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Santa Barbara

# Organizational Change in Public Schools: The Use of Small Groups

A Dissertation submitted in partial satisfaction of the

requirements for the degree of Doctor of Philosophy

in Education

by

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September 2016

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ABSTRACT

Organizational Change in Public Schools: The Use of Small Groups

by

Maricela Estrada

American education, as an institution, has undergone over 50 years of educational reform efforts at the national, state and local level yet as a nation trails behind other comparable countries (U.S. Department of Education, NCES 2015). One latest reform effort, the Common Core State Standards (CCSS) Initiative, is state-driven and led in part by the National Governors Association. The education change effort meets the Obama Administration's challenge to promote innovation, reform and excellence in America's Public Schools (White House, November 04, 2009) and is generally supported by legislators, school boards, administrators, teachers, parents and businesses. Literature (e.g., organizational & leadership theory, teacher retention, psychology, etc.) has revealed that a multi-level, multi-faceted individualized approach with consistent stakeholder support at all bureaucratic and consumer levels results in effective implementation (e.g., high levels of change efficacy and change commitment inter and intra agency).

One current strategy utilized and promoted as best practice to support this goal is the use of Professional Learning Communities, a small group structure that focuses on student achievement via teacher collaboration, often referred to loosely as teacher teaming, grade level groups and/or varying curriculum-focused committees.

This case study of two districts explored the following three questions: 1. How does small group work support large-scale innovation (reform policy) implementation (in public

schools)? 2. How does actual practices vary from what previous research suggests? 3. What do local public school administrators, staff, and faculty identify as issues facilitating and non-facilitating for the use of small groups in public schools?

The methods utilized included a series of semi-structured interviews with the Supervising CCSS Implementation Manager, the Assistant Superintendent of Curriculum at District A, and the collection and review of related artifacts, including the comprehensive implementation plan and anecdotes about implementation at the district level and across school sites. Alternatively, a comprehensive online teacher survey was employed, adapted from research on the use of small groups, best practices for professional learning communities and organizational readiness for change literature (Hackman 1983, Wenger et al. 2002, DuFour 2004, Wells & Feun 2009, Weiner 2009, etc.) for District B. This survey was followed by semi-structured interviews with four faculty members, a Teacher on Special Assignment and two site Principals.

Both qualitative and quantitative analysis revealed the contextual complexities of organizational readiness for change (e.g. vertical: bureaucratic administrative hierarchy and horizontally: across school sites and classrooms; inter and intra agency), the influence of teacher quality and retention, and the implications of utilizing a variety of small group structures as work teams, a means for professional development, and a problem solving cadre all under the loose definition of a Professional Learning Community strategy.

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## The Problem

American society depends on the public school system to teach and prepare public school children for the variety of career paths available for high school graduates. In California, the Governor and state legislature delegate educational responsibility to the state Department of Education. The department depends on the state's approximately 1,000 school districts and their respective leadership bodies (elected school boards and Superintendents) to deliver educational leadership and quality educational experiences to the children and families of each community. In this model, individual school sites provide educational services for neighborhood children within each community; and at each site, principals provide leadership for their respective schools with support from the local school district. Administrators manage administrative affairs while teachers manage classrooms, curricula, and students.

Education has an important role. The systematic "baton passing" of such a political and social responsibility poses various problems at each level, particularly and most critically, at the local level where the direct services are expected and/or anticipated to provide quality education and positive educational experiences for students.

According to Fowler's (2012) publication, *Policy Implementation: Getting People to Carryout a Policy*, school site leaders must carefully plan an implementation of policy once they have determined that decision-making around the adoption of the new policy is based on appropriate motives (such as what is best for students and the school), to appropriateness for the school or district, and its support among key stakeholders. Fowler (2012) outlined lessons learned from three generations of research on policy implementation in schools.

These results for successful policy implementation included: mobilizing for implementation (garnering support for the new policy); planning for implementation (who and what is needed, including training and information): gathering resources for implementation; implementation in stages; and institutionalization.

Amongst her outline of successful policy implementation strategies, Fowler (2012) highlights three particular problems raised in previous reform efforts at the implementation stage: (a) inadequate/insufficient resources designated to the effort, (b) poor planning, and (c) resistance from implementers. Fowler's descriptions and suggestions are timely, given that she compiled three generations of research at a time when the next wave of educational policy reform was being introduced to the states.

Fowler (2012) stated that the district-level leadership must garner support from the implementers, site principals and teachers, and a necessary strategy to do so is to include them in the planning process via a large steering committee (with representatives of all stakeholders) or a smaller committee (voluntary group of members strongly committed to the project). She stated that there is no good reason for failure (as it relates to a policy implementation), given that previous research (both quantitative and qualitative) provides a road map for workable approaches to policy implementation (e.g. Wells & Feun 2009).

