Though promising as an implement for school reform, few professional learning centers (PLCs) have turned the vision into reality. This paper looks at how PLCs develop and maintain momentum. It examines and documents efforts in schools actively engaged in creating PLCs based on Hord's model. Hord's model employs external change agents, or codevelopers. Research, conducted in nine states, was built on five dimensions from Hord's model: (1) shared and supportive leadership; (2) shared vision and values; (3) collective learning and application; (4) supportive conditions; and (5) shared personal practice. Data for the study reported in this paper were collected from 58 structured interviews with administrators and teachers, the last round of data collection for a 5-year project. The interviews were analyzed using the five dimensions. Key findings include the importance of leadership from school principals and the need to create a culture of trust, respect, and inclusiveness with a focus on relationships. The evidence supports the distinct yet overlapping nature and interdependency of the five dimensions. In addition, 14 indicators emerged through data analysis that helped to reconfigure and expand the model. Briefly, the new model involves the entire professional staff in continuous learning and collaboration. (Contains 5 appendices and 19 references.) (WFA)
DOCUMENTING AND EXAMINING PRACTICES
IN CREATING LEARNING COMMUNITIES:
EXEMPLARY AND NON-EXEMPLARS

Kristine A. Hipp
Leadership Studies
Cardinal Stritch University
6801 N. Yates Rd., Box 103
Milwaukee, WI 53217
414-410-4345
khipp@stritch.edu

Jane B. Huffman
Department of Teacher Education and Administration
University of North Texas
1300 Highland #218A – P.O. Box 311337
Denton, TX 76203
940-565-2832
Huffman@unt.edu

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DOCUMENTING AND EXAMINING PRACTICES IN CREATING LEARNING COMMUNITIES: EXEMPLARS AND NON-EXEMPLARS

Since Peter Senge published his landmark book in 1990, *The Fifth Discipline*, both the corporate world and leading educators have been struggling with ways to foster and sustain learning communities, the "promise" for organizational reform. Practitioners and researchers alike have provided organizations a myriad of images as to "how" these learning communities should look, but few have formed these visions into reality (Darling-Hammond, 1996; DuFour & Eaker, 1998; Fullan, 2000; Hord, 1997; Senge, 1990). The task has been considerably more formidable than anticipated, thus the challenge of moving from concept to capability continues (Fullan, 2000; Zempke, 2000).

In response to this challenge, Shirley M. Hord, project director at the Southwest Educational Development Laboratory (SEDL) in Austin, Texas, conducted a significant review of the corporate and educational literature to identify the critical dimensions of a professional learning community (PLC) (Hord, 1997). Using these dimensions as a framework, she initiated a five-year project that began with a search for mature PLCs. Needless to say, Hord identified less than a handful of these communities and found the stories of their beginnings, for the most part, lost with time. This led her to purposefully develop such cultures with external change agents from nine states across the United States. These change agents, called Co-developers, each adopted a school and worked collaboratively with staff to model and help to facilitate the change process over a two year period. Extensive data using a variety of methods were collected over the course of this project; however, the findings presented in this paper are derived from the second
year of systematic work and documentation of specific efforts in six of the twelve schools involved. Our goal was to never again miss the richness and complexity of the journey.

Purpose of Study

This purpose of this paper is to document and examine evidence of purposeful efforts in schools that are actively engaged in creating PLCs. The authors examined the evidence from site interviews to uncover exemplars and non-exemplars that validate practices promoting and practices hindering school efforts. The findings will assist leaders and external change agents in guiding schools toward creating and maintaining PLCs as they move from initiation to implementation, and ultimately to institutionalization (Fullan, 1990).

Specifically, the paper will provide:

a) A report of evidence gathered from 58 on-site interviews of faculty and staff in six K-12 schools during the second year of the project.

b) A clear picture of the progressive development of professional learning communities from initiation to implementation.

c) Reflections on learnings and generation of next steps that lend credibility and address the challenge of sustaining current efforts.

d) An examination of the inclusiveness of the Hord’s PLC model.

Theoretical Framework

The term “learning community” is interpreted in a variety of ways as illustrated in Appendix A (Huffman, Hipp, Moller & Pankake, 2001). However, the theoretical framework and defining dimensions of this study emerged from Hord’s (1997) review of the literature that sought to:
a) define and describe what the literature is calling the professional learning community; b) to describe what happens when a school staff studies, works, plans, and takes action collectively in behalf of increased learning for students; and c) to reveal what is known about how to create such communities of professionals in schools. (p. vii)

She defined PLCs as the professional staff learning together to direct their efforts toward improved student learning. Moreover, she conceptualized this collaborative culture as a vehicle to promote continuous learning and engage the educational system in school improvement. A description of the five dimensions that emerged from this review follow:

1. Shared and supportive leadership: School administrators participate democratically with teachers by sharing power and authority, inviting input into decision-making, and promoting and nurturing leadership among staff.

2. Shared vision and values: Staff share visions for school improvement that have an undeviating focus on student learning. Shared values support norms of behavior that guide decisions about teaching and learning.

3. Collective learning and application of learning: Staff at all levels of the school share information and work collaboratively to plan, solve problems and improve learning opportunities. Together they seek knowledge, skills and strategies and apply this new learning to their work.

4. Supportive conditions: Structures include a variety of conditions such as size of the school, proximity of staff to one another, communication systems, and the time and space for staff to meet and examine current practices. Collegial relationships include respect, trust, norms of critical inquiry and improvement, and positive, caring relationships among students, teachers and administrators.

5. Shared personal practice: Peers visit with and observe one another to offer encouragement and to provide feedback on instructional practices to assist in student achievement and increase individual and organizational capacity.

PLCs are "one model [of school improvement] that recognizes that school capacities must be grounded in the culture of the school and the normative behaviors of its staff" (Hord, et al, 2000, p. 1). This model evolved from Rosenholtz’s (1989) extensive research surrounding the conditions of teachers’ workplaces, Senge’s (1990)
model of corporate learning organizations, and Sergiovanni's (1994) work which argued that when a school functions as a community, its members embrace shared ideals, norms, purposes, and values. This study was driven by the notion that if more was understood about change-ready schools, strategies could be initiated, implemented and sustained for pursuing continuous school improvement.

Methodology

This research is one component of a multi-method, five-year study (1995-2000) of the development of PLCs that continuously inquire and seek to improve teaching and learning (see Appendix B). Previous data collected, interpreted, presented and published included: phone interviews (Fall-Spring, 1998-1999), face-to-face interviews with principals and a teacher representative from each of the study sites (Summer, 1999), and three administrations of Hord's professional learning community questionnaire, School Professional Staff as Learning Community (SPSLC) (1998-2000). The questionnaire, which was constructed around the five dimensions, was administered to the entire faculty at all school sites.

In the last round of data collection, as cited in bold in Appendix B, Co-developers and SEDL staff conducted, in total, 104 on-site, structured interviews in each of 12 schools in the winter/spring of 2000. Our intent was to hear from a representative sample beyond the principal and teacher representative, who were most committed to the PLC project, to gain further insight into the implementation of efforts. This paper reports preliminary findings from half of these schools, which were located primarily in the south and Midwest regions of the nation. In their efforts to create PLCs, all schools included in this sample had progressed from the level of initiation to implementation. The schools
included elementary, middle, and high school grade levels, as well as a diversity of
students in rural, suburban and urban settings. Students in these schools were
economically disadvantaged to varying degrees (See Appendix C).

