HIGH SCHOOL REDESIGN: PROFESSIONAL LEARNING COMMUNITIES, 2007–2008

Austin Independent School District
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EXECUTIVE SUMMARY

In a joint effort, Office of Redesign staff worked with members of the Office of Curriculum and Instruction to support the development of Professional Learning Communities (PLCs) on each high school campus in the district. The PLCs provided a forum for teachers, administrators, and instructional coaches to work collaboratively to share effective instructional practices, to determine and focus on areas of student need, and to make instructional improvements in the classroom. Through this initiative, the PLCs on school campuses were expected to increase teachers' instructional skills, confidence levels, and excitement about teaching; improve collaboration among teachers; increase teacher retention; raise levels of student engagement and performance; and ultimately, increase academic achievement for all student groups.

During the 2007–2008 school year, the Department of Program Evaluation (DPE) in Austin Independent School District (AISD) evaluated the PLC initiative in the high schools. The goals of the evaluation were to determine the progress made by PLCs within the district and to gauge the extent to which the necessary resources, structures, and supports were in place to allow the PLCs to grow and evolve. DPE conducted a survey of 783 high school teachers involved in PLCs on high school campuses and held a series of focus groups and individual interviews. The data collected were used to describe the PLCs established across the district and to determine the preliminary outcomes for PLC participants.

The evidence collected reflected a wide variety of campus differences with respect to structural resources and stages of development. The teachers surveyed shared a number of thoughts, reactions, and recommendations, many of which are summarized in this report. The data clearly indicate that teachers who were part of strong PLCs enjoyed them, believed they increased academic rigor, and found the professional support of their peers valuable. On the other hand, teachers who were not part of well-functioning PLCs reported a need for much clearer communication with and training by administrators; better support (e.g., a reduction in the number of initiatives introduced at one time) from administrators; and help balancing the time and energy demands of competing initiatives within the High School Redesign Initiative and campus-specific activities.

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INTRODUCTION

The fundamental objective of Professional Learning Communities (PLCs) for the 2007–2008 school year was to provide a forum for teachers, administrators, and instructional coaches to work collaboratively on an ongoing basis to improve the quality of teacher instruction and student learning in classrooms. Specifically, as a result of the initiative, PLCs were expected to

- increase teachers' skills, confidence levels, and excitement about teaching;
- increase collaboration among teachers;
- increase teacher retention;
- increase levels of student engagement and performance; and
- decrease achievement gaps between student groups.

PLCs were established in all district high schools. However, to meet the range of campus objectives, the models used to create these collegial learning groups varied and were supported by different external providers. Some high schools (e.g., Johnston, Lanier, and Bowie) created their own professional learning goals and structures, based on campus-identified needs. LBJ, Reagan, and Travis used the First Things First (FTF) model, which utilized a multidisciplinary, small learning community (SLC) approach to promote student engagement and learning. Akins, Anderson, Austin, Bowie (Social Studies/ Science), Crockett, International, and McCallum used the Disciplinary Literacy (DL) model, supported by University of Pittsburgh's Institute for Learning (IFL). The DL-PLC model focused on assisting teachers to design and implement rigorous instruction within core content areas.

In addition to providing regular days for training and times set aside during the school day, the district also provided time throughout the school year for teachers to meet in their PLCs. All high school campuses delayed class start times for an hour on selected dates during the course of the academic year. These "late start days" create time to improve teaching and learning, without taking teachers out of the classroom (Looby, 2008).

To effectively support and facilitate PLCs in the high schools across the district, administrators from the Office of High Schools and the Office of Curriculum and Instruction facilitated a PLC for the district's high school principals. Within this collegial learning group, the principals explored a variety of scholarly articles focused on the development and facilitation of PLCs on their respective campuses. Throughout the school year, they often explored the following ideas presented by Wenger (1998): (a) articulation of the purpose(s) of the PLCs (i.e., "joint enterprise"); (b) determination of how the PLCs should function (i.e., "mutual engagement"); and (c) development of shared practices and norms (i.e., "shared repertoire").

METHODOLOGY

PURPOSE OF THE EVALUATION

The 2007–2008 school year marked the formal commitment by the district and its high schools to the establishment and implementation of PLCs. Due to the collaborative nature of PLC work, an extensive evaluation of each stated PLC objective during the first year of implementation would have been premature. Instead, the PLC evaluation objectives for 2007–2008 were developed through a joint effort by District Program Evaluation (DPE) staff, Office of Redesign staff, and Office of Curriculum and Instruction staff, with input from researchers from Stanford University's Center for Research on the Context of Teaching. The evaluation was designed to provide formative data to the district regarding the extent to which campuses and central administration offices held a shared understanding of the definition of PLCs, and the extent to which the requisite resources for successful implementation of PLCs were present within each campus. As PLC work progresses in subsequent years, more advanced forms of evaluation will be necessary to inform progress and district planning.

EVALUATION QUESTIONS

The following questions guided the evaluation of the district's PLC program:

1. To what extent were the requisite conditions (e.g., time, leadership, trained facilitation, resources, and protocols) in place to implement successful PLC(s) on each campus?
2. To what extent did PLC participants express a clear understanding of the activities (i.e., in a manner that indicated their PLC involvement)?
3. What were the specific PLC-related activities on each campus?
4. To what extent did PLC participants express a clear conceptual understanding of the nature, participant roles, and objectives of PLCs?

DATA COLLECTION AND ANALYSES

With input from Office of Redesign staff, Office of Curriculum and Instruction staff, and researchers from Stanford University's Center for Research on the Context of Teaching, staff from Austin Independent School District's (AISD) DPE adapted the Professional Learning Communities Survey, previously developed by the National School Reform Faculty, to assess the extent which major factors were associated with PLCs in AISD (Appendix A).

The survey contained items asking teachers to assess the major factors associated with the development of a well-functioning PLC, using a six-point scale. These areas included

critical elements of PLC development, structural conditions, and social and human resources necessary for PLC success (Table 1). Survey results were summarized using descriptive statistics. Differences between campuses were measured using analyses of variance (ANOVA) or nonparametric procedures, depending on the item response characteristics and sample sizes.

Table 1. Items on the Professional Learning Communities Survey, by Topic

Critical elements	Structural conditions	Social and Human resources
Reflective dialogue	Time to meet and talk	Openness to improvement
De-privatization of practice	Physical proximity	Trust and respect
Collective focus on student learning	Interdependent teaching roles	Cognitive and skill base
Collaboration	Communication structures	Supportive leadership
Shared norms and values	Teacher empowerment and school autonomy	Socialization

Source. AISD Professional Learning Communities Survey, Spring 2008

A second section was added to the survey, in which teachers were asked to identify specific PLC activities from a checklist to describe the purpose(s) of their PLCs, how their PLCs functioned, and the development of shared practices and norms. Descriptive statistics were used to summarize the results.

DPE staff surveyed a sample of teachers from all district high schools in April 2008. To increase the likelihood that the survey responses would be representative of each school, the survey was sent to1,098 teachers representing all grade levels and content areas who were participating PLCs. Surveys were received from 783 teachers (71.3%) across all high schools (Table 2). To ensure a 5% confidence interval at the district level, a 62.3% response rate was needed. Thus, the results may be considered reliable and representative of high school teachers across the district.

