The Role of Enabling School Structures, Trust, and Collective Efficacy in Developing International Professional Learning Communities

Julie Gray – Texas A&M University – San Antonio

Robert Summers – The University of Alabama

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Statement of Purpose

This paper explores the role of enabling school structures, trust, and collective efficacy in the development of professional learning communities in six international schools in South and Central America, each with students ranging from pre-Kindergarten to 12th grade. This study hypothesizes that enabling school structures, collegial trust, trust in the principal, and collective efficacy will individually and jointly predict the development of professional learning communities in international schools.

Theoretical Framework

One of the assumptions underlying the theoretical framework is that trust is an essential aspect of developing a PLC. Furthermore, certain enabling school structures must be in place for a PLC to be established and sustained over time. While there is emerging research about trust, enabling school structures, and collective efficacy, to our knowledge, none has been applied to PLCs in context to international schools.

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. 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, 2004; McLaughlin & Talbert, 2001, 2006), it is our hope that the current study will further expand the theoretical knowledge base and assist in informing classroom practice.

Professional Learning Communities (PLCs)

According to Hord professional learning community (PLC) is a collegial group of faculty and staff who are united in their commitment to student learning (Hord, 1997). Moreover, PLCs
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encompass these attributes: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice (Hord, 1997). Hord, further asserts 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).

International Schools

There are great diversities in the characteristics of international schools. As Hayden summarizes that “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” (Hayden, 2006, p. 10). Therefore, it is difficult to define “international school”. Our study will focus on the organizational and structural aspects of the international school as a professional learning community, rather than defining the concept of international school.

Enabling School Structures (ESS)

Hoy and Miskel state 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). These two types of structure are further defined by Hoy and Sweetland who describe formalization as “the degree to which the organization has written rules, regulations, procedures, and policies” (Hoy & Sweetland, 2001, p. 297).

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). 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, competent, honest, and open” (Hoy & Tschannen-Moran, 1999, p. 189).

This study will focus on two aspects of trust, trust in colleagues and trust in principal. Collegial trust is the faculty belief “that 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). 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” (Tschannen-Moran & Hoy, 1998, p. 342).

**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 Hoy 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” (Goddard, Hoy, & Hoy, 2000, p. 496). It has been shown 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 increase student achievement (Goddard, et al., 2000).

**Hypotheses**

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

**H1: Enabling School Structure, collegial trust, trust in principal, and collective efficacy will 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, trust in the principal, and collective efficacy will individually and jointly contribute to an explanation and be predictive of professional learning community development in international schools.**

**Methodology**

The independent variables will include: enabling school structures, collegial trust, trust in principal, and collective efficacy. The dependent variable will be professional learning communities, and the control variables will include native citizen (teacher is from home country of the school) and school level (elementary, middle or high school).

Because the participants are all in other countries and the surveys will be conducted online the invitation to participate will be sent to a school level liaison, the school director or other school contact, via email with the weblink for the online survey via Qualtrics survey software. This program protects the confidentiality of each participant such that responses cannot be linked back to an individual.

**Sample**

We will use a convenience sample as we already have established relationships and a positive rapport with the nine international schools that will make up the sample for this study. Four schools are located in Colombia, one in Guatemala, one in Mexico, another in Paraguay, and the remaining two schools are in Venezuela. Each school has students in pre-kindergarten to twelfth grade with total enrollment ranging from 300 to 1,200 students. The number of teachers varies from 20 instructors to 80 in total, while each school is lead by a School Director. The completion rate at each school varied from 10% to 43% of teachers who choose to participate, which we find to be representative of teacher perceptions for each school.
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Instrumentation

PLCs development will be measured by a shortened version of the Professional Learning Community Assessment (PLCA) instrument which was developed by Olivier, Hipp, and Huffman, but adapted by one of the authors (Olivier, Hipp, & Huffman, 2003, 2010; Gray, 2011). The alphas for the subscales ranged from .82 to .94 (Olivier & Hipp, 2010). The shortened form of this instrument was developed after items were selected from each subscale. Factor analysis was performed to determine the new instrument, the Professional Learning Communities – Short, was valid and reliable with a Cronbach’s alpha of .92 (Gray, 2011).

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).

Operationally, collegial trust will be defined by a subscale of the Omnibus Trust instrument, Omnibus T Scale (Hoy & Tschannen-Moran, 1997, 2003). The alpha coefficient of reliability for collegial trust is .94 (Hoy & Tschannen-Moran, 1997) and .95 for this study (Gray, 2011).