Interviews (see Appendix D) were conducted on-site that lasted 30-45 minutes
and were audiotaped, transcribed, and analyzed using Hord’s five dimensions. Although
these dimensions may appear preconceived and suggest a deterministic approach, this
system of data collection and analysis seemed rational since the six project schools were
intentional in their efforts to apply these dimensions to initiate and implement PLCs.
Moreover, researchers analyzed interviews using a variety of indicators to examine and
substantiate the thoroughness of Hord’s five dimensional. It should be noted that the
interdependent nature of the five dimensions might discourage the isolation of evidence
into discrete dimensions; however, while the dimensions are arbitrary in their
separateness, they provided a template to generate evidence of additional descriptive
indicators and ultimately, to guide school efforts.

HyperRESEARCH, a qualitative analysis software tool, published by Scolari, was
used to analyze and interpret the results. The tool allowed our research team of five Co-
developers and one SEDL project coordinator to generate a list of codes (above
mentioned “indicators”) that emerged continually throughout the interviews. A variety of
procedures were planned purposefully to guarantee rigor and promote inter-rater
reliability. They also allowed the team to considered new and more inclusive information
in our analysis. These processes took approximately six months.

First, the indicators were developed, reviewed, refined, and re-refined with all
members of the research team for ensuing coding practice. The indicators consisted of 14
areas: alignment, collaboration, communication, culture, decision-making external influences, leadership, professional development, relationships, resources, structure, student focus, time, and vision and goals. The team also matched indicators to each of Hord's dimensions and found some duplication depending on the contextual meaning linked to each code. Next, three interviews were coded by the research team to work toward agreement and to establish a common language. Finally, each interview was coded in pairs and reports were developed that pulled together all selected quotations per code (indicator) across all interviews, thus providing the database for this paper.

Evidence

The authors report exemplars and non-exemplars that promote or hinder school efforts under each of the five dimensions of a PLC that relate to initial findings from this study. The current data from 58 on-site interviews have been drawn from a purposeful sample of staff reflecting diversity in gender, subject area and grade level. These most recent interviews from each school move findings deeper into the culture of each school, beyond the principal and teacher representative. The data also adds a more comprehensive documentation of efforts across schools developing and implementing PLCs. These findings have also served to further examine the thoroughness and practical use of the Hord model.

This section is organized to include the indicators that serve to further clarify and define Hord's initial interpretation of the five dimensions of a professional learning community (see Appendix E). Note that the indicators reflect codes used to analyze interviews using HyperRESEARCH. It is apparent that although these dimensions are seemingly discrete, they often overlap depending on the reference.
In the following sections each dimension is used as an organizer to report the progression from initiation to implementation that reflects the growth in schools seeking to become PLCs. A composite of exemplars and non-exemplars identified in the 58 interviews across our six schools at all levels, elementary, middle and high school, and in urban, suburban and rural settings provides the database for these findings. Although the contexts in these schools are markedly different, the evidence can often be generalized across settings.

*Shared and Supportive Leadership*

The following exemplars and non-exemplars reflect indicators of: alignment of curriculum, instruction and assessment; decision-making; leadership/principal; leadership/teacher; leadership/staff; resources/people; and structure/committee. Each section is organized around Hord’s (1997, 2000) dimension of shared and supportive leadership. The framework for this dimension describes school administrators as participating democratically with teachers by *sharing power and authority; inviting input into decision-making; promoting and nurturing leadership among staff.* It should be noted that the section on shared and supportive leadership is most lengthy, yet we have found that it is most integral to the development of the other dimensions.

*Sharing Power and Authority*

In schools initiating efforts to share power and authority among staff, a natural progression of efforts was evident. In the beginning, schools established committees, yet despite good intentions, at times failed to make them as functional as planned. A comment from a teacher exemplified this point, “I think I am on the attendance committee. I mean, I think we have different committees. I know we do, but I have not
been on the campus planning committee as far as that goes." Also, teachers acknowledged the commitment of time that committee work required.

Most decisions are made in the Leadership Team (LT). Representatives attend from each grade level including paraprofessionals and others. They meet twice per month. Big concerns are setting goals, checking on those goals and achieving them, [and dealing with] the budget, book adoptions, and renovations. The LT is also involved in hiring and prioritizing which grade levels need teachers. It is quite a commitment of time.

A teacher in the same building stated that, "In the LT we do all the budgeting. We also do staffing situations as far as if we need another teacher at a certain grade level or if we need to switch someone from one grade level to another." These were important decisions that needed to be addressed; however, it was felt that Leadership Teams needed "to focus on what matters most – student learning, that is, "to get the LT to move away from all the issues of managing and get to the issues of teaching and learning."

Leadership in the initiation stage was, in many cases, limited to those in administrative roles who had earned the respect of their staff, "I guess our principal would be the #1 leader. She supports us. I see a partnership between the assistant and her – a dual relationship." Echoed by a teacher in another building,

I think she is a very strong leader. She seems to have a clear vision of what she wants to do. We also have the team leaders that go through the assistant principal to the principal. She [the principal] is a good listener. I don't think she's forgotten what it's like to be in the classroom.
Empowered teachers revealed a sense of autonomy, even at the district level where teacher input was encouraged,

This year all of our staff development is campus-based. Other years the staff development had been a mix between district and campus. Usually the district provides us with a menu you can choose from or you can do something that your campus sees as especially important for you or your team.

Teachers indicated they were listened to at all levels of the organization, “I think everybody feels that they have a right to have input. It lets everybody take ownership and I don’t think anybody is afraid of administration stepping on their feet and saying, ‘no, you can’t do that’ because they seem open to anything that’s going to benefit kids.” Another teacher maintained that, “When you have some kind of say-so and they [administrators] listen to you, you have some ownership of the school, instead of just following orders. So that is going to motivate you to keep working hard and try new things.” Finally, in one school a faculty council was established and teachers in this middle school met once a month to discuss any concerns or major decisions that the faculty would need to make together.

The administrators listen to us and even if it’s something new that they’re not quite sure about, they’ll ask our opinions. They’ll make the final decision, but will listen to us. It’s usually volunteers. Two middle school teachers chair the council and any teachers who want to come, can. We have a great turn out; just about all the teachers are there. Teachers make up the agenda themselves, so that it’s generated from the classroom up. Administration sits with us. It can be anything from student problems and how do we solve them, or how do we solve
communication between administration and teachers? Not everybody walks away happy, but everybody feels like they had their say.

Teachers across schools commented on meaningful opportunities to work in small groups before taking their questions, concerns and ideas to the whole school, “We’ll try it out and come up with a solution and then present it to the faculty as a whole to see what everybody else thinks. We have quite a few small groups that do various tasks and work this way.” One group for instance, took over the decision to implement a year-round school. It was stated that, “the most important part of the decision is the process. It’s how the teachers studied the issue, got input from parents and the community, took the information to the school board and finally made the decision. They accepted that responsibility.”

At times, individual teachers stepped forward and assumed more responsibility, while in other cases, leadership was more collective. Two examples illustrate this point,

I am mainly here to facilitate, just to guide them along. I’m not there to tell them how it should be done, that’s not what my role is at all, but to steer them in the right direction. They make the decisions as a group. It’s a collaborative effort.

