict with a nation’s most basic cultural values or recent political past” (p. 259).

This study builds upon the research of Hord (1997, 2004, 2007) and her assertions about PLCs. Hord (2007) summarizes that certain logistical conditions and collegial relationships must exist for a PLC to function effectively. Teachers need time to meet with each other and resources to support the instructional plans they are creating collaboratively. Stoll, Bolam, McMahon, Wallace, and Thomas (2006) believe that certain norms must exist in PLCs, including a focus on student learning, effective use of instructional resources, and positive communication between participants. We hypothesize that a relationship exists between enabling school structures, collegial trust, and collective efficacy in professional learning communities, as separate variables (i.e., enabling school structures and collegial trust) and collectively as three variables, as demonstrated in Figure 1.

**Literature review**

**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. PLCs have
the following attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). Hord (2007) summarizes that schools need “two types of supportive conditions … 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” (p. 3).

McLaughlin and Talbert (2001) added to the literature about PLCs and concluded that a PLC is comprised of “teachers’ joint efforts to generate new knowledge of practice and their mutual support of each other’s professional growth” (p. 75). Bryk, Camburn, and Louis (1999) further explain that professional community in schools involves frequent interactions among teachers that are guided by shared norms of practice in order to improve teaching and learning. Toole and Louis (2002) describe PLCs as a “social architecture for school improvement,” with certain teacher characteristics acting as essential tools in the form of “patience, constancy, humility, respect, and an inquiring intellect” (p. 266). In other words, educators may need to be patient, constant, humble, respectful, and curious when interacting with colleagues, in order for a PLC to be developed (Toole & Louis, 2002).

**International schools**

It is difficult to define what an international school is, as there are great diversities in the characteristics of such schools. As Hayden (2006) summarizes, “schools describe themselves as international schools for a variety of reasons including the nature of the student population and of the curriculum offered, marketing and competition with other schools in the area, and the school’s overall ethos and mission” (p. 10). For this study, we define an international school as one that is located outside of the United States, has adopted a North American curriculum, and is recognized by a regional accrediting agency. We will focus on the organizational and relational aspects of the international school as a professional learning community, taking into consideration the effects of culture and teacher perceptions.

Generally speaking, there are certain commonalities that can be seen when one examines international schools. First, they have adopted, in whole or in part, an American curriculum. Second, they employ many native English-speaking teachers who hold teaching credentials in their home countries. Third, their student population is made up of the children of host country nationals, as well as the children of expatriates who work in international corporations located near these schools. Finally, as accredited schools, they have the authority to award an American high school diploma to students who meet the curricular requirements. The Middle States Commission on Higher Education or the New England Association of Schools and Colleges are two of the regional accrediting agencies that would provide such endorsements.

In an international school, a cultural distance often exists between the school and the local host culture (Murakami-Ramalho & Benham, 2010). Teacher turnover rates tend to be high in international schools for a variety of reasons, including cultural differences, a desire to travel, salary, benefits, and perceived effectiveness of the school leadership (Desroches, 2013; Murakami-Ramalho & Benham, 2010; Roberts, 2010; Walker & Cheong, 2009). It is not uncommon for expatriate teachers to trans-
fer from one international school to another (Murakami-Ramalho & Benham, 2010). Many educators have *wanderlust*, a desire to travel and experience different cultures and countries around the world (Hanks, McLeod, & Urdang, 1986; Joslin, 2002).

Many of these international schools belong to the Association for the Advancement of International Education (AAIE). This association aims at supporting leadership, best practices, and professionalism in international schools. AAIE is not only a forum for leaders from these schools, but also a space to develop partnerships with other associations and institutions worldwide. The annual conference of the association explores issues of interest for international schools and promotes integration through the development of research and scholarship. Professional development is also fostered through continuous training opportunities, such as the summer institutes and webinars the association offers throughout the year. In addition to belonging to AAIE, the overarching international organization, many schools also belong to smaller regional organizations. For instance, the Association of American Schools in South America (AASSA) draws its membership from all of the international schools in South America (ISS, 2010). The Tri Association does the same for schools in Central America. The missions and services of these regional associations are overlapping and complementary.