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).

Data Analysis

The first level of quantitative analysis will involve a bivariate correlational analysis using the Pearson Correlation Coefficient in order to test the relationships of the independent and dependent variables within the context of the six international schools in this study. Secondly, we will use multiple regression to determine the individual and collective relationships between the independent variables, enabling school structures, trust, and collective efficacy, the control variables, native citizenship and school level, and the dependent variable, professional learning communities.
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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 1. 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 (.59, \( \rho < .01 \)), Collegial Trust (.48, \( \rho < .01 \)), and Trust in Principal (.55, \( \rho < .01 \)), which were all significant. However, PLCs maintained a weak correlation to Collective Efficacy (.32, \( \rho < .01 \)), although still significant. PLCs shared had a negative relationship with Native Citizen (number of teachers from the country) and School Level (elementary, middle or high school), the control variables for the study.

In Figure 1 and Table 3, it is evident that together ESS, Collegial Trust, Trust in Principal, and Collective Efficacy explained 45% of the variance of the development of PLCs in the international schools involved in this study. ESS had a moderate effect on PLCs that was significant (\( \beta = .30, \rho < .01 \)), while Trust in Principal also had a moderate effect that was significant, too (\( \beta = .26, \rho < .01 \)). Collegial Trust also had a moderate that was not as significant (\( \beta = .22, \rho < .05 \)). Collective Efficacy did not demonstrate a significant effect on the development of PLCs (\( \beta = .09 \)).

Scholarly and Practical Significance of the Study

This research adds to our knowledge about PLCs as well as to the field of literature, but in context to international schools. Enabling School Structures have a significant effect of PLCs, as well as a strong relationship with Trust in Principal. 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 in the principal. However, this applies to the schools in the sample and a larger study would need to be conducted in order to state that these findings are representative of other international schools in South American. This is a limitation of this study.
Further, this study demonstrates the importance and necessity of enabling school structure, 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 the field of literature.

**Table 1: Descriptive Statistics of All Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Community (PLC)</td>
<td>121</td>
<td>1.67</td>
<td>3.83</td>
<td>2.8537</td>
<td>.42737</td>
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<tr>
<td>Enabling Structures (ESS)</td>
<td>121</td>
<td>2.00</td>
<td>4.82</td>
<td>3.6564</td>
<td>.52337</td>
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<tr>
<td>Trust in Colleagues (TC)</td>
<td>118</td>
<td>1.88</td>
<td>5.88</td>
<td>4.4070</td>
<td>.77061</td>
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<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>
</tr>
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<td>Collective Efficacy (CE)</td>
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<td>2.58</td>
<td>6.00</td>
<td>4.5405</td>
<td>.73557</td>
</tr>
<tr>
<td>Native Citizen (NC)</td>
<td>118</td>
<td>1.00</td>
<td>2.00</td>
<td>1.4569</td>
<td>.50030</td>
</tr>
<tr>
<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>
</tr>
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</table>
Figure 1: Conceptual Diagram of Hypothesized Relationships with Results

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>
</thead>
<tbody>
<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>
<td>1</td>
<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>.002</td>
<td>.002</td>
</tr>
<tr>
<td>Trust in Principal</td>
<td>1</td>
<td>.106</td>
<td>-.030</td>
<td>.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collective Efficacy</td>
<td>1</td>
<td>-.17</td>
<td>-.30**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Native Citizen</td>
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<td>.11</td>
<td></td>
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</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
### Table 3: Regression of PLCs on all Independent and Control Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
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<tr>
<td>(Constant)</td>
<td>.862</td>
<td>.300</td>
<td>2.872</td>
<td>.005</td>
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<td>Enabling Structures</td>
<td>.256</td>
<td>.076</td>
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<td>.001</td>
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<td>Collegial Trust</td>
<td>.122</td>
<td>.049</td>
<td>2.505</td>
<td>.014</td>
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<tr>
<td>Trust in Principal</td>
<td>.112</td>
<td>.036</td>
<td>3.104</td>
<td>.002</td>
</tr>
<tr>
<td>Collective Efficacy</td>
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<td>.049</td>
<td>.994</td>
<td>.322</td>
</tr>
<tr>
<td>Native Citizen</td>
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<td>.062</td>
<td>-2.016</td>
<td>.046</td>
</tr>
<tr>
<td>School Level</td>
<td>.001</td>
<td>.027</td>
<td>.035</td>
<td>.972</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PLCs
References


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


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