A second example indicated,

They’re willing to share what they’re doing and I’m blessed overall with a very competent faculty. They know we’ve tried new things and they’ll ask and they observe others and bring [ideas] back to their classrooms. I feel many teachers are leaders, but it’s about leading by example as opposed to “you need to be doing this in your classroom.”
Schools functioning at higher levels of implementation viewed leadership as pervasive, "We all share leadership. We meet once a week and take turns leading the meeting and take turns being part of the leadership team. I think it gives everybody the feeling of being just a little bit more in control and aware of what's going on. From my standpoint, we have a say in how the school should be run."

**Inviting Input Into Decision-Making**

Over time, teachers grew in their overall sense of autonomy. In many cases, teachers came to believe that they were listened to and their opinions were valued. Nonetheless, others argued that, "We kept thinking we were going to get to talk about the issues, but decisions are made without a lot of input. We have yet to be provided with an opportunity to brainstorm and try to improve the situation." Almost a reiteration, "I don't feel like I ever had any real say so as far as the inservice. It was told I didn't have an option, you were just going to do this."

As schools consciously guided their efforts to create PLCs, participatory decision-making structures were developed that sought representation from all areas: teachers, counselors, parents, community members and administrators, often elected by the faculty members in each school. Despite efforts at developing inclusive and diverse teams, one comment indicated how easy it was to neglect an important group of people, "The only thing I see that doesn't work some time is the para-professionals. They don't have a vote in the LT and sometimes they're not given the information or they're given it second-hand." Yet, a teacher in another school contended there was broad representation, "In addition to the teacher representatives, a para-professional attends, also one building administrator, an administrator from the central office, a business person, a parent, and a
neighborhood representative attends.” She added that, “In LT we talk about the issues, we have the opportunity to express our opinions and major decisions are made. Grade level representatives take notes and we go over them in grade level meetings the next day.”

In general, teachers indicated that decision-making processes had changed significantly over the past two years, “This year I see a lot of change. Administration now sits down and talks to us, even if it’s after school. We’ll meet for five minutes and they’ll tell us what’s going on and ask us what we think. This is a big change from when we didn’t even know that things were happening.” Teachers told stories about redesigning job descriptions, seeking feedback from staff, reviewing and setting schedules, and planning staff development.

Although district and building administrators make the “big decisions”, teachers expressed that they could share their feelings about various situations, offer alternatives ways of doing things differently. It was acceptable that their ideas were not always acted upon, as long as they were heard. Depending on the issue, teachers accepted the fact that some decisions needed to be made by board members and administration, while others could be made by team leaders, whole staffs or in teams like, “sometimes my grade level team has the freedom to make decisions on how we run our government, how we make rules for a study hall, etc., etc., so there are different levels of decisions being made by almost everybody.”

Classroom teachers made most decisions that affected children. More than one teacher claimed that, “our principal calls us together in our groups, allows us to have input into what’s needed and what’s best for the child. We interact with each other and
solve our problems to help the children.” Another teacher indicated that, “If children are having problems academically or behaviorally, teachers refer students to the building level committee chair [a teacher] and we go through the necessary procedures to make sure the students’ needs are met.” Another teacher captured the bottom line,

When it involves the children and if its something that can be changed and is not mandated from the central office or by the state or whatever, I think the administrators get together with the teachers who are leaders and make those kinds of decisions. If they think it’s something that can be changed – the teachers’ voices can be heard.

The majority of curricular decisions made in schools striving to become PLCs “were made by teachers who were willing to take some risks and try new things. These decisions involve when and what will be taught and in what kinds of ways. We’d look at the curriculum and decide within the guidelines what’s best.” When ideas were questioned, teachers said, “We’ll go find whatever else we need to do.”

Teachers acknowledged that in some cases it would be easier if someone else would make the decision, yet shared the benefits,

like we decided whether we wanted Chapter reading to be campus-wide or self-contained. It was completely the teachers’ decision. We had always been told this is the way we’re going to do it, now it was happening. The site-based committees helped that, where teachers have a lot more input. It’s good because it’s not handed down from the top, because sometimes the top doesn’t know what the bottom is doing.
In general, teachers revealed they had a voice within their role. "Even as a classroom teacher my opinions are valued. I may not always get my way on something, but they listen. They are supportive and I feel I'm part of the decision-making process." This was important as most schools had wide representation into their campus plans. One teacher maintained, "We were all there when we did it. It was an open discussion and we said okay, on this page and section were going to change this and this. Do you agree with this or do you not agree with it? And so the whole staff, the teachers and the aides were there."

Promoting and Nurturing Leadership Among Staff

Teacher interviews indicated that principals and other administrators deliberately engaged in promoting leadership among staff; however, in some cases leadership was shared out of necessity, "There was so much change. We restructured the whole district, got a new principal, got a new grade level in the building, and reconfigured our 5-8th grade teams. No one principal could do it all." The teachers viewed leadership as changing, revealing resentment and a lack of trust in years past. One teacher admitted, "When the LT came on, he [the principal] tried to hand over some leadership to us. We've come a long way in terms of working supportively toward change in how we teach." And, "teachers teach teachers, like we have our computer liaison and our building computer person who train here on campus and we have the other elementary schools that come here for the training."

Teachers were also cognizant of being "on the other side" as leaders. One teacher admitted that when the LT meets they decide what will be presented and how the meeting will be structured. "We've tried to do different things in the small groups, so that they
leave feeling like it wasn’t a waste of time. We don’t want to waste anybody’s time because they will tell you quickly. That’s the first way to turn them off.” Leadership Teams in schools consisted of a “wide range of personalities and views”, depending on whether they were elementary, middle or high school. “Everybody has their niche and I think that has been the most change to see kindergarten teachers working as leaders with 8th grade physical education people to solve problems.”

Classroom teachers were most often hailed for their modeling and inspiration. “They’re great at what they do.” Other teachers see this and exclaim, “What are you doing and I’d like to try that!” One teacher asserted,

The teachers here or staff members who I think are the most inspirational are those who are visionary. They know what they want and they will do anything to make it happen. I mean, look at Judy. When she has a vision, it’s like I get so pumped up just hearing her get excited talking about something. I think, “Yeah!”

Leadership is promoted at grade level meetings where “there’s always someone that comes forth from that grade that we can listen to and sometimes it happens that there’s more than one leader at that grade. Teachers nurture leadership in their own teams.” One teacher maintained that, “They encourage leadership. They pick a pretty good staff to begin with – teachers who automatically have leadership qualities. They pick quality teachers who are willing to work hard and try new things, who take leadership on their own.” One teacher revealed that,

It puts a lot of pressure on us, because all of the other area schools are looking at us to see how successful we are. They ask, ‘How do you do that because we’d like to do it, too. We are the first to get up and try it. Also, the school board and
administration believe in us. We express quite often that we appreciate the opportunity and their support.

Teacher leaders in these schools were respected and spoke with confidence, “The teachers here support me because I’m the veteran. I’m coaching, I’m firm, I’m straight and I’m fair. I’m pretty well respected and I think I’m needed here. Yes, ma’am! That’s why I haven’t left. I’m a role model.” Another teacher, when school-wide portfolio assessment was put on hold, just did it. She said, “I need to get started. I’ve gotta be the first one to try it. So her students are creating their own portfolios and the person across the hall saw what she was doing and she said, ‘You’d better come and see. We gotta do this.’ She’s out in the halls talking about it.” One teacher simply echoed, “These people who are leaders, you will find that they are outstanding in their field. They excel at whatever they’re doing.”