Table 2. Campus Participation in the Professional Learning Communities Survey, Spring 2008

Campus	Number of Respondents	Percentage
Akins	100	12.80%
Anderson	77	9.80%
Austin	73	9.30%
Bowie	97	12.40%
Crockett	71	9.10%
International	20	2.60%
Johnston	51	6.50%
Lanier	52	6.60%
LASA	31	4.00%
LBJ	65	8.30%
McCallum	53	6.80%
Reagan	50	6.40%
Travis	43	5.50%
Total	783	100.0%

Source. AISD Professional Learning Communities Survey, Spring 2008

Analysis of the demographic data created a "picture" of the teachers and administrators who responded to the survey. This includes information about the validity of findings from the survey and provides direction for future efforts to recruit participants. Early career educators (i.e., those with 0 to 4 years of experience) were significantly more likely to respond than were their more experienced peers. Females were more likely than their male peers to respond (Table 3). Finally, teachers with more years of professional experience and with a higher level of educational achievement were less likely than were those with a bachelor's degree to respond to the PLC survey.

Table 3. AISD Professional Learning Communities Survey Response Rates, 2007–2008

Teacher experience	% Male	% Female	% Total
Associate's degree	0.5%	0.1%	0.6%
Bachelor's degree	28.2%	40%	68.2%
Master's degree	11.5%	17.4%	29%
Doctorate	0.009%	0.003%	1.3%
0–4 years experience	12%	15.8%	28%
5–9 years experience	0.08%	11%	19%
10–18 years experience	0.08%	12.2%	20.4%
19–40 years experience	0.09%	12%	21%
Total	41.6%	58.4%	100%

Source. AISD Professional Learning Communities Survey, Spring 2008

Note. There were 783 PLC survey respondents. Due to data availability and rounding errors, percentages may not sum to 100%.

DPE staff also interviewed a sample of teachers from all district high schools in May and June of 2008. An invitation to participate in an interview or focus group was sent to all teachers who completed the PLC survey. The interviews and focus groups were designed to describe and understand the context in which the PLCs operate, the support structures provided for PLC implementation, the roles of PLC members, and the activities that take place within the PLCs. Across all high schools, 81 teachers participated in an interview or focus group.

EVALUATION RESULTS

CRITICAL ELEMENTS PRESENT IN PLCS

On the survey, teachers across the district rated the extent to which the critical elements of PLCs were present in their groups (Table 4). These elements included the following: reflective dialogue, de-privatization of practice, collective focus on student learning, collaboration, and shared norms and values. Within this domain, teachers selected a descriptor based on a six-point scale, ranging from "not even close" to "totally there." The average rating across the district was 3.8, or just past the midpoint (3.5). Collective focus on student learning and collaboration were the critical elements that had the highest mean ratings across the district.

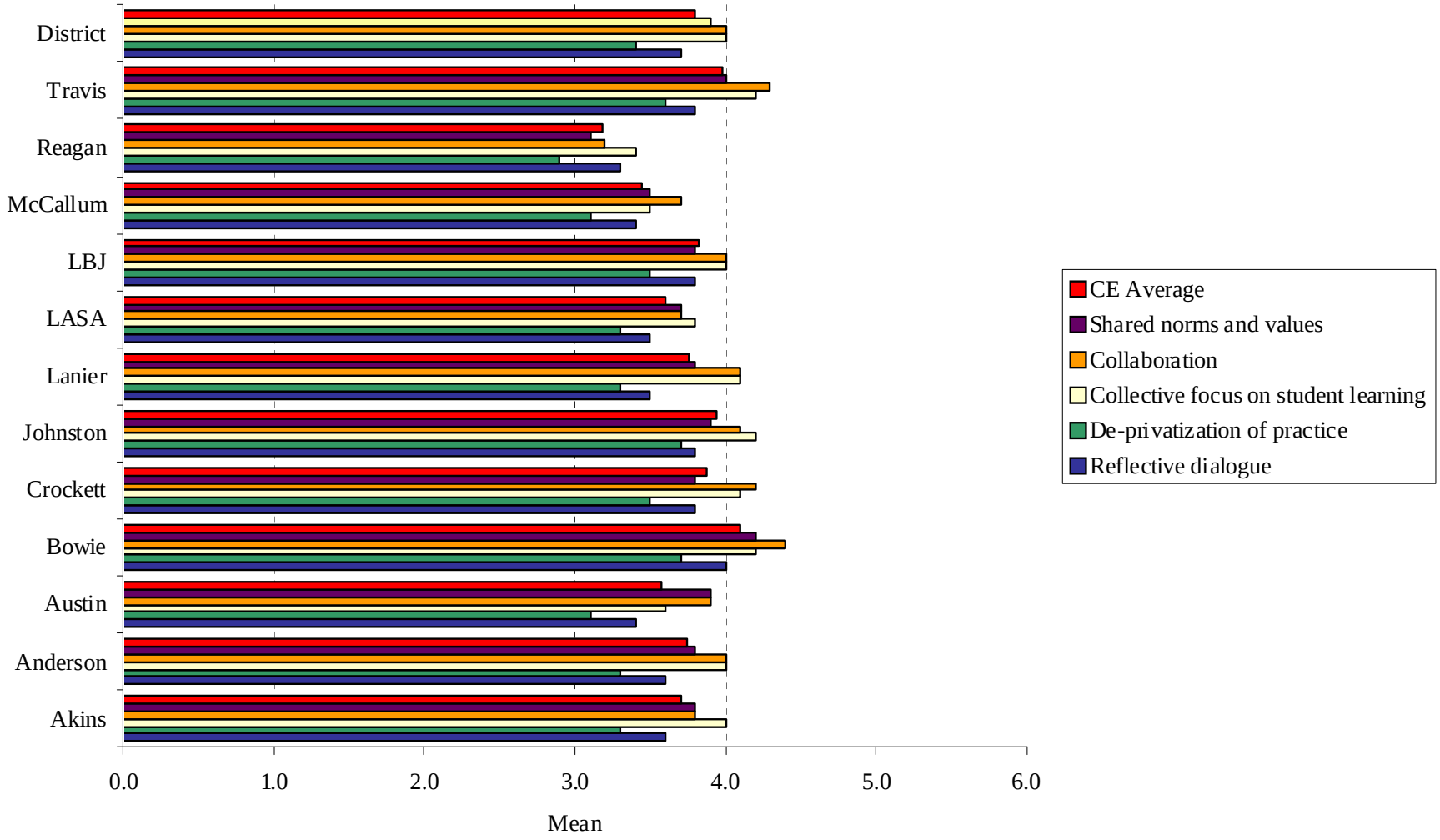
Table 4. Critical Elements of Professional Learning Communities, District-Level Results, Spring 2008

Critical element	Not even close yet 1	2	3	4	5	Totally there 6	Rating average
Reflective dialogue	1.0%	11.0%	**28.7%**	27.0%	17.7%	9.8%	3.7
De-privatization of practice	6.6%	15.9%	**33.2%**	22.4%	17.0%	4.9%	3.4
Collective focus on student learning	4.1%	8.0%	**25.0%**	24.4%	25.4%	13.0%	4.0
Collaboration	4.1%	9.8%	21.1%	**24.7%**	24.0%	16.2%	4.0
Shared norms and values	5.5%	10.3%	23.6%	**26.1%**	22.4%	12.3%	3.9

Source. AISD Professional Learning Communities Survey, Spring 2008

Across high schools, the teachers varied in their ratings of the critical elements evident in their PLCs (Figure 1). Overall, Bowie teachers rated the critical elements higher than did teachers in the other schools in the district. Teachers at Reagan rated the critical elements evident in their PLCs significantly lower (3.2) than did teachers in other high schools. The mean rating for reflective dialogue given by teachers at Austin (3.4) was significantly lower than the mean rating given by teachers at Bowie (4.0). When asked about their shared norms and values related to critical educational issues and student learning, Bowie (4.2) and Travis (4.0) teachers rated themselves significantly higher than did teachers at Reagan (3.1).