*Enabling School Structures (ESS)*

An enabling school structure is defined as a “hierarchy that helps rather than hinders and a system of rules and regulations that guide problem solving rather than punishes failure” (Hoy & Miskel, 2008, p. 110). School structures vary along a continuum from hindering to enabling (Hoy & Sweetland, 2001). Organizations with enabling structures promote problem solving, co-operation, and collaboration through innovation and flexibility, while protecting participants (Hoy & Sweetland, 2001). In contrast, a school that is more tightly managed or controlled by the school leader would represent a hindering school structure (Hoy, 2002). Miskel, F evurly, and Stewart (1979) assert that more effective schools 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” (p. 114). In summary, teachers perceive their school to be more effective if they are involved in shared decision-making and collegial relationships, professional activity is encouraged, and the rules of the organization are more formalized (Gray, 2011).

*Trust in the organization*

Trust plays an integral role in the development of collegial relationships and in the work of schools (Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 1999). For this study, we define trust 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, competent, honest, and open” (Hoy & Tschannen-Moran, 1999, p. 189). We will focus on collegial trust, how “teachers can depend on one another in a difficult situation; teachers can rely on the integrity of their colleagues” (Tschannen-Moran & Hoy, 1998, p. 342).

According to Toole and Louis (2002), “social trust appears to be one of the strongest facilitators of professional learning community” (p. 271). When teachers
trust and respect their colleagues, a PLC can be developed in which “collaboration, reflective dialogue, and sharing of practice could occur” (Toole & Louis, 2002, p. 271). Hord (2004) contends that PLCs “rely on trust in order to function effectively” (p. 43). The essential element of trust in colleagues “implies that principals and teachers are all working together to provide the best education possible for their students” (p. 43). Many would argue that this should be the goal of all educators.

Collective efficacy
According to Bandura (1997), 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” (p. 477). In the context of schools, Goddard, Hoy, and Hoy (2000) further assert 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). They summarize that the more efficacious the teachers are as a group, the more likely it is that they will participate in sustained school improvement efforts (Goddard et al., 2000). Forsyth and his colleagues (2011) characterize collective efficacy as a “powerful determinant” of teacher trust in colleagues, further supporting the framework of this study (Forsyth et al., 2011). We assert that teachers who have greater confidence in their colleagues are more likely to participate in a PLC and sustain it over time (Gray, 2011).

Research questions
In this study, we are investigating the relationships between enabling school structures, collegial trust, and collective efficacy in the development of professional learning communities in the private international schools of our sample. We hope to learn more about the relationships between the variables influencing PLC development in a private international school setting. Is there a correlation between school structure and collegial trust? Is there a relationship between school structure and collective efficacy? How are all three variables related to the development of PLCs in the schools of our sample?

Methodology
For this quantitative study, we analyzed an existing database from cross-sectional survey research of 14 international private schools in Mexico, Central America, and South America (Creswell, 2014; Dooley, 2001). Of the schools that voluntarily participated in the online survey, five were in Colombia, two were in Brazil and Venezuela, respectively, and five were divided between Guatemala, Honduras, Mexico, Nicaragua, and Paraguay. We used a convenience sample approach, as we had contact information and email addresses for 89 private international schools in Central and South America, as well as Mexico (Creswell, 2014). Teachers completed surveys online via the Qualtrics Research Suite™ software, which was exported to Excel and then SPSS for statistical analysis.

The independent variables included enabling school structures, collegial trust, and collective efficacy. The dependent variable was the development of professional learning communities. We invited 89 private international schools in Mexico, South and Central America to participate in our study. However, only 14 school directors agreed to invite
their teachers to complete the survey. Because the schools were in eight different countries, surveys were administered online, using Qualtrics software, ensuring confidentiality of all responses and participants' identities. For this study, the school is considered to be the unit of analysis, as the variables are based upon the collective perceptions of the teachers for each school. Therefore, all analyses will be evaluated at the school level.