In these change-ready schools, teachers showed commitment to the demands of being on the LT and focused early on building capacity in new staff. For instance, one teacher stressed that, “The LT is a two year commitment and teachers look forward to their terms. This is so important to our school that we have our new teacher sit in on a LT meeting during her orientation.” New teachers are given opportunities, “I really enjoyed serving on the LT and this is my third term. It is probably time to give someone else an opportunity to serve because it is a good way, especially for new teachers in the building to learn a lot about the school.” Teachers and administrators were seen as leaders, guiding each other and serving as role models. In one case, a teacher shared that “teachers teach the students to lead one another, so there’s a bunch of leaders in our school.”
Shared Vision and Values

The following exemplars and non-exemplars reflect indicators of: culture; external influence/standards/policy; professional development for school improvement; and relationships/trust/respect. Each section is organized around Hord’s (1997, 2000) dimension of shared and supportive leadership. The framework for this dimension describes staff that share visions for school improvement that have an undeviating focus on student learning. Shared values support norms of behavior that guide decisions about teaching and learning.

Staff Share School Vision Focused on Students

In many schools while the intent of the teachers and administrators centered on what is best for students, the vision statement was vague, “I think all teachers just value the chance for children to come and learn. Everybody’s on a different level but we realize that and we’re trying to get everybody to that goal.” Another teacher also expressed a desire to help children,

I’m still willing to change and get out of the box and try new things if I think its going to benefit the children. That’s what we’re here for. I think our goal as teachers is to make sure that our children leave us with knowledge that they didn’t know before they came to us. And, hopefully as they progress in the years, they’ll get in real life situations and apply what they’ve learned at school.

In some schools, however, teachers are not clear about the vision or how it was developed, “I don’t know what the vision statement is – it just wasn’t something important for me to remember. I remember meetings when it was discussed, but I don’t recall necessarily if I had input. I’m sure I could have had input if I had wanted it.”
Another teacher saw limitations as barriers to developing a common vision, "I think as a school we are doing the best we know how, with the funding we received, I think we're right on track as far as getting our children to where we ... we're doing as much as we can do." Others noted that,

administrators see the big picture, whereas we have tunnel vision. I see what's appropriate to my classroom. I know that when push comes to shove, I have to bow to their discretion and have confidence that they see that big picture. Even if I don’t see them all the time, I’m involved and I’m supported. I’d feel very comfortable standing up and opposing something that was proposed if I really had an opposition to it.

One school developed its vision statement and plan by involving all stakeholders, "I think we had all faculty in the beginning. We also had representation from the janitors, carpenters, parents, school board members, and community people. There were a lot of people giving ideas and we came up with a plan."

Several schools expressed a common vision regarding student success,

We feel that every child will be successful, feel important, and feel like they're learning something. Lately we have discovered that this is possible through a lot of things we’ve been doing with inclusion. It is becoming a lot easier to realize that this is an attainable goal – that every kid can succeed.

Another school related the common vision to curriculum, "We are always refocusing our vision. We look at our curriculum and we look at what is coming down the pike – like portfolio assessment for students and teachers. So we look to the future, determine our weaknesses, and work to develop strengths."
Shared Values Guide Decisions About Teaching and Learning

Recognition and consideration of values and beliefs often guide decisions for the schools. A veteran teacher explained interactions among faculty, “To develop a ‘living’ curriculum you have to have trust with your faculty members that they are teaching what they are supposed to teach.” In another school trust is also very important, “You must have trust in each other to do whatever you can to help that person and know that they will help you.” In one school trust is just developing, “We are trying to build some comfort zones where teachers can come out and say ‘gosh this isn’t working for me.’”

There are other examples of shared values that guide instructional decisions. One principal explained,

I think you might be hearing a very good interaction between teachers and students. Certainly you would hear teachers listening as well as talking. You would see kids interacting very easily with teachers. It is a very much give-and-take kind of situation. It seems very friendly.

In another school the staff consider ways to balance content and relationships for the benefit of the students,

Kids are treated with respect and they know they have a place to learn. They also get the material they need to be successful at the next level so they can succeed.

We try to change as fast as we need to so we develop the balance between relational teaching and getting the content to the students.

Once the student focus is established schools develop decisions regarding implementation of the vision. One teacher explained her school’s plan, “I think that student learning would be most important and getting the students prepared for the next
level of learning. We do that by working together and consulting with one another. One school tied their implementation to staff cohesiveness, "When we made our improvement plan, and when we implement our plan, we always go back to our togetherness and our support of all the staff and the administration."

One school developed a process to develop a vision and monitor progress with the whole school community every semester.

We had a staff meeting prior to the break and the principal laid down the rules and expectations. From that meeting we chose categories that we needed to work on - behavior and academic. We developed committees to work on those two areas and we came up with a plan to look at what we could do to implement change. Then we were given a time to get back together to present so that we could all be on the same page.

Some schools strive to get their message out to the larger community. A principal laments, "We know it is important to get our message out. We've tried it in several ways, we send notes home, we send invitations to parents to come see what we're doing, we try to get info into the newspaper - but we feel like we still haven't hit the right key yet."

Another school communicates the vision more systematically, "There is a monthly newsletter and something is always written about what is happening in the classroom. In addition, the TAG class is developing a web page which will include interviews with teachers about what is taking place in the classes."

**Collective Learning and Application of Learning**

The following exemplars and non-exemplars reflect indicators of: alignment; collaboration; professional development for collective learning, inquiry, shared personal
practice and training; and time/all/use. Exemplars and non-exemplars are organized
around factors in Hord’s (1997, 2000) dimension of collective learning and application of
learning. The framework for this dimension describes staff at all levels of the school who
share information, and who work collaboratively to plan, solve problems and improve
learning opportunities. Together they seek knowledge, skills and strategies and apply
this new learning to their work.

Sharing Information

In one school a veteran teacher reflected on sharing information,

There’s a lot of good people willing to share their insight, knowledge, and
information. You gain a lot of strength because you hear what everybody said,
then you have the benefit of the older teachers’ knowledge and the benefit of the
newer teachers – new classes, new direction. So that’s been real good.

Another teacher explains the value of sharing and how that impacts the
relationships in the school,

We share information from the first day when we begin looking at the scope and
sequence. As the year goes on we revisit and share new information. We discuss
what happens in LT and good ideas that teachers have. The most important part
about teaching is your relationship with your peers and your ability to share, have
fun, and learn from each other.

The issue of time negatively impacted sharing for many teachers. In one school
time appeared as a non-exemplar and hindered communication, “We really don’t have
time to visit someone else. That would require a sub or someone to cover, and while we
want to do this, the opportunity just hasn’t been available.” Another teacher commented,
“It’s hard to believe that we are so isolated. We would be working next door to someone and you don’t see them or talk with them.”

However, in another school, the principal scheduled meetings designed to increase the possibility of sharing information,

There are many opportunities for them to share in grade level meetings each week. The meeting after LT is sharing administrative information, and the meeting the other week deals more with instructional issues. Faculty meetings are twice a month on Thursdays after school.

*Collaborative Work to Plan, Solve Problems, and Improve Learning Opportunities*

While there were many examples of collaboration, some teachers felt the district could support their efforts better, “The district is getting better in scheduling our time. We are having more time in our departments during inservice days instead of meeting as one big faculty group. It’s hard to get things done when you’re in a big group.

Planning efforts ranged from very few to highly integrated. One teacher described the progression,

I think it was a gradual process. To begin with we were very isolated – she planned, and I planned. Then we began to work together and to talk. Then we started to plan together as a grade level. Then we started to work together as staff.