Figure 1. Teacher Ratings of Critical Elements in Their Professional Learning Communities, May 2008



Source. AISD Professional Learning Communities Survey, Spring 2008

During interviews and focus group conversations, teachers were asked to describe their PLCs to gauge their overall understanding of the critical elements that support a well-functioning PLC. Content analysis showed teachers' understanding of PLCs varied widely within and across campuses. Teachers shared comments directly related to the limited implementation of and the ideal image of PLCs in schools across the district. One teacher said, "It's a fancy name for a departmental meeting." Another teacher stated, "We call everything a PLC now. That's not necessarily what it is. Sometimes, it is just a meeting or a workshop." In contrast, a teacher said,

> People bring their lesson plans and share them. We break into small groups to look at the plans and provide feedback on what will work well and what will not work well. We provide recommendations on strategies and content. It is done in such a way that it is very reflective and helpful.

Another teacher described the PLC on her campus:

> We have spent some time determining how we will use "our time." We are improving lessons and reviewing new materials. We bring the new teachers on board. The time is spent developing rationale and what we expect from students as a result. We review student work and review testing information. We adjust our instruction accordingly… part of Late Start will be used in a large group to develop a common mission/direction and the rest of the time will be used for our own PLC.

Overall, many teachers described the critical elements of PLCs as valuable to the improvement of their practice. Teachers' participation in PLCs helped them to determine common goals to work toward throughout the school year. As a result of their participation, teachers indicated they were beginning to develop shared norms and values. Teachers reported that the increased focus on student learning and the collaboration between the teachers were conducive to the development of a more reflective, student-focused practice.

Structural Conditions for PLCs

The extent to which the structural conditions for PLCs were present on a campus was explored (Table 5). Teachers were asked to rate the structural conditions necessary for PLC development and implementation (e.g., time to talk and meet, physical proximity, interdependent teaching roles, communication structures, and teacher empowerment and school autonomy). The average rating across the district was 3.7, or just past the midpoint

(3.5). Time to meet and talk and physical proximity were the highest rated structural conditions. Teacher empowerment and school autonomy had the lowest average rating.

Table 5. Structural Conditions of Professional Learning Communities, District-Level Results, Spring 2008

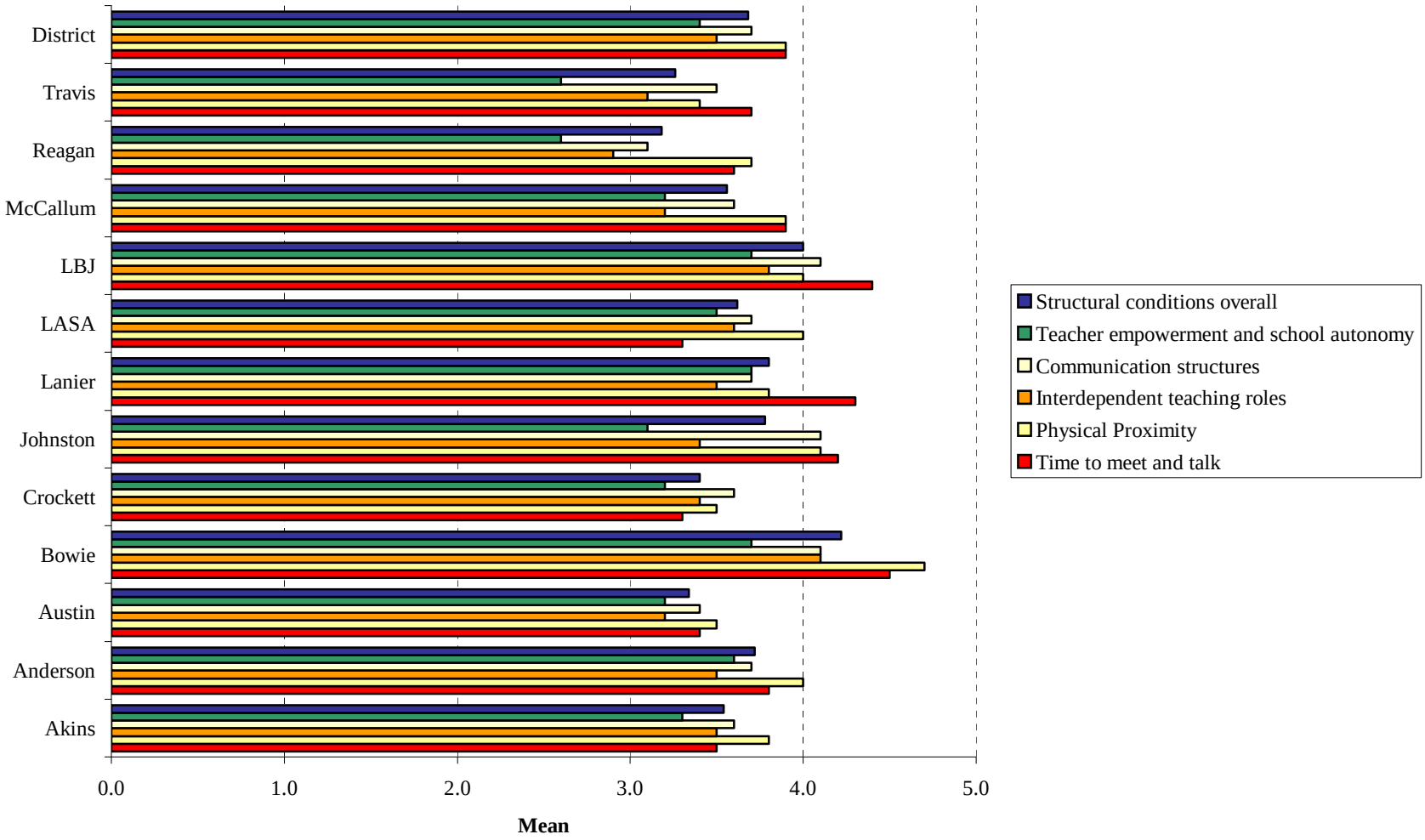
Critical element	Not even close yet 1	2	3	4	5	Totally there 6	Rating average
Time to meet and talk	7.10%	12.90%	21.30%	20.20%	21.50%	17.10%	3.9
Physical proximity	6.40%	11.20%	19.90%	22.40%	24.70%	15.40%	3.9
Communication structures	5.30%	12.80%	25.00%	24.30%	23.40%	9.10%	3.7
Interdependent teaching roles	7.20%	14.40%	30.00%	22.80%	18.40%	7.10%	3.5
Teacher empowerment and school autonomy	12.60%	15.70%	24.00%	23.10%	18.10%	6.40%	3.4

Source. AISD Professional Learning Communities Survey, Spring 2008

With respect to structural conditions, some significant differences were found between schools (Figure 2). Teachers at Bowie (4.2) and LBJ (4.0) rated the overall structural conditions for their PLCs significantly higher than did teachers at other high schools in the district. In rating time to talk, teachers at Bowie, LBJ, Lanier, and Johnston had mean ratings above 4. Bowie teachers also rated physical proximity (e.g., common spaces to meet or work) and interdependent teaching roles (e.g., the ways in which teachers work together to include team teaching and integrated units of study) significantly higher than did teachers at other schools. Bowie, Johnston, and LBJ teachers rated their PLC communication structures across teams, grade levels, and departments at 4.1.