Hypotheses

We assert that enabling school structures, collegial trust, and collective efficacy are essential aspects of PLC development in international schools. Previous studies had shown that there is a relationship between enabling school structures, trust, and collective efficacy (Gray, 2011; Goddard, 2002; Hord, 1997, 2004; Hoy & Sweetland, 2001). Therefore, we hypothesized that:

H1: Enabling school structure, collegial trust, and collective efficacy will be correlated with each other in international schools.

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 (Gray, 2011). Consequently, we hypothesized that:

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

Sample

The majority of the schools in our sample were selected out of convenience based upon previous relationships with each school. The sample includes one school in Guatemala, Honduras, Mexico, Nicaragua, and Paraguay, respectively; two schools in Brazil and Venezuela, respectively; and five schools in Colombia, for a total of 14 schools. Each of the private international schools had a total enrolment of 900 to 1,200 students, ranging from preschool to twelfth grade. There was a range of 22 to 155 full-time teachers employed at each school, and a principal assigned to each grade section (preschool, elementary, middle, and high), as well as a school director managing each school. Of the respondents, 23 worked in preschool, 66 in elementary school, 36 in middle school, 44 in high school, and 14 were teachers of all grade levels.

The sample of 183 participants included 149 teachers, 12 support staff members, 8 principals, 4 school directors, and 10 participants who had other job titles. One hundred and three teachers were native to the home country of the school, while 90 were non-native in nationality. Of the non-native teachers, six were from Canada, 54 from the United States, and 23 from other countries. Teachers' years of experience varied: 25 teachers had three years or fewer, 41 teachers had four to seven years, 69 teachers had eight to 15 years, and 50 teachers had more than fifteen years of experience in the field of education.

Instrumentation

PLC development was measured by a shortened version of the Professional Learning
Community Assessment – Revised (PLCA-R) instrument that was developed by Olivier, Hipp, and Huffman in 2003 and revised in 2010. The alphas for the subscales ranged from .82 to .94 (Olivier, Hipp, & Huffman, 2010). The shortened form of this instrument was developed after two items were selected from each subscale. Factor analysis was performed to determine if this shortened version of the PLCA-R was valid and reliable, with a Cronbach’s alpha of .92 (Gray, 2011; Olivier, Hipp, & Huffman, 2010). The subscales of the PLCA-R consist of 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., 2010). Sample items include “Leadership is promoted and nurtured among staff members” and “Opportunities exist for coaching and mentoring” (Olivier, et al., 2010).

Enabling school structure was measured using a 12-item, five-point Likert-type scale that ranges from “never” to “always” and was reliable in the high .8s and .9s (Hoy & Sweetland, 2001). For this study, the Cronbach’s alpha was .91 (Gray, 2011). Sample items include “Administrative rules help rather than hinder,” “The administrative hierarchy of this school enables teachers to do their job,” and “Administrative rules in this school enable authentic communication between teachers and administrators” (Hoy & Sweetland, 2001, p. 307).

Operationally, collegial trust will be defined by a subscale of the Omnibus Trust instrument, Omnibus T Scale (Hoy & Tschannen-Moran, 2003). The alpha coefficient of reliability for Collegial Trust is .94 (Hoy & Tschannen-Moran, 1997) and .95 for this study (Gray, 2011). Sample items include “Teachers in this school trust each other,” “The teachers in this school do their jobs well,” and “Teachers in this school are open with each other” (Hoy & Tschannen-Moran, 2003, p. 2002; Hoy & Tschannen-Moran, 1999).

Collective efficacy will be measured using the short version of the collective efficacy (CE) Scale, a 12-item Likert-type scale which was developed by Goddard, Hoy, and Hoy in 2000. The Cronbach’s alpha for the short form was .96 (Goddard, Hoy & Hoy, 2000). Sample items include “Teachers here are confident they will be able to motivate their students” and “Teachers in this school believe that every child can learn” (Goddard et al., 2000).