It has been real gradual. Another teacher reinforced this collaboration, “We started talking to teachers in other grades and we found ourselves headed in the same direction. We’re all very individual with our own strengths and weaknesses, but when you plan together, you gain a lot of insight.”
Schools that were successful in collective problem solving generally had a process in place to systematically deal with issues. One secondary school delegated their problem solving to committees, “We usually meet a couple times a year in large groups to focus on several issues. Then school-wide decisions are made and from there several committees are assigned tasks to work on throughout the year.” One elementary teacher described the process more informally, “In my LT we took a few minutes and had the primary people explain to the middle school people what the issue is. Then we questioned them as to what the problems were and they solved some of their problems by just talking about them.”

At the team level, one teacher described the process for resolving issues, “Our team is especially close. We work well together and get insight, help and suggestions from each other. If we have a problem with a student, we open the door and ask for help or for that student to go to that teacher’s room.” Many teachers described opportunities they experienced to improve learning at their schools. One kindergarten teacher explained that the team was working hard to provide consistency in the curriculum, “We’re really trying to unify together. We are still building, but we see it and it’s connecting. We have to work together, all of us.”

An emerging sense of teamwork contributed to teachers’ feelings of autonomy. Teachers indicated that they meet as a team and discuss various issues, such as, “Right now as the social studies team, we’re trying to come up with a curriculum. We put in our bid for what we would like our schedule to be and we help one another.” In another school that had just received parent approval for starting an Alternative program for at-risk learners, one teacher shared that,
We developed a curriculum and put together a different program that would best meet the needs of these kids. We developed a one-year pilot to see how it all works this year. Then we have to report to the school board once every two months, and give a report of how things are going.

Another teacher revealed the method the principal used to develop the school improvement plan, "We have a faculty meeting when we give input in each area of the plan. We could suggest new areas, change wording, or add ways that we implement the plan. We also have access to the data to make better decisions."

**Seeking New Learning and Application**

Gaining knowledge, skills and strategies often is accomplished by traditional staff development, including workshops, mini-workshops, conferences, district inservices, and university courses. At one school there were several choices, "Some staff development days are site or district determined. Other times we decide as a staff what new learning we want, and who we want to present. Some years we have book studies." In another school much of the learning occurred in the grade level teams, "We did a workshop for some of our teachers on writing lesson plans. We share and learn from each other through our grade level meetings and workshops."

Another group of teachers responded to an opportunity they had to attend Eric Jensen’s presentation on brain research. Returning from the experience "motivated and enthusiastic", approximately 20 teachers met after school over a period of a month at various teachers’ homes to discuss the experience and his book. One teacher shared that, No one in particular led the group. Each week we had a different format. We would talk about different aspects, and then divide into groups. Each time we’d
be with different people, which was nice. More often than not, we discussed what we were supposed to have read for that week, then come together to talk about it further. We’d meet up to four hours a session.

As staff learned new skills and strategies, they often would be concerned about classroom application. One program that assisted one school’s faculty in program implementation was described this way, “It is a structured activity where I can present something and get some constructive feedback in a non-threatening environment.” Another teacher explained how her team implemented new learning, “We meet almost everyday for about 40-45 minutes. We talk about what we are doing in class and how we can modify our lessons.”

In one school the faculty members were working on team teaching. They were trying to form teams in each other’s classrooms. The social studies teacher commented, “The students did a writing assignment and I graded it on content, and the writing teacher graded it on style. We try to get them to see things across the board. It works well. We are trying to do more hands on activities after the lecturing.”

Supportive Conditions

The following exemplars and non-exemplars reflect indicators of: collaboration; communication; decision-making; external influences/central office; external influences/parents; external influences/community; professional development/individual learning; professional development/training; professional development/observation and assessment; relationships/trust; relationships/respect; resources/money; resources/facilities; resources/materials; resources/people; structure/committee; structure/schedule; time/allocation; and time/use. Each section is organized around
Hord's (1997, 2000) dimension of supportive conditions. The framework for this dimension describes *collegial relationships*, which include respect, trust, norms of critical inquiry and improvement, and positive, caring relationships among students, teachers and administrators. It also describes *structures*, which include a variety of conditions such as size of the school, proximity of staff to one another, communication systems, and the time and space for staff to meet and examine current practices.

*Collegial Relationships*

Creating a readiness for change is critical and often does not occur without focusing on the people in the organization and the interaction among all stakeholders. Some call it the human side of change, which is critical in establishing the culture of the school. All schools in the study were diligent in their efforts to increase trust and respect, provide emotional and tangible support among staff, and focus where it mattered by engaging staff, and in some cases, the greater school community, in critical inquiry and school improvement.

Administrators were not only approachable, but helped to create a climate of trust and respect, which for some principals required more change than others, "In the beginning he was very opposed to a lot of change. Now he’s used to it. Change is just a normal everyday fact of life here because it’s constantly evolving. That only happens when there is a lot of trust and he has an excellent staff here.” Regarding the same principal two years later,

He puts a lot of trust into these people and the fact that they will be able to carry things off and do whatever makes him look good. But he’s definitely changed. He’s worked to build trust. Whatever he expects you to do, he follows up on it to
see your progress and check to see what other resources you need. That’s the number one help as an administrator and it also keeps him in touch with exactly what’s going on.

Another teacher noted the type of rapport that was most commonly shared, “You’re very comfortable talking with her. She’s not like a principal. She’s more like your fellow worker or at least she makes you feel that way.” Staff efforts were recognized as evident in this comment, “Our principal and vice principal are really good for me. If we do anything, they take note of it and give us a good compliment. I feel comfortable with the fact that I can go to either and talk to them about anything, and they would give their best to help me solve problems.

A majority of teachers indicated that there were few problems that they couldn’t discuss with their administrators because they weren’t afraid of repercussions or conflict. As one teacher stated, “If we hit a brick wall, he’ll be there to say we need to talk to this person about whatever, or she’ll go with you and break new ground or open doors so you can take your ideas a step further.” In terms of what’s important, in the eyes of one teacher it was fairness, “I feel like I’m treated fairly and I feel like we treat the students fairly and being fair means everyone has a voice. It’s not a dictatorship. It’s just fair...to the students, the teachers, the administrators and the parents.”

Further, teachers enjoyed sharing with their administrators and being made to feel important, which was evident in the following two sentiments,

I’m working on a special project with my team that Judy is letting us do. I’m sure when we bring it to her, she will look at it and say it looks great. She’s very attuned. Though she hasn’t worked in a classroom setting for a while, she’s still
eager. When we have fresh ideas, she's eager to hear all about them. She carries them to other administrators and says this is what my teachers want.

This second teacher was made to feel like he made a difference, "He [the principal] understands it's the teacher who really has the real impact. He values and supports what the faculty does, what they say. He does a real good job of including the faculty in making the decisions that are really going to affect student achievement."

Colleagues were also viewed as a significant source of support to one another.

"My fellow teachers support me the most. If I'm not sure about something I know, then I can go to those teachers. I can trust them to give me the right information and guide me as to how to get further information." Another thought was, "I can be honest and say this isn't working for me and won't feel betrayed or made to feel foolish." Staff also become close through regularly scheduled meetings whether grade level teams or Leadership Teams,

I've gone through divorces in that group. It's more than just a group who work together, it's become a family. You find out some pretty personal things about people when you're meeting that often, especially if it's been stressful for them they share a lot. It's really become a close-knit group and you become protective of one another.