Teacher empowerment and school autonomy was the lowest rated critical element in PLCs across all high schools. Teachers from the Bowie, Lanier, and LBJ campuses had the highest average rating (3.7). In contrast, teachers from Reagan and Travis had an average rating of 2.6 for teacher empowerment and school autonomy.

Figure 2. Teacher Ratings of Structural Conditions for Their Professional Learning Communities, May 2008



Source. AISD Professional Learning Communities Survey, Spring 2008

In the focus groups and interviews, teachers gave positive descriptions of the structural conditions in which their PLCs were functioning. They greatly appreciated the time set aside for PLC meetings and the opportunities to make decisions about improving instruction and learning. They valued the increasing interdependence among teachers within and across content areas. Examples of their comments include the following:

> "Our PLC met as a fine arts department, and we had the chance to get to know teachers and observe them teaching. This helped us to incorporate an interdisciplinary approach that helped all of us plan/teach and help kids make connections between their classes."
>
> "PLCs created a time for teachers to do things that they might not normally be able to do without the collaboration of others. We shared resources and strategies and coordinated what we were teaching."
>
> "In our PLC, we also work on DL strategies. We work at the grade level and then align across the curriculum at different grade levels. We make time for this weekly. I think our data will show that we did well with this approach."

Teachers also expressed some concerns about the structural conditions of the PLCs. Although highly rated, time to meet and talk also surfaced as a concern for many teachers. Examples of their comments are provided to illustrate these concerns.

> "Interdisciplinary teachers, elective teachers, specialty teachers aren't involved in PLCs and don't know what others are doing. It leaves people feeling like they aren't perceived as having anything of value to share. It's still our responsibility to teach these things (like higher thinking, academic rigor, etc.) that they all learn in PD but we're not allowed to be part of the discussions with content areas. And now, core teachers are busy tutoring during lunch, so there really is no time to build a community among our campus teachers."
>
> "I never meet with my PLC. My classes are in conflict with their meetings, and I do not know what is going on. I am not informed about what is going on. There is a lack of communication."
>
> "I do not meet in my PLC because of my schedule. They have their meetings when I have classes scheduled. Further, they focus on the core subjects and I teach an elective that uses a self-paced curriculum. The PLC really does not support my needs as a teacher, but I would like to know what is generally going on at my campus and this would be a place that I can stay informed."
>
> "There are no scheduled times during the class day. It is hard to find a common time for the members of the group. Before and after school is not an option for many because of coaching and family responsibilities."

Teachers across all schools related similar concerns about their inclusion in PLCs. In these conversations, the elective and special education teachers indicated they were not always included in a PLC or were not members of a PLC that supported their instructional improvement or content area needs. For example, one teacher said,

> Fine arts, elective, and special education teachers are left out of instructional improvement training. We are left out of the campus plans. We feel disrespected. Other content areas were able to develop their own PLC plans and work collaboratively. Elective teachers were subject to [a] canned program of consultants or being left out altogether.

Teacher empowerment and school autonomy was the lowest rated structural condition on the surveys, and teachers also expressed concerns related to these ideas during conversations. Some teachers were concerned about their PLCs operating based on mandates from district and/or campus administration. One teacher stated, "Our PLCs are dictated by 'administration.' PLCs should not have to conform to external expectations. Teachers have little choice about what they are learning or doing to improve their practice." Another teacher said, "Conflicting messages are received from the district office. We are told what we have to do and have little input. These messages have created a 'push back' from teachers."

Social and Human Resources for PLCs

To further describe the context for learning to take place, teachers were asked about the social and human resources available within their PLCs. These social and human resources included openness to improvement, trust and respect, cognitive and skill base, supportive leadership, and socialization (Table 6). Compared with critical elements and structural conditions, this domain had the highest overall average rating (4.0).

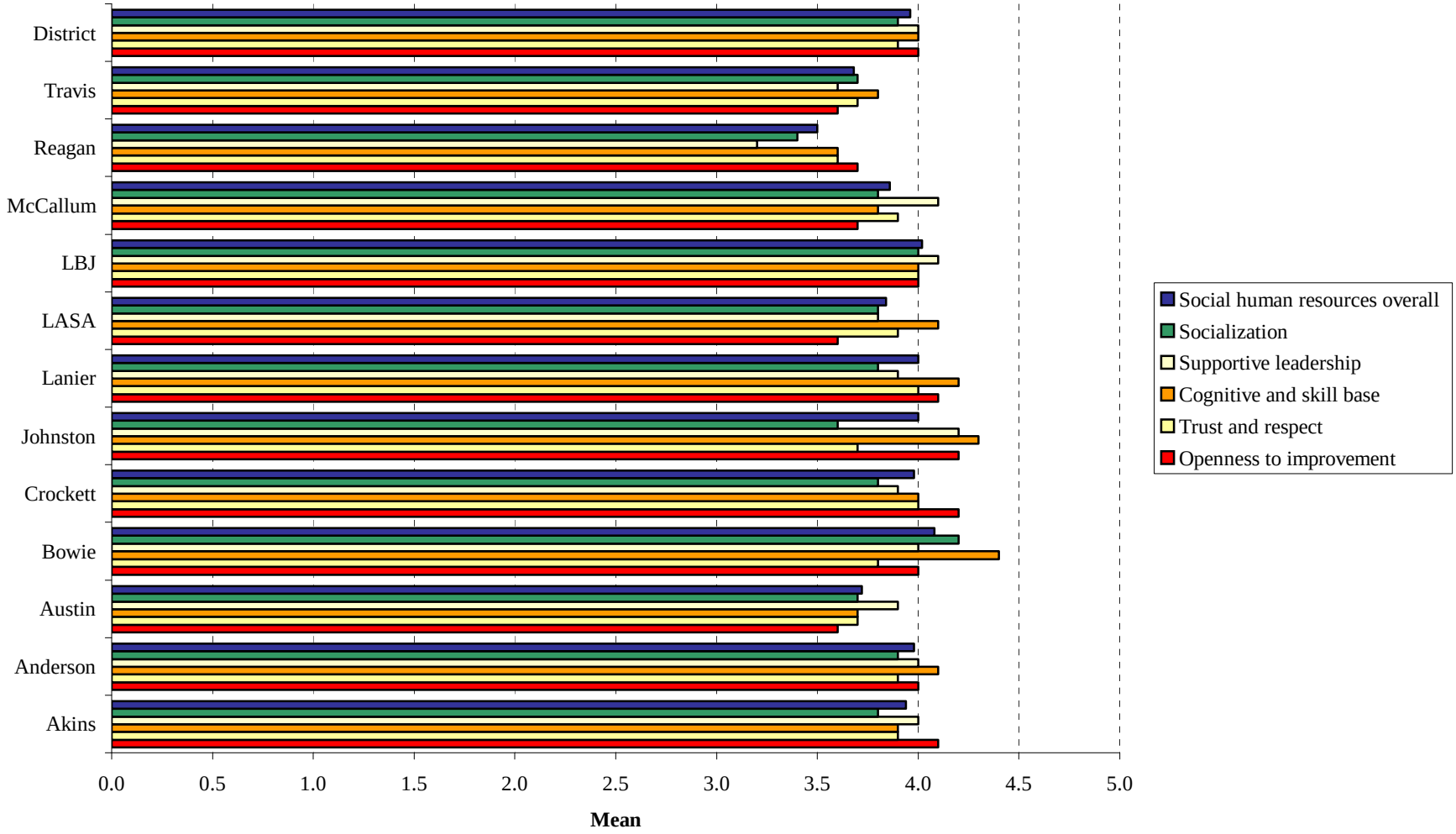
Table 6. Social and Human Resources of Professional Learning Communities, District-Level Results, Spring 2008