Data collection
Using Qualtrics Research Suite™ software, approximately 1,025 teachers and faculty members were invited via email to complete the online survey. The final completion rate for teacher data was 18 percent (185 out of 1025 teachers) of teachers and faculty in the fourteen schools that agreed to contribute data. While this completion rate is low and a limitation of the study, we take into consideration the fact that all requests took place over email and these schools receive numerous requests from universities and organizations around the world. Further, many of the teachers may not speak English fluently. The school directors who chose not to have their teachers participate mentioned time constraints and poor timing as reasons for non-participation.

Data analysis
The first level of quantitative analysis will involve reviewing the descriptive statistics
of the variables of the study. Secondly, we will analyze the bivariate correlations using the Pearson correlation coefficient in order to assess the relationships of the independent and dependent variables of the study. Finally, we will use a multiple regression model to determine the individual and collective relationships between the independent variables (enabling school structures, collegial trust, and collective efficacy) and the dependent variable (the development of PLCs).

**Findings**

The descriptive statistics are shown in Table 1, while the conceptual diagram of the hypothesized relationships between the major variables of the study is seen in Figure 2. Hypothesis 1 is supported; all of the independent variables were significantly correlated with one another, as evidenced in Table 2. Professional learning communities, the dependent variable, had moderate relationship with enabling school structures (.62, $\rho < .01$), collegial trust (.53, $\rho < .01$), and collective efficacy (.48, $\rho < .01$), which were all significant.

**Descriptive analysis**

Our first level of analysis involved obtaining descriptive statistics and bivariate correlations of the variables in our study. In Table 1, the descriptive statistics for our sample of schools revealed that PLC development ranged from 1.67 to 3.83, with a mean of 2.90 and a standard deviation of .43. Enabling school structures ranged from 2.00 to 5.00, with a mean of 3.66 and a standard deviation of .33. Collegial trust varied from 1.88 to 5.88 with a mean of 4.41 and a standard deviation of .77. Trust in principal ranged from 1.33 to 6.00, with a mean of 4.36 and a standard deviation of 1.00. Collective efficacy ranged from 2.58 to 6.00, with a mean of 4.54 and a standard deviation of .74. Non-native citizenship varied from 1.00 to 2.00 with a mean of 1.46 and a standard deviation of .50, while native citizenship ranged from 1.00 to 5.00 with a mean of 2.67 and standard deviation of 1.15.

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<th>Minimum</th>
<th>Maximum</th>
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<td>Professional community (PLC)</td>
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<td>1.67</td>
<td>3.83</td>
<td>2.8537</td>
<td>.42737</td>
</tr>
<tr>
<td>Enabling structures (ESS)</td>
<td>118</td>
<td>2.00</td>
<td>4.82</td>
<td>3.6564</td>
<td>.52337</td>
</tr>
<tr>
<td>Trust in colleagues (TC)</td>
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<td>1.88</td>
<td>5.88</td>
<td>4.4070</td>
<td>.77061</td>
</tr>
<tr>
<td>Trust in principal (TP)</td>
<td>118</td>
<td>1.33</td>
<td>6.00</td>
<td>4.3595</td>
<td>1.03341</td>
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<tr>
<td>Collective efficacy (CE)</td>
<td>118</td>
<td>2.58</td>
<td>6.00</td>
<td>4.5405</td>
<td>.73557</td>
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<tr>
<td>Native citizen (NC)</td>
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<td>2.00</td>
<td>1.4569</td>
<td>.50030</td>
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<td>School level (SL)</td>
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<td>1.00</td>
<td>5.00</td>
<td>2.67</td>
<td>1.153</td>
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**Bivariate correlational analysis**

Hypothesis 1 states that enabling school structures, collegial trust, and collective efficacy will be correlated with PLC development in international schools, which is confirmed in Table 2. PLC development was positively correlated with enabling school
structures ($r = .62, \rho < .01$), collegial trust ($r = .53, \rho < .01$), and collective efficacy ($r = .48, \rho < .01$). Although not a hypothesized relationship, PLC development was negatively correlated with school level ($r = -.09, \rho < .01$), indicating that PLC development was higher at the elementary level and declined progressively at the middle and high school level (Gray, 2011).