A new teacher shared her appreciation of the veteran teachers in her school, who "took me under their wings. You can go to all the teacher orientations in the world, but there's nothing like that first hand experience. They nurtured me and carried me and told me what I could do to improve."
**Structures**

DuFour and Eaker (1998) argued that structures are critical in cultivating the culture of a school. Whether the issue is time, a chronic and continuing problem in our schools today, proximity and communication, or effective mechanisms to engage staff in meaningful dialogue, these six schools are working impressively to overcome obstacles to change.

Interestingly enough, the issue of time was addressed quite differently across schools. Some staff could not get past the antiquated structures that have deterred progress through the years, while others attacked the issue with hope and creativity. In some schools teachers criticized the unproductive use of time, “I wish things weren’t so piecemeal. My impression is that it’s hit and miss.” Another teacher was even more direct about the wasted time during after school inservice,

In our weekly staff meeting we are still listening to somebody’s agenda for the day, and most of us are tired and want to go home. That’s not the time when people sit around and share their vision. People have other responsibilities. At least we have a bit of time, not like the first year that I was here at the high school where two people talked to me the entire year.

Common preparation time was also inconsistent across schools. As one teacher bemoaned,

If someone is looking for you for advice, support, resources or whatever, they would find me during my prep period. But as far as having time off during the same hour to collaborate with my team with other teams, it just doesn’t happen.
Fortunately, we found other schools successfully addressing the issue. Teachers in these schools responded more hopefully and felt that their administrators and LTs were working on rearranging or buying time. One teacher confessed, “A lot of it is that we don’t think that we have the time to go out and browse and get information, but I’ve never been denied anything, that reasonably speaking, I thought would benefit my class.”

Often it was noted that teachers would be given subs, which they “figured was money well spent, for instance, “when the 7th grade social studies teachers got subs for a couple days and we got to work on six-week unit tests together. We all had to give the same test, so we needed time to actual develop it.” And,

It’s nice to have time set aside to talk with other English teachers. Good teachers will make time. They’ll seek out other teachers and ask what they’re doing to teach their objectives. They may talk about it over lunch. It’s hard to do it after school when, as adults, you always have other things to do. I think a lot of time you wouldn’t be collaborating as well with other teachers if you didn’t have regular team time. That is what you use your time for.

Grants and building funds were also garnered to provide substitute teachers and small stipends:

Time is always a factor in whatever you’re doing. Giving stipends through our enrichment grant is not ideal, but it helps. With balanced literacy in the primary school, the 2nd grade teachers had off at the same time and could plan together. That made all the difference. Their learning curve has been real high this year. They are constantly coming up with new ideas, because it made them look at what
they were doing. One night they even worked on a literacy library until 9:00 on their own time.

It was felt that teachers also have responsibility in making time available to meet. "The flexibility has always been there, but it's not always accessed until you set the stage for teachers and say, 'Gee whiz, we need to do this.' We found we could shift time to make different things happen." These teachers found it was simply a matter of shifting their recess period.

Middle school teachers realized the problems school administrators frequently face when trying to arrange meeting time, however, they actually found a time where teachers could work together in mixed groups after assessing potential problems, "Because we're on different time schedules, we knew if we scheduled it after school, some people would just leave. They wouldn't wait around for another hour to meet. So we did some overlapping which involved stipends that provided incentives."

The structures also varied in each facility, which either facilitated or hindered collaboration and support. One teacher shared how she used her lunch hour and after school to tutor students in her high school feeling little time to meet with staff, "Just the nature of what we're doing isolates us." Another teacher indicated that teaching eight years in a portable caused her to be "seriously disconnected to the other teachers." Some teachers, "just don't see each other. Our schedules are totally different. We don't really socialize or consult each other unless it's at a meeting.

Communication systems varied as well, from morning assemblies with informal chats, email, message boards to enhance two-way communication, notes of recognition, daily newsletters and memos, to minutes of meetings. One teacher praised her school, "I
never have to find out about things through the grapevine. I may have to stop in the office and read a message board, but I still know what’s going on.” In another school, the daily announcements were listed on the back of each teacher’s absentee list. “So you save teaching time and it’s all there in writing.” In other schools, telephones were available in each room to use for teachers to keep the lines of communication open to enhance parent’s involvement and support. We find that parents really do want what’s best for kids.” Another school used a telephone call-in system, “where twice a week teachers use the Interlink to share what’s happening, like upcoming events. The parents can call in and leave a message or ask questions and the teachers get back to them.” One school’s problem was another’s opportunity.

Shared Personal Practice

The following exemplars and non-exemplars reflect indicators of: alignment; professional development for collective learning and shared personal practice; and time/all/use. Examples and non-examples are organized around factors in Hord’s (1997,2000) description of shared personal practice. That description portrays peers visiting with and observing one another to offer encouragement and to provide feedback on instructional practices to assist in student achievement and increase individual and organizational capacity.

Peers Visit and Observe to Offer Encouragement

Many interviews illustrated the occurrence of teachers meeting and sharing information while offering support, “I meet with the other 8th grade teachers and we brainstorm and we do our observations and share ideas.” In another school small planning committees meet together and then they “all meet together and share between the groups.
We meet at least on a weekly basis.” However, not in all schools did teachers visit other teachers, “We visited at the beginning of the year, but unfortunately we’ve slacked off.” In another school one teacher did not see how she could visit other classrooms due to her being self-contained all day.

One school had structured peer observations, “We go into each other’s classrooms and we do a peer observation. We have one due every nine weeks. You actually go in and observe the class and write up what you observe. Then after class you discuss it with them.” Collaboration and sharing appeared to be the norm and at one elementary school a teacher expressed that, “My partner and I switch classes during our planning periods two days a week. It works perfectly for us because we have the same students.”

However, in another school informality is the standard procedure. One school was built as an open concept building to enhance communication and proximity. Teachers shared a wall between classrooms and there were front and back doors for teachers to travel in and out of throughout the day. “For instance, my team partner is a first-year teacher and we leave our door open all the time. So if she has questions about something, she just runs through and says, ‘what do I do?’ In fact, most of our doors stay open.” This school was also arranged to allow their content mastery room to back up to their resource room, where the teachers in both areas “had a lot of common children and used common strategies.” Grade levels also connect so, for instance, a third grade teacher can go next door and ask the second grade teacher what was taught the year before.” In schools with a less facilitative structure, teachers have a specific day and time to meet, however when asked, “in the course of a day we meet two or three times. Because we are situated close to one another, we are in constant contact.”
Feedback to Improve Instructional Practices for Student Achievement

Regarding specific classroom issues, one teacher commented, "I say to my partner, 'you know I need help with so-in-so. Are you having problems or do you know something that will work?" Once a month teachers from primary and middle school get together to talk about "dilemmas and possible solutions. We also bring in student work and share the student work and offer suggestions on how we can improve it – what can we do in our class." A second grade team got together to look at student work and discover, "This is an eye-opener. I didn’t think to teach it this way."

One teacher used a more individualized, observation approach throughout the school year,

I chose a teacher and observed her during my off period. Then I took notes and made comments on how she presented her lesson. I knew she was good at what she did and I wanted to try and get a few tips from her. I learned a few strategies and her approach to different things. I was impressed. She did a good job.

A few schools reported that teachers share classrooms or team together. In one school this arrangement was explained, "Some of us get the luxury of having another teacher working with us in the classroom. And depending on which teacher you work with, you dovetail it differently, and the students see the model of people respecting each other."