However, less than fully acknowledged is that the committees she suggested are but one type of group, and are typically associated with activities that are ad-hoc (short-term) in nature. To ensure that the leadership demonstrates strong commitment to the latest manifestation of a half-century-old school reform effort, the leadership must plan for long-term, sustainable implementation and institutionalization plans.

Any school district leader facing a large-scale reform effort in 2015 has over 50 years of reform efforts to not only learn from, but to consider when introducing the newest reform, the Common Core State Standards (CCSS). Now that research-based roadmaps are available and outline who to include and what to consider (Fowler 2012), it appears necessary for districts to carefully select implementation strategies wherein success will be dependent on the dissemination of information to, ongoing communication with, and professional development of the implementers (teachers and principals).

Thus, it appears necessary to create a special kind of work group for policy implementation to account for the planning, implementation, and institutionalization of the reform. The effort must be systematic and embody leadership — with people working in a way that is significantly different than the strategies of the last 50 years.

**Effective Group Work Models for Policy Implementation**

The effective use of small groups is dependent on various factors related to leadership, management, organizational structure, and team composition. Small groups are dependent on a 'manager' to assign membership to the group, define the task, and delegate sufficient resources and autonomy to execute the task, a situation that rarely occurs in small group work (Hackman, 1983; Hackman,1986; Hackman,1998). Each factor (leadership, management and organizational structure) is further assessed to reveal various contextual elements that impact the effectiveness of each individual involved, including their demonstrated knowledge, skill and expertise in the area related to the task, and also in leading, managing, and participating in small group work. The latter is critical, as small group work is widely misused and often looked to as a 'one-size fits all' and the manager's 'go-to' solution for complex problems.

The misuse of small group work can be attributed to the existence of various types of small groups, the user's lack of information on the type of group demanded for the task, and a lack of knowledge and experience in the evolution of small groups overtime—which impacts the manner in which the task is attempted, the roles of each member, and the type and level of leadership, management, and supervision needed (Hackman, 1983; Gersick, 1988; Gruenfeld et al., 1996).

*A Small Group Problem*

This study was highly influenced by the works of Richard Hackman on the design and management of work teams. Hackman (1998) states, "it is possible…that the published claims [of all the team successes reported in the managerial literature] are exaggerated…" (p. 247). This statement highlights the undertaking and importance of the design and management of work teams. He states that pursuing a one-size-fits-all remedy most likely will not result in success.

The supplemental works of Wenger (2002) on Communities of Practice (COP) along with DuFour (2004) and Hord's (1997) work on Professional Learning Communities (PLC), lend support to leaders who are responsible for managing diverse organizational structures and providing leadership and management tools for organizing individuals to function within those contexts. Indeed, the importance is too great—particularly when a large-scale innovation implementation is at hand. Hackman (1998) stated, "a favorable performance situation…yields a double benefit…when careful thought as to the design of a team is granted, teams are likely to have less need for…interventions (because they encounter fewer problems that lie beyond their own capabilities)." Favorable performance situations include coaching and coaching will be helpful because the group will not be "…preoccupied with

more basic, structurally rooted difficulties". Despite being written for a business oriented concept, the construct of *favorable performance situation* can be applied to public schools as it is design and organizational context. In education, 'managers', (e.g. Principals) often lack the authority and support to "[Create] organizational conditions that actively support work teams" as it is seen as "more of a revolutionary than evolutionary undertaking" (e.g. innovative reform initiative). Hackman (1983) states that this revolutionary undertaking can lead to *hurt* (e.g. authority, legitimacy) on behalf of the leadership even if successful, a construct to be explored and considered in the evaluation and planning for organizational readiness for change.

Researchers on work team design and management have generally reported group cohesiveness as a common condition present in work teams deemed 'effective.' Group cohesiveness in Hackman's (1983) model was referred to as group synergy. "According to a simulation done by Neal (1997), in which groups were made up of members with varying levels of competitiveness, it is group cohesiveness—rather than individual competitive-disposition—that predicts performance." (Blumberg, et al. 2012). In this statement, we must assume that the level of competiveness infers that the individual member has the knowledge, skills, and expertise meriting the competitive-status. Therefore, the focus becomes to ensure the group has sufficient group synergy that would favor a status of group cohesiveness.