Table 2. Pearson Correlations of All Variables ($n = 118$)

<table>
<thead>
<tr>
<th></th>
<th>ESS</th>
<th>Collegial Trust</th>
<th>Trust in principal</th>
<th>Collective efficacy</th>
<th>Native citizen</th>
<th>School level</th>
</tr>
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<tr>
<td>Professional community</td>
<td>.59**</td>
<td>.48**</td>
<td>.54**</td>
<td>.32**</td>
<td>-.21*</td>
<td>-.06</td>
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<tr>
<td>Enabling structures</td>
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<td>.44**</td>
<td>.58**</td>
<td>.25**</td>
<td>-.11</td>
<td>-.01</td>
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<tr>
<td>Collegial trust</td>
<td>1</td>
<td>.34**</td>
<td>.48**</td>
<td>.030</td>
<td>-.086</td>
<td>-.086</td>
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<tr>
<td>Trust in principal</td>
<td></td>
<td></td>
<td>.106</td>
<td>-.030</td>
<td>.002</td>
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<tr>
<td>Collective efficacy</td>
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<td>-.17</td>
<td>-.30**</td>
<td></td>
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<tr>
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<td></td>
<td>.11</td>
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* Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed)

Our independent variables were also moderately correlated with each other: enabling school structures and collegial trust ($r = .54, \rho < .01$); collegial trust and collective efficacy ($r = .45, \rho < .01$); and enabling school structures and collective efficacy ($r = .44, \rho < .01$). Additionally, there was a weak correlation between collective efficacy and grade level ($r = .21, \rho < .01$).

Regression analysis

The development of PLsCs, the dependent variable, is regressed on the independent variables of the study, enabling school structures, collegial trust, and collective efficacy (Table 3). In Figure 2 and Table 3, it is evident that together ESS, Collegial trust, academic emphasis, and collective efficacy explained 47 percent of the variance of the development of PLSCs in the international schools involved in this study. ESS had a moderate effect on PLSCs that was significant ($\beta = .41, \rho < .01$). Collegial trust also had a moderate effect that was significant ($\beta = .22, \rho < .01$). Finally, collective efficacy demonstrated a significant effect on the development of PLSCs ($\beta = .20, \rho < .01$). Non-native citizenship of teachers did not have a significant effect on PLSCs.

Conceptualization of hypothesized relationships

Our study demonstrates the essential role of enabling school structures, collegial trust and collective efficacy in the development of PLSCs in private international schools. The findings represent the relationships between the dependent variable and the independent variables, all of which are significant (see Table 2 and Figure 2). We assert that these variables interact with each other and cannot be sustained without the other. The reciprocal nature of their relationship confirms the hypotheses of this study, while expanding what we know about PLSCs in international private schools in Mexico and South and Central America. These findings extend our understanding of PLSCs in an international school setting.
Scholarly and practical significance of the study

This research adds to our knowledge about PLCs as well as to the literature in the field, but in the context of international schools. Enabling school structures have a significant effect on PLCs, as well as a strong relationship with academic emphasis. In other words, if enabling structures are in place, then a professional learning community is more likely to be developed and teachers are more likely to trust the principal. However, this applies to the schools in the sample and a larger study would need to be conducted in order to claim that these findings are representative of other international schools in South America. This is a limitation of this study.

We agree that “collegiality in different nations is influenced by structural as well as cultural arrangements” (Toole & Louis, 2002, p. 264). Collaboration and collegiality may not be encouraged within certain cultures; therefore, a shift of thinking

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<th>Coefficients a</th>
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<td><strong>Model</strong></td>
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<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Enabling structures</td>
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<tr>
<td>Collegial trust</td>
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<td>Trust in principal</td>
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<td>Collective efficacy</td>
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<td>Native citizen</td>
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<td>School level</td>
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a. Dependent variable: PLCs

Table 3. Regression of PLCs on All Independent and Demographic Variables
may need to occur for teachers to work with colleagues. For example, Tatto (in Toole & Louis, 2002) asserts that “Mexico’s national, centrally-generated pressures for rapid reform conflict with its own efforts to create reflective communities within schools” (p. 261). Therefore, it is important for school leaders to promote and encourage collaboration and sharing of instructional ideas among their teachers.