Another way teachers help each other is when teachers are teaching outside their certification or teaching a new preparation. In this instance the veteran teacher said, "This is how I do it with my class. You can modify – but I am going to help you out. That’s worked out pretty well." Other teachers regardless of experience support one another with regard to individual students,
If there’s a disciplinary problem and another teacher just needs to take five, she’ll send them to our room and we just work with the child. We do that a lot to help out in the disciplinary areas. The team really gets together and works on that. Our teams also work across grade levels to get insight from each other, help and suggestions.

For one teacher, problems are often not addressed, “If I need to talk to other teachers, I can try to find someone who has the same off period that I have. Otherwise, I just deal with it.”

In several schools the assistance is more general and covers information that can help the teachers develop and the school improve. One school organized a all day meeting where outstanding teachers talked with newer teachers, “the team explained things the teachers would be going through during the year – roll books, classroom management, etc.” Another school also had teacher planning days each month.

We do different things school-wide. All the teachers and aides come in. We just all have a great time. It’s fun to just get together in a no pressure environment and learn something that we can take back and implement in our classrooms.

Discussion and Conclusions

This purpose of this paper was to document and examine evidence of purposeful efforts in schools that were actively engaged in creating PLCs using Hord’s (1997) model. The authors attempted to select exemplars and non-exemplars from 58 interviews across six diverse K-12 school settings that validated practices promoting and hindering school improvement efforts. Data was provided showing the progressive development evident in the schools from initiation to implementation to begin to examine, How does a
professional learning community develop and maintain momentum? The evidence supports the distinct yet overlapping nature and interdependency of each of the five dimensions: shared and supportive leadership, shared vision and values, collective learning and application, supportive conditions, and shared personal practice. Moreover, the 14 indicators that emerged through data analysis reveal patterns that serve to reconfigure and expand the model. Not one of the six schools had reached the level of institutionalization.

In a study of a large Midwest high school that had worked purposefully to become a PLC, Schmitt (2002) found three dimensions that augmented Hord’s model: community connections, teacher-student relationships, and professional commitment – all critical in sustaining a PLC. Data from the current study suggest the following dimensions, which allude to teacher-student relationships and professional commitment, but say very little about the need for parent and community connections, factors vital to creating a PLC:

- **Shared and Supportive Leadership**
  - Power and Authority
  - Input into Decision-Making
  - Nurturing Leadership
- **Shared Vision and Values**
  - Focus on Student Learning
  - Shared Values
- **Supportive Conditions**
  - Relationships
  - Structures
- **Collective Learning and Application**
  - Planning and Problem Solving
  - Seeking New Knowledge
  - Sharing Practice and Providing Feedback

Hipp and Huffman (2000) maintained that future leaders need to, “build communities that allow leadership to permeate traditional boundaries within the school and visions to emerge from the interactions which reflect the shared values, beliefs, and
commitments of the whole organization” (p. 306). Insight is gained from Olivier, Cowan and Pankake (2000) who found that although schools pay attention to many things, they are not attending to matters that make a difference, such as how schools operate to enhance student learning.

Again, the authors found that the leadership of the principal was key (Hipp & Huffman, 2000), where principals disperse power, invite input into decisions, and nurture the capabilities of all staff to focus on a common vision. Unfortunately, we continue to find that creating and sustaining a shared vision is not modeled effectively in any of the six schools, perhaps due to the fact that a shared set of values is not apparent. Shared values would ideally inspire a shared vision among diverse stakeholders. Decisions would also be data-driven, which was not yet apparent in these schools, and focus on student learning.

There were also few references to parent and community involvement except in the schools at the highest level of implementation that also involved adults and students deep within the organization. Further, research needs to be conducted on the involvement and significance of parents and community in the entire process – how to develop and maintain and not just give lip service.

In addition, we found supportive conditions to be the glue that is critical to hold the other dimensions together. Without creating a culture of trust, respect, and inclusiveness with a focus on relationships, even the most innovative means of finding time, resources and developing communication systems will have little effect. Finally, the data would indicate that it is difficult to separate collective learning and application and shared personal practice. Shared personal practice must move beyond simply peer
coaching – observing and providing feedback – and become embedded as a strategy in collective learning, where inquiry is provoked, plans are made and problems are solved based on student data, and continuous learning is modeled by the entire school community.

Educational Importance

The building of a professional learning community is a journey as evidenced by the time and energy exerted to move schools from one level to the next. Some schools move along in their efforts at a steady pace, while others seem to stall and proceed without re-culturing (Fullan, 2000a). There can be no blueprints for change that transfer from one school to the next (Fullan & Miles, cited in Brown, 1995, p. 92), yet there are strategies that can guide in fostering cultures that systematically address school improvement and student learning. Change cannot be individual and fragmented, but must be collaborative and embedded within the day-to-day work to address the needs of students (Louis & Marks, 1996).

Earlier findings show that how a school principal does or does not engage with the faculty and staff during an innovation can determine its success or failure. We anticipate these findings will continue to uncover critical information relevant to managing change in schools. The value of this research will deepen that understanding and assist leaders in guiding their schools to develop healthy cultures focused on student performance. This research will also provide information to guide and structure processes to sustain school reform, continuous learning, and student achievement. Dufour and Eaker (1998) suggested, “Until educators can describe the school they are trying to
create, it is impossible to develop policies, procedures, or programs that will help make that ideal a reality” (p. 64).

As we continue to gather data and analyze our findings, we remain unaware of the extent of our success. We also remain open to emerging dimensions that help define a PLC. Nonetheless, we continue to provide systematic documentation of our efforts and want to avoid the disappointment of missing the rich details and complexity of the journey.

Next Steps

Research Team Members (RTMs) have recently applied for a two-year grant from AERA/OERI to continue the study of professional learning communities (PLCs). This proposed research would examine six schools’ professional staffs who initiated the dimensions of this project. By examining the contextual factors, materials, policies, and actions of individuals and groups in these six schools, the rate and degree of development of PLCs will be established. Interviews will be conducted with the principal and key staff members in each school. Evidence gathered will assist the researchers in identifying the significant elements of the PLC model in relation to the day-to-day realities of operating schools, i.e., moving from theory into practice.

This research illustrates findings for a new model for school improvement that involves the entire professional staff in continuous learning and collaboration. This speaks to the heart of educational reform for the 21st Century, that schools involved in sincere efforts to broaden the base of leadership to include teachers and administrators, to define shared vision based on student learning, and to provide a culture of continual support, will make great strides in becoming PLCs.
References