Critical element	Not even close yet 1	2	3	4	5	Totally there 6	Rating average
Openness to improvement	3.90%	10.20%	21.40%	24.30%	28.70%	11.40%	4.0
Cognitive and skill base	2.50%	6.70%	23.60%	28.00%	29.50%	9.60%	4.0
Supportive leadership	6.30%	9.70%	19.50%	23.10%	27.50%	13.80%	4.0
Trust and respect	5.50%	10.40%	21.70%	23.60%	28.10%	10.60%	3.9
Socialization	4.50%	10.20%	24.50%	25.80%	25.00%	9.90%	3.9

Source. AISD Professional Learning Communities Survey, Spring 2008

Survey responses concerning social and human resources within the PLCs were more consistent across the schools (Figure 3), compared with responses pertaining to critical elements and structural conditions of PLCs. One significant difference between the schools in this domain was found in response to a question about cognitive and skill base development within the PLC. This critical element refers to the formal structures that are in place within the PLC to assist marginal and ineffective teachers to improve their practice. Teachers at Reagan rated themselves significantly lower than did teachers at other schools, while Bowie, Johnston, and Lanier teachers rated themselves significantly higher.

Figure 3. Teacher Ratings of Social and Human Capital Within Their Professional Learning Communities, May 2008



Source. AISD Professional Learning Communities Survey, Spring 2008

During focus group conversations, teachers often discussed building teachers' cognitive and skill base. They talked about how their participation in PLCs helped to improve their own cognitive and skill base to improve student learning. Examples of teachers' comments follow:

> "I have been frustrated in creating rigor. My kids do not have the vocabulary. I feel like I spend a lot of time explaining things about the language and not really the content. I know that it is just me, and that I need to work on it. The PLC work helps me. Our work is coherent, and I am beginning to make connections. With the help of others, I am still developing whole lesson plans and gathering resources. It will come together; it just takes time."

> "PLCs are wonderful. We use it for planning within the department and by grade level or course. This is the best thing for us. It needs to happen more regularly. It may be a loss of instruction time, but it actually helps us create deeper, better lessons to do a better job in the classroom. I think it is a good investment and pays off in terms of student learning."

Other teachers, even within the same schools, had quite a different perception of their need for building their cognitive and skill base. They believed they did not need to participate in PLCs to improve their practice. For example, one teacher said,

> PLCs take time away from my planning and from my classroom time spent with kids… I have a master's degree. I know how I am doing. I should not have to spend hours of my time in these artificial groups to improve instruction when I do not need the help.

The other area that registered significant differences between campuses was that of supportive leadership, or the way school administrators help PLCs to focus on developing a shared purpose, continuous improvement, and collaboration. On the survey, supportive leadership was rated highest by teachers at LBJ and lowest by teachers at Reagan. In interviews, teachers often illustrated the importance of the principal's leadership. They reported that the degree to which principals supported PLCs on their respective campuses directly influenced the time spent working in PLCs, teacher buy-in, and teacher participation in PLCs.

One of the major ways principals communicated their support of PLCs was through the protection of the time designated for PLCs to meet. For example, one teacher said, "PLCs are supposed to be focused on instruction and supported by the principal. There are some differences within departments about where to focus our effort, but the principal buffers us [from outside demands]." Another teacher shared, "Our campus administration has done a fantastic job at safeguarding PLC time. We have had people try [to take the time for other things] but our assistant principals hold their ground and our [department] chairs do, too."

Some teachers struggled with the lack of supportive leadership on their campuses. They reported that principals did not hold teachers accountable for their participation in PLCs or for

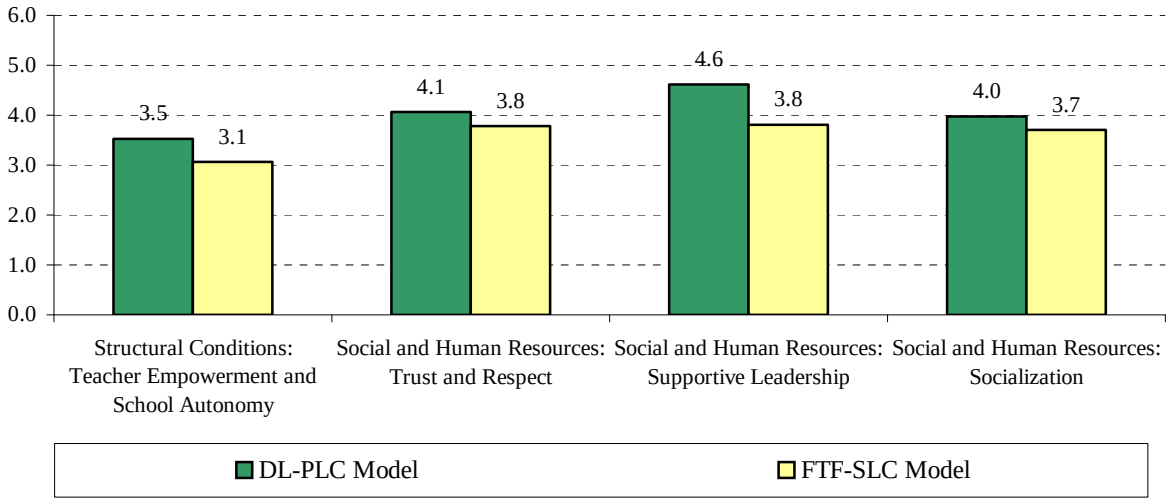
the types of activities taking place within the various PLCs on a campus. Teachers often viewed principals as being inconsistent in their communication and focus. Teachers often recommended that more training be provided to administrators and other campus leaders to support PLC work on campuses. The following comments illustrate their concerns:

> "Our principals give lip service to their support of PLCs, but they do not make sure that all groups are engaging in the activities that are expected by district or curriculum staff."
>
> "PLC leaders don't know how to lead a PLC. It's very old school and top down."
>
> "People get worried when they do not have the information and rely on second-hand information. We need more direct communication. This will help us deal with conflicts. Lack of information and the lack of decision or 'wait and see' is not always the best approach."

RESULTS BY PLC MODEL/PROFESSIONAL DEVELOPMENT PROVIDER

Based on whether the schools used the DL-PLC or FTF-SLC model, differences primarily were found in the area of social and human resources, with one difference related to a structural condition (i.e., teacher empowerment and school autonomy). Schools using the DL-PLC model had significantly higher ratings than did FTF-SLC schools on the following critical elements: teacher empowerment and school autonomy, trust and respect, supportive leadership, and socialization (Figure 4). These differences may have been influenced by the degree of social and human resources available within the PLC. Since Johnston, Lanier, and Bowie instituted a hybrid model or developed their own variations of PLCs, they were excluded from this analysis.

Figure 4. Significant Survey Response Differences, by Professional Learning Community Model, May 2008



Source. AISD Professional Learning Communities Survey, Spring 2008

In the teacher focus groups and interviews, teachers using the DL-PLC model often talked about the professional development support they received throughout the school year from IFL. Teacher leaders often commented that the lessons and support mechanisms were better timed this year and more useful for their work, compared with the previous year. The teacher leaders also reported they utilized this support in the facilitation of PLCs at their school. Specifically, the focus of their work was to design instructional strategies and plans that would increase academic rigor in the classroom. In this process, the PLC groups that were focused on core content determined common goals to work toward throughout the school year, collectively designed units of study and lesson plans, and assessed how individuals and groups were progressing toward meeting their goals.