Further, this study demonstrates the importance and necessity of enabling school structures, collegial trust, and academic emphasis, yet the regression reveals that the structural dimension has more effect than the relational dimension as represented by the trust variable. The empirical findings demonstrate the importance of establishing enabling school structures as an antecedent to the development of professional learning communities. The reciprocal relationship of ESS and PLCs confirms the hypotheses and shows that one depends upon the other for sustenance. Practically, this study suggests that the development of PLCs that foster increased collaboration and in turn, attention to student learning outcomes rests on a school leader’s ability to foster these conditions and factors. Therefore, this study further adds to our knowledge of professional learning communities and to literature in the field.

**Theoretical implications**

We assert that PLCs must be founded on informal aspects of the organization—teacher trust in colleagues and collective efficacy—as well as formal aspects, in the form of enabling school structures: “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” (Louis & Kruse in Toole & Louis, 2002, p. 247). The formal structure of the PLC allows change to occur in classrooms and within the school organization (Gray, 2011). Sharing best practices and ideas becomes commonplace within teacher groups, departments, or grade levels: “Trust and respect acted as a foundation of professional learning community on which collaboration, reflective dialogue, and sharing of practice could occur” (Toole & Louis, 2002, p. 271). By sharing the power of the formal organization through shared decision-making and leadership opportunities for teachers, the principal acts as a change agent within the school (Hord, 2004).

Based upon 30 years of PLC research, we believe that certain structural and physical conditions must be developed and maintained for a PLC to be established and sustained over time (Gray, 2011; Hipp, Huffman, Pankake, & Olivier, 2008; Hord, 1997, 2004, 2007, 2009; Huffman & Hipp, 2003; Kruse & Louis, 1993; Louis & Kruse, 1995; McLaughlin & Talbert, 2001, 2006). Enabling school structures are not sufficient for PLCs to thrive within schools. Trusting relationships must be built between colleagues, including teachers and leaders, for PLCs to produce positive results (Hord, 2007): “Social trust appears to be one of the strongest facilitators of professional learning community” (Toole & Louis, 2002, p. 271). W. K. Hoy (2002) concludes that “when school structure was enabling, teachers trust each other, demonstrate professional autonomy, are not bound by rigid rules, and do not feel powerless” (p. 91).

**Limitations of the study**

As the final response rate for the teacher data on the survey was 18 percent, we re-
alize that this completion rate is low and is therefore a limitation of the study. These private international schools receive many requests to participate in surveys like ours. We also acknowledge that many of the respondents may not have spoken English as their first language, which may have influenced how they responded to items on the survey. Therefore, the findings of our study are not intended to be representative of other private international schools.

We are also cautious in interpreting our findings because of the possibility of multicollinearity between the independent variables (Cohen & Cohen, 1983), as some items in the PLCA-R are similar to items in the enabling school structures, collegial trust, and collective efficacy instruments. However, we were able to eliminate the possibility of multicollinearity with further statistical analysis.

We also acknowledge there can be limitations in the use of instruments with different Likert-type responses (Norman, 2010). That is to say that comparing a scale with four options for response (PLCA-R and AE) with another with five options (ESS) or six options (Omnibus Trust) may not yield the same results. Therefore, care should be taken in interpreting these items and making “inferences about differences in the underlying, latent characteristic reflected in the Likert numbers, but this does not invalidate conclusions about the numbers” (Norman, 2010, p. 629).

**Summary**

Professional learning communities, whether international or located in the United States, have common characteristics founded upon collaboration, supportive structures, and trust. Leithwood and Lewis (in Toole & Louis, 2002) assert that “schools must simultaneously become places of trust (communities) and places of risk-taking (learning organizations)” (p. 249). Because of the effects that globalization and changes in the world economy have on international schools, we offer professional learning communities as a model for school improvement and teachers’ professional growth: “The cross-cultural findings are clear; professional learning communities can generally lead to improved school functioning in most settings” (Toole & Louis, 2002, p. 274). In summary, this study demonstrates the important roles of trust, collective efficacy, and enabling school structures in developing PLCs in international private schools.

**References**