### APPENDIX A

**Professional Learning Community Research**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astuto, Clark, Read, McGree &amp; Fernandez, 1993</td>
<td>...a school’s professional staff members who continuously seek to find answers through inquiry and act on their learning to improve student learning.</td>
</tr>
<tr>
<td>Mitchell &amp; Sackney, 2001</td>
<td>...where “educators collaboratively analyze current practices, experiment with new practices, and assess the relationship between practice and the effects of practice within the community context” (p.1).</td>
</tr>
<tr>
<td>Senge, 1990</td>
<td>...an entity having a conscious vision and purpose, and continually developing the capacities to shape the future.</td>
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<tr>
<td>Louis, Kruse &amp; Marks, 1996</td>
<td>...a cultural climate that enhances professional development, collective inquiry, and supports risk taking among teachers.</td>
</tr>
<tr>
<td>Sergiovanni, 1992</td>
<td>...“the idea of the school as a learning community suggests a kind of connectedness among members that resembles what is found in a family, a neighborhood, or some other closely knit group, where bonds tend to be familial or even sacred” (p. 47).</td>
</tr>
<tr>
<td>Louis &amp; Kruse, 1995</td>
<td>... characterized by teachers engaging in reflective dialogue, deprivatization of practice, collective focus on student learning, and shared norms and values.</td>
</tr>
<tr>
<td>Calderon, 1998</td>
<td>... a context in which the collective synergy, imagination, spirit, inspiration, and continuous learning of teachers is used to improve the “craft” of teaching.</td>
</tr>
<tr>
<td>Lambert, 1998</td>
<td>...places in which teachers participate in decision making, have a shared sense of purpose, engage in collaborative work, and accept joint responsibility for the outcomes of their work” (p.11).</td>
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## APPENDIX B

### Five-Year PLC Project Schedule

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<thead>
<tr>
<th>Year</th>
<th>Activities</th>
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<tbody>
<tr>
<td>1995-1996</td>
<td>Review of the Literature</td>
</tr>
<tr>
<td>1996-1997</td>
<td>Search for PLCs</td>
</tr>
<tr>
<td>1997-1998</td>
<td>Training of Co-developers, Selection of Study Sites, <em>School Professional Staff as Learning Community Questionnaire</em></td>
</tr>
<tr>
<td>1998-1999</td>
<td>Continuous training of Co-developers, Initial interviews with school principals and teacher representatives, <em>School Professional Staff as Learning Community Questionnaire</em></td>
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<tr>
<td>1999-2000</td>
<td>Continuous training of Co-developers, Follow-up interviews with school principals and teacher representatives, On-site interviews conducted by SEDL staff and Co-developer of teaching staff, <em>School Professional Staff as Learning Community Questionnaire</em></td>
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## APPENDIX C

### Demographics

<table>
<thead>
<tr>
<th>Name of School</th>
<th>Level</th>
<th>Grade levels</th>
<th>Context</th>
<th>Number of Students</th>
<th>Economically Disadvantaged</th>
<th>Number of Interviews</th>
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<tbody>
<tr>
<td>Davis</td>
<td>Primary</td>
<td>PreK-3</td>
<td>Rural</td>
<td>196</td>
<td>63%</td>
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<td>Lakeland</td>
<td>Elementary</td>
<td>PreK-8</td>
<td>Urban</td>
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<td>Foxdale</td>
<td>Middle School</td>
<td>5-8</td>
<td>Suburban</td>
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<td>12%</td>
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<td>Northland</td>
<td>Elementary</td>
<td>K-5</td>
<td>Suburban</td>
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<td>Glen Rock</td>
<td>High School</td>
<td>9-12</td>
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<td>Kennedy</td>
<td>Middle School</td>
<td>474</td>
<td>Rural</td>
<td>474</td>
<td>89%</td>
<td>5</td>
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APPENDIX D
Communities of Continuous Inquiry and Improvement
Research Protocol

Supportive & Shared Leadership:
Our intent is to find out what they think leadership is and if and how widely leadership is shared among administrators and teachers- ask for evidence that supports their comments.
Tell me about leadership in this school
Use these probes:
- Who are the leaders?
- What do they do that makes them a leader?
- Is leadership shared? If so, how?
- How did this decision-making process come about? By whom?
- Give example on how a school decision was made recently.
Is this different from the past? If so, who or what has made it different?

Shared Values & Vision:
Our intent is to find out the values behind the vision, who was involved in creating the vision, and who believes in it- ask for evidence that supports their comments.
Tell me what the staff would say is important about the work they do here
Use these probes:
- How do you know?
- How is it reflected in the school?
- In the classroom?
- With students?
Tell me about the school’s vision of improvement
Use these probes:
- What process did the school use to create a vision?
- Who decided on this vision? How does the staff fell about it?
- How is the vision communicated? Externally? Internally?
- How is the vision reflected in the school activities and operation?
Is this different from the past? If so, who or what has made it different?

Collective Learning & Application:
Our intent is to find out if all of the staff members come together to reflect on their work for students and learn from each other in substantive dialogue- ask for evidence that supports their comments.
Tell me about how the staff comes together to learn.
Use these probes:
- How many of the staff comes together to learn?
- When? How often? About what?
- How do staff members determine what they want to learn?
- Tell me about how the staff uses what they learn.
Is this different from the past? If so, who or what has made it different?
Supportive Conditions:
*Tell me about conditions in the school that support teachers’ work together.*
Our intent is to find out what is in place—structures (for example time and space for staff to meet) and relationships the staff has with each other that support teachers work together—ask for evidence that supports their comments.
Use these probes:
- What structures support collective learning?
- How do staff members communicate with each other?
- How do they communicate with people outside of the school?
- When do teachers have time to collaborate?
- What resources are available to support teachers learning together?
- How do staff members work with each other? Cooperate? Support?
- Who are the staff members that motivate and inspire?
*Is this different from the past? If so, who or what has made it different?*

Shared Personal Practice (Peers Sharing with Peers):
*Tell me about any situations in which the staff shares their practice and solicits feedback from each other to improve their teaching (ie. classroom observation, examining student work)*
Our intent is to find out if the staff is sharing their work with each other and then giving relevant feedback that will improve teacher practice—ask for evidence that supports their comments.
Use these probes:
- Do teachers go into each other’s classrooms to observe them at work with students?
- Do teachers work together to examine student work?
- Do they give substantive feedback to each other on their observations or on student work?
- How do you know what to look for in giving peer review and feedback?
- How did these processes come about? Who initiates it?
- How are they integrated into the school schedule?
*Is this different from the past? If so, who or what has made it different?*
## APPENDIX E

### Dimensions and Related Indicators

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared and Supportive Leadership</td>
<td>Alignment of Curriculum, Instruction and Assessment; Decision-Making; Leadership/Principal; Leadership/Teacher; Leadership/Staff; Resources/People; Structure/Committee</td>
</tr>
<tr>
<td>Shared Vision and Values</td>
<td>Culture; External Influence/Standards; External Influence/Policy; Professional Development/School Improvement; Relationships/Trust; Relationships/Respect</td>
</tr>
<tr>
<td>Collective Learning and Application</td>
<td>Alignment of Curriculum, Instruction and Assessment; Collaboration; Professional Development/Inquiry; Professional/Training; Professional Development/Collective Learning; Professional Development/Shared Personal Practice; Time/Allocation; Time/Use</td>
</tr>
<tr>
<td>Supportive Conditions</td>
<td>Collaboration; Communication; Decision-Making; External Influences/Central Office; External Influences/Parents; External Influences/Community; Professional Development/Individual Learning; Professional Development/Training; Professional Development/Observation &amp; Assessment; Relationships/Trust; Relationships/Respect; Resources/Money; Resources/Facilities; Resources/Materials; Resources/People; Structure/Committee; Structure/Schedule; Time/Allocation; Time/Use</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>Alignment of Curriculum, Instruction and Assessment Professional Development/Collective Learning; Professional Development/Shared Personal Practice; Time/Allocation; Time/Use</td>
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Printed Name/Position/Title: Kristine A. Hupp

Organization Address: Cardinal Stritch University

6801 N. Yates Rd., Box 103

Milwaukee, WI 53217

Telephone: (414) 410-4346

E-Mail Address: knipp@stritch.edu

Date: 4/4/02
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