In contrast, teachers at FTF-SLC schools described a different approach to instructional improvement. At these schools, the interdisciplinary SLC groups were expected to examine the engagement, alignment, and rigor present in their respective classrooms. However, they reported little support from the FTF service providers to help them effectively facilitate their PLCs so they could integrate best practices within or across content areas.

PLC Activities Across Campuses

Effective PLCs are characterized as having articulated and shared purpose(s). The purpose(s), or joint enterprise, should be understood and continually renegotiated by its

members (Wenger, 1998). With this idea in mind, teachers were asked to identify the purposes for their PLCs, using a comprehensive list provided within the second part of the survey (Table 7). On average, teachers identified four to five purposes per PLC. The most commonly identified purposes of the PLC's were (a) sharing and discussing research on effective teaching methods (83%), (b) increasing teacher understanding of what students must know and do as a result of every instructional unit (65.6%), and (c) reviewing of student achievement related to articulated goals (59.8%). In the survey, individual lesson planning also was included as a non-example to assess teacher understanding of the PLC's purpose. The percentage of teachers identifying this activity as a purpose for their PLC was lower than that for any other activity.

Table 7. Purpose(s) of Professional Learning Communities, District-Level Results, Spring 2008

Purpose	Response %
Share and discuss research on effective teaching methods	83.00%
Better understand what all students must know and do as a result of instruction	65.60%
Review student achievement related to articulated goals	59.80%
Share and discuss research and practices for special populations	55.50%
Learn to use the classroom observation protocol for instructional improvement	47.80%
Learn to use protocol for studying student work	47.30%
Evaluate adherence to and the effectiveness of our team norms (twice per year)	41.00%
Planning individual lessons (without collaborative input)	25.00%

Source. AISD Professional Learning Communities Survey, Spring 2008

Teachers were asked to identify the structures and activities that described the ways they worked in their PLCs (Table 8). The highest percentage (84.5%) of teachers reported that their PLCs had regularly scheduled meetings; 74.9% of teachers reported using organized, planned agendas for PLC meetings; and 71% reported that most members regularly attended PLC meetings. The PLC activities were focused on examining state standards, curriculum development/alignment, student achievement, clarifying the criteria for assessing student work, and engaging in collective inquiry on questions about student achievement.

Table 8. Professional Learning Communities Structures and Activities, District-Level Results, Spring 2008

Activity	Response %
Conduct regularly scheduled meetings	84.50%
Use organized, planned agenda for PLC meetings	74.90%
Members routinely attend PLC meetings	71.00%
Examine state standards, curriculum development/ alignment, and student achievement	62.80%
Clarify the criteria for assessing student work	50.10%
Engage in collective inquiry on questions about student achievement	49.70%
Examine student/school/district data trends	48.70%
Observe classrooms of PLC members within campus	48.30%
Identify policies and practices that encourage student learning	47.10%
Work interdependently to achieve common goals set from within the PLC	46.90%
Use assessment results to identify students who need additional support	45.10%
Identify strategies and create instruments for student assessment	44.40%
Identify the proficiency standards for common student assessments	41.90%
Identify the standards or targets each student must achieve	39.10%
Practice applying criteria for student assessment	35.00%
Respond to parent emails and phone calls	28.80%
Observe classrooms of PLC members in another school	24.70%
Plan field trips for students	21.40%
Individually grade student work	18.50%

Source. AISD Professional Learning Communities Survey, Spring 2008

Teachers were asked if they had examined data within their PLC work (Table 9). Overall, 48.7% of teachers indicated they used data in their PLC endeavors. Of these teachers, most reported examining school (81.4%), district (64.0%), and state (59.1%) assessment data to guide instruction; in addition, 60.5% of teachers reported they examined student attendance data in their PLCs.

Table 9. Data Reviewed in Professional Learning Communities, District-Level Results, Spring 2008

Data	Response Percent
School assessment data	81.40%
District assessment data	64.00%
Attendance data	60.50%
State assessment data	59.10%
Tutoring service data	37.40%
Discipline referral/action data	28.70%
Students dropout data	27.30%
Student enrollment in rigorous courses	19.70%
Other areas in which we hope to engage students (e.g., community service)	18.70%
National assessment data	14.70%
Extracurricular activities data	14.70%
Parent conferences regarding discipline	14.40%
Student graduation data	13.70%

Source. AISD Professional Learning Communities Survey, Spring 2008

For PLCs to be well functioning, they need to generate a shared repertoire of ideas, which take the form of products or outputs (Wenger, 1998). These products or resources (e.g., assessment tools, curriculum documents, and observation protocol) provide a way to express and sustain the collective knowledge and skills of the group.

On the survey, teachers identified outputs and products produced from the work of their PLCs (Table 10). Consistent with the most commonly occurring activities in PLCs, 65% of the teachers reported that they used common assessments to identify students who need support for learning, to discover strengths and weaknesses in instruction, and to help measure their program's effectiveness. More than half (53.6%) of the teachers reported that they generated and submitted products that resulted from work on questions related to student learning. Half (50%) of the teachers developed strategies and systems to assist students in acquiring prerequisite knowledge and skills when they were lacking in those areas.

Table 10. Products of Professional Learning Communities, District-Level Survey Results, Spring 2008

	Response %
Used common assessments to (a) identify students who need additional time and support for learning, (b) discover strengths and weaknesses in our individual teaching, and (c) help measure our program's effectiveness	64.60%
Generated products related to student learning	53.60%
Developed strategies and systems to assist students in acquiring prerequisite knowledge and skills when they are lacking in those areas	50.10%
Developed strategies to extend and enrich the learning of students who have mastered essential skills	42.00%
Developed a system of interventions for students to receive additional time and support for learning if he/she experiences initial difficulty	41.70%
Received frequent and timely feedback about the performance of students on school, district, and state assessments	39.80%
Taught students the criteria to be used in judging the quality of their work and have provided them with examples	39.30%

Source. AISD Professional Learning Communities Survey, Spring 2008

The teachers described the structures of, activities within, and products of a well-functioning PLC in ways that were consistent with the survey results. Sample teacher comments from the focus group conversations include the following:

> "Our PLC works well. The instructional coach at the school sets the agenda. We are informed ahead of time about the agenda and about how we need to prepare. Meetings are run by the agenda with a purpose stated, and there is a product to be produced at each meeting. We work together in developing activities, units of study, unit tests, calendars, et cetera. PLCs are seen as an effective way to support and improve instruction and are valued by the teachers."

> "All of our teachers meet in a PLC. Each department makes the decisions about what we will do in our PLCs and have our assistant principal approve our activities. This helps us to make sure we stay on track. We share strategies and ideas and try to include other disciplines within our own content area. We focus on improving instruction and have learned to do the Dana Walks [classroom observations]."

During the focus group conversations, as teachers described the PLC activities, they often requested supportive leadership to help guide them in selecting and facilitating these activities. They often suggested that having supportive leadership would help them create well-functioning PLCs. Teachers shared the following:

> "There needs to be a way to appoint someone in the PLC to take the lead and be responsible for facilitating the PLC activities."

> "PLC time needs to be mapped out across the school year to make the most use out of the time provided across the school year."

"Leadership in PLCs needs to trade off among members. It would help get people out of being passive if leadership rotated. If we would use more protocols it would help lead us to productivity. Wasting an hour is really disheartening."

"There is no formal training for PLC leaders…What the structure is supposed to look like….Agenda setting is even more planning time. I have no idea what it's supposed to be like. I just sort of say 'here's what we're doing.'"

DISCUSSION

The purpose of this evaluation was to determine the progress of PLCs in high schools across the district and to gauge the extent to which the necessary resources, structures, and supports were in place to allow PLCs to grow and evolve. To do so, DPE staff conducted a survey of 783 teachers involved in PLCs on high school campuses and held a series of focus groups and individual interviews to enhance the contextual understanding of the survey data.

With respect to critical elements, structural conditions, and social and human resources, the data collected reflected some differences across campuses and within schools. Teachers at Bowie seem to be most developed in their PLC work, while teachers at Reagan consistently reported the lowest levels of PLC development. Although variation was evident across schools by construct, the differences between the means were not often statistically significant. This may indicate that the various schools are developing their PLCs in a similar manner.

To understand PLC development across the high schools, the context of teaching should be considered. Teachers have operated in an independent tradition. This tradition of independence—which some may consider isolation—is a common characteristic of high schools (McLaughlin and Talbert, 2001). So, developing a culture of collaborative inquiry with respect to the improvement of teaching and learning represented a significant change from the norm.

PLCs successful in creating a culture of inquiry have been characterized by the following critical elements: reflective dialogue, de-privatization of practice, collective focus on student learning, collaboration, and shared norms and values (Louis, Marks, & Kruse, 1996). The data collected and analyzed in this evaluation indicated teachers were indeed coming together collaboratively with a focus on student learning. De-privatization of practice was not as fully developed, which might be expected given the traditions of teaching practices. Teachers may need leadership, skill development, and opportunities to increasingly share, observe, and discuss each other's philosophies and practice.

Structural conditions also play an important role in the development of PLCs and include time and space for groups to meet, structures for communication, recognized settings for teachers to work together, and autonomy for decision making. The data from this evaluation indicated that providing time and space to meet appeared to be a fairly straightforward task. With district support, most schools consistently were able to establish a time and place for members to meet. Most teachers consistently met with their PLC groups and

were greatly appreciative of this time to work together. However, some teachers were not able to participate as much as they would have liked. Improvements in the communication structures, within and across teams; grade levels; and departments may be necessary to increase teacher inclusion and participation in PLCs.

On the surveys and in the interviews, teachers across the district reported lower levels of empowerment and autonomy, compared with the other structural conditions necessary to support PLC development. This finding is not surprising because teacher empowerment and autonomy are difficult to develop and require that the principal communicate his or her vision of instructional improvement through the development of teacher expertise (Keedy & Finch, 1994). Consistent practice and skilled leadership are required to achieve a balance between teacher/school empowerment and the development of common goals between the classroom, the school, and the district to ensure coherence in teaching and learning for all students (Blase & Blase, 2001).

The data collected in regard to the social and human resources necessary for well-functioning PLCs were rated highly and consistently across schools. Teachers were open to improvement and were sharing practices to improve instruction. Most teachers reported that the protection of their PLC time and the encouragement to work collaboratively were evidence of the presence of supportive leadership in their schools.

The differences found between the DL-PLC and FTF-SLC models were primarily associated with social and human resources, with DL-PLC members reporting significantly higher ratings than FTF-SLC members. This finding is not surprising considering IFL's DL work with teacher leaders accomplished during the past two years. In this work, teacher leaders in core content areas were supported to increase the rigor of instruction in their own classrooms and expected to facilitate PLCs to help their peers to do the same. Talbert, David, and Lin (2008) found lead teachers had experienced substantial growth in their cognitive and skill base, had improved leadership skills, developed openness to instructional improvement, and created a culture of collaboration focused on promoting academic rigor and student engagement in the classroom.

Furthermore, the differences between the PLC models may be statistical artifacts of the district context. It should be noted that FTF schools were selected to participate in FTF based on campus-level data that showed low student performance on the Texas Assessment of Knowledge and Skills (TAKS). Therefore, the survey ratings in terms of trust and respect and

teacher empowerment and school autonomy may be more specifically attributable to the overall status and student achievement issues within the campuses, and perhaps are only related to the PLC model by circumstance.

The overall findings related to PLC structures and activities were positive. Most teachers indicated that their PLCs used planned agendas to facilitate PLC meetings and had consistent participation by all members. These practices contributed to the effective functioning of the PLCs. However, the results also indicated that almost one in four of the PLCs did not have an organized, planned agenda for PLC meetings or consistent participation by all members. Many teachers may need further development opportunities to understand more thoroughly what activities are intended to take place during allocated PLC time, and expectations for their consistent participation should be articulated. The productivity of the group may be affected by the absence of a routine, well-organized, and well-attended meeting structure.

With a unified focus, teachers indicated that they were participating in activities associated with well-functioning PLCs. Teachers most often reported that they were sharing research and practices related to effective instruction, focusing on student learning needs, and reviewing student achievement related to articulated goals. However, three non-examples of PLC activities also were selected by teachers completing the survey: individually grading student work, planning field trips, and responding to parent phone calls and e-mails. Although these activities were selected less often than were other activities, teachers did report spending PLC time on them. This finding may indicate that some teachers or PLC groups do not understand how to begin the process of creating a culture of inquiry or are unclear about the purpose for which they were brought together.

Overall, teacher comments on the surveys and their discussion in the focus groups and interviews revealed that most teachers highly valued the time spent and the work conducted in their PLCs. Teachers who were part of a well-functioning PLC enjoyed the experience. They reported their experiences within these groups increased their overall morale and excitement about teaching. In an environment of change and competing initiatives, teachers consistently identified their PLC as being the most helpful support in the improvement of their classroom instruction, compared with other district initiatives. They believed the support they received from their participation in PLCs increased the academic rigor of their classrooms, which in turn, they expected would improve student learning outcomes.

On the other hand, teachers who indicated that they were not part of a well-functioning PLC still found value in the experience, but requested additional supports. They requested that district and campus administrators provide clearer communication about the expectations for PLCs, reorganization of PLC membership to make the PLC more meaningful, improved training or guidance to facilitate PLCs, and help in balancing the time and energy demands of competing initiatives within the High School Redesign Initiative and campus-specific activities.

CONCLUSIONS AND RECOMMENDATIONS

The district's mission was to provide a forum for teachers, administrators, and instructional coaches to work collaboratively on an ongoing basis to improve the quality of teacher instruction and student learning in classrooms. Toward this end, PLCs were established and supported in all high schools during the 2007–2008 school year. An evaluation was conducted to gauge the extent to which the necessary resources, structures, and supports were in place to support PLC development and to describe the progress of PLCs within the district.

Overall, the evaluation revealed positive results for all schools. PLCs were supported through a combination of efforts provided by the district's Office of High Schools, Office of Curriculum and Instruction, Office of School Redesign, campus administrators, professional consultants, and teacher leaders. In most cases, time consistently was set aside for PLCs to meet and expectations for PLC work were articulated. As a result, most teachers identified the PLCs as a valuable source of support for improving teaching and learning. Many PLCs were described as being collaborative and focused on student learning, and teachers were open to improvement and sharing best practices.

PLC effectiveness can be increased with relatively minor changes in implementation. The following recommendations are provided for consideration:

1. *Provide continuing PLC facilitation training for school administrators and teacher leaders*. Focusing group conversations is a major element in the success of any meeting. Focusing high school teacher conversation about teaching and learning may be especially challenging given the teaching profession's history of isolation and/or autonomy. Many leaders do not have the skills to facilitate the work productively and need support to lead their groups toward realizing their instructional improvement goals.

2. *Expand PLC training to all group members*. School principals were involved in a district-led PLC about supporting professional learning opportunities on their respective campuses. DL-PLC training was provided for teacher leaders on campuses, using the DL model. However, some PLC groups may be led and/or facilitated by those who have not been supported to assume this role. Extended PLC facilitation may improve teacher understanding about the purpose for their PLCs and help PLC members to work more effectively together. For example, a teacher said, "Certain individuals on campus are trained and understand PLCs, but only those involved directly in the training or initiative really get it…others don't know very much about it or how it is supposed to work, or why." Another said,

   > We don't really know what we're doing. The leader is expected to do everything. At the Association for Supervision and Curriculum Development conference, I attended meetings about what PLCs were and how they work. Lots of people need to be trained so they can teach everyone else.

3. *Align and clearly articulate expectations for teacher participation in school improvement initiatives to reduce demands on teacher time and reduce conflicting messages.* For some teachers, it was unclear how often PLCs should meet, how often they were required to attend, and how they should prioritize participation when multiple initiatives required their attention. The following statements illustrate teachers' concerns:

   > "The time we have to meet pulls us in so many directions. It is difficult to identify priorities, so we go with what impacts our classroom instruction the most immediately."

   > "We are being asked to do so many initiatives, and maybe they can all co-exist. Things could be related, but there is no time for us to organize all of the initiatives or content. How does the Campus Improvement Plan fit with Quality Teaching for English Learners? How does PLC fit with Advisory? Maybe they fit, we can't tell right now."

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APPENDICES

Appendix A

1. PLC/SLC Resources and Requisite Conditions Survey

This survey is designed to collect your opinions about Professional Learning Communities/Smaller Learning Communities development and use on your campus. The survey consists of three Likert-type rating scales that pertain to information about PLC/SLC Critical Elements, Structural Conditions, and Social and Human Capital. The survey also asks about the types of PLC activities that take place on your campus.

The responses you provide will be confidential. Results will only be reported in groups (by campus or within content areas).

Thank you in advance for your time and for sharing your thoughts with us.

1. Please rate the following 5 critical elements of PLC/SLC development.

	Not Even Close Yet					Totally There
Reflective Dialogue	◯	◯	◯	◯	◯	◯
De-privatization of Practice	◯	◯	◯	◯	◯	◯
Collective Focus on Student Learning	◯	◯	◯	◯	◯	◯
Collaboration	◯	◯	◯	◯	◯	◯
Shared Norms and Values	◯	◯	◯	◯	◯	◯

What is your evidence? What are your questions?

2. Now assess your school on the structural conditions available to PLC/SLC development.

	Not Even Close Yet					Totally There
Time to Meet and Talk	◯	◯	◯	◯	◯	◯
Physical Proximity	◯	◯	◯	◯	◯	◯
Interdependent Teaching Roles	◯	◯	◯	◯	◯	◯
Communication Structures	◯	◯	◯	◯	◯	◯
Teacher Empowerment and School Autonomy	◯	◯	◯	◯	◯	◯

What is your evidence? What are your questions?

3. Finally, assess your school on the social and human resources available to PLCs/SLCs.

	Not Even Close Yet					Totally There
Openness to Improvement	◯	◯	◯	◯	◯	◯
Trust and Respect	◯	◯	◯	◯	◯	◯
Cognitive and Skill Base	◯	◯	◯	◯	◯	◯
Supportive Leadership	◯	◯	◯	◯	◯	◯
Socialization	◯	◯	◯	◯	◯	◯

What is your evidence? What are your questions?

2. PLC/SLC Activities

4. Joint Enterprise: What is the PLC/SLC about?

- ☐ Share & discuss research on effective teaching methods
- ☐ Share & discuss research and practices for ELLs, SpEd, and other disaggregated student groups
- ☐ Better understand what all students must know and to be able to do as a result of every unit of instruction
- ☐ Planning individual lessons (without collaborative input)
- ☐ Evaluate our adherence to and the effectiveness of our team norms at least twice each year
- ☐ For each of the academic and affective goals set for students, the question is asked, “How do we know if our students are achieving this goal?”
- ☐ Learn to use protocol for studying student work
- ☐ Learn to use the classroom observation protocol in use at this campus (i.e. DL, Dana and/or EAR)

Other (please specify)

5. Mutual Engagement: How does the PLC/SLC do its work?

- [ ] Regularly scheduled meetings
- [ ] Organized, planned agenda for PLC meetings
- [ ] Most all members routinely attend PLC meetings
- [ ] Work with colleagues regarding state standards, district curriculum guides, trends in student achievement, and expectations for the next course or grade level
- [ ] Individually grading student work
- [ ] Work with colleagues to clarify the criteria by which the quality of student work will be judged
- [ ] Practice applying criteria by which to judge the quality of student work until it is consistent
- [ ] Plan field trips for students
- [ ] Identify the specific standard or target each student must achieve on each of the skills being addressed by formative assessment
- [ ] Classroom observations within your PLC members/campus
- [ ] Identify policies and practices that encourage learning in homework, grading, discipline, etc.
- [ ] Work interdependently to achieve common goals set from within the PLC
- [ ] Engage in collective inquiry on questions specifically linked to gains in student achievement
- [ ] Respond to parent emails and phone calls regarding students
- [ ] Identify strategies and created instruments to assess whether students have the prerequisite knowledge and skills.
- [ ] Identify the proficiency standard we want each student to achieve on each skill and concept examined with our common assessments
- [ ] Visits to other campuses to observe PLCs or classrooms
- [ ] Use the results of common assessments to identify students who need additional time and support to master essential learning, and ensure they receive proper support
- [ ] Have examined data trends

Other (please specify)

6. If you have examined data within your PLC/SLC work, please indicate what types of data your PLC/SLC has examined.

- [ ] School assessment data
- [ ] District assessment data
- [ ] State assessment data
- [ ] National assessment data
- [ ] attendance
- [ ] extra-curricular activities
- [ ] tutoring services
- [ ] students enrolled in most rigorous courses offered
- [ ] students graduating without retention
- [ ] students who drop out of school
- [ ] other areas in which we hope to engage students (such as community service)
- [ ] number of referrals (including top three reasons)
- [ ] number of parent conferences regarding discipline
- [ ] number of in-school suspensions (including top three reasons)

Other (please specify)

7. Shared Repertoire: What has the PLC/SLC produced?

- [ ] Generate and submit products that result from work on questions related to student learning.
- [ ] Use common assessments to (a) identify students who need additional time and support for learning; (b) discover strengths and weaknesses in our individual teaching; and, (c) help measure our program's effectiveness
- [ ] Team members each receive frequent and timely feedback about the performance of his/her students on team, district, and state assessments
- [ ] Have taught students the criteria to be used in judging the quality of their work and have provided them with examples
- [ ] Develop a system of interventions that guarantees each student will receive additional time and support for learning if he/she experiences initial difficulty
- [ ] Develop strategies and systems to and systems to assist students in acquiring prerequisite knowledge and skills when they are lacking in those areas
- [ ] Develop strategies to extend and enrich the learning of students who have mastered essential skills

Other (please specify)

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