In a public school context, it is common to find teaching teams composed of novice teachers, as team composition is based on departmental/categorical requirements (i.e. grade, content area) and inferred content knowledge or expertise rather than team recruitment based on a given teacher's holistic knowledge, skills, or expertise. The task of leadership and management of individuals and their work groups is large-scale in itself, but

implementation of a large-scale reform innovation adds to the complexity and critical nature of how these individuals are managed.

**The Latest Reform**

Currently, local school districts across the United States are working towards implementation of the Common Core State Standards (CCSS). This initiative is a result of a national effort, and ultimately, a statewide political decision to implement the CCSS via individual school districts and school sites. A variety of work groups, including self-managed teams, will likely be utilized at all levels to support implementation. With respect to a large-scale innovation implementation project such as this, research suggests that strong external leadership is needed to set the direction and to coordinate teamwork at the school level (Smylie, Conley & Marks 2002; Wells & Feun, 2012).

*The Common Core State Standards Initiative*

The nation's governors and education commissioners led the development of the Common Core State Standards (Common Core or CCSS) through their representative organizations, the National Governors Association (NGA), and the Council of Chief State School Officers (CCSSO). "The Common Core State Standards Initiative is a state-led effort that established a single set of clear educational standards for kindergarten through 12th grade in English language arts and mathematics that states voluntarily adopt" (National Governor's Association, 2010).

The Common Core State Standards have been publicized as being "clear and concise" to ensure that stakeholders across the nation, including parents, teachers, and students, have a clear understanding of the expectations in reading, writing, speaking and listening, language, and mathematics in school. "The standards are designed to ensure that students

graduating from high school are prepared to enter credit bearing entry courses in two or four-year college programs or enter the workforce."

The CCSS provide a clear set of shared goals and expectations for the knowledge and skills students need in English language arts and math at each grade level (what students need to learn), but they do not dictate how teachers should teach. This initiative allows teachers to continue to develop lesson plans and tailor instruction to the individual needs of the students in their classrooms. In other words, the state sets the goal, but leaves goal achievement up to individual school districts, school sites, and teachers.

**Summary**

American education, as an institution, has endured over 50 years of educational reform efforts at the national, state and local level, yet as a nation arguably trails behind other comparable countries in some achievement areas (U.S. Department of Education, NCES 2015). The latest reform effort, the Common Core Curriculum Standards Initiative (CCSS), is state-driven by the Association of Governors. The education change effort meets the Obama Administration's challenge to promote innovation, reform and excellence in America's Public Schools (White House, November 04, 2009) and is generally supported by legislators, school boards, administrators, teachers, parents and businesses. Literature (e.g. organizational & leadership theory, teacher retention, psychology, etc.) has revealed that a multi-level, multi-faceted individualized approach with consistent stakeholder support at all bureaucratic and consumer levels is what will likely result in effective implementation (e.g. high levels of change efficacy and change commitment) vertically and horizontally (e.g. inter and intra agency: as a district and across school sites). The current strategy utilized and promoted as best practice to support this goal is the use of Professional Learning

Communities, a small group structure that focuses on student achievement via Teacher collaboration, often referred to loosely as teacher teaming, grade level groups and/or varying curriculum focused committees. This case study explored how small group work has the potential to support large-scale innovation (reform policy) implementation (in public schools) by studying two local school districts in California. The data collected was compared to factors in the literature identified as effective (e.g. use of small groups in public schools) and compares these factors to the perception of the policy implementers (e.g. teachers and administrators).

## Purpose and Practical Question

Research studies suggest that a teaching team's use of a small group strategy can lead to the development of effective practices (and ultimately, increased student gains). However, issues concerning the availability of student achievement data for analysis and comparison among school district site populations which intentionally utilize a small group strategy to implement a large-scale reform effort, such as the use of PLCs for implementation of the CCSS, leaves a number of questions unanswered. This reflects the need to investigate student achievement rates in public school utilizing a deeper small group strategy. There are 1,028 school districts in the State of California (CDE, 2015) thus, it would require several years of investigation to gain an understanding of the difference in achievement rates between sites with a traditional professional development strategy and sites utilizing a structured small group strategy such as a professional learning community.

This study aimed to explore and understand how the use of small group work in public schools supported or hindered policy implementation at the local level, specifically, implementation of the Common Core State Standards (CCSS). Currently, 43 of 50 states are

implementing the CCSS. Factors that impact group work at the district and local levels lead to an overarching, practical question on the use of small groups in a setting which, given the description of the school system structure above, is setup for autonomous "asynchronous" work.

**Research Question**

The investigation involved the gathering of staff, faculty, and administrative perspectives on the use of small groups in public schools at two California public school districts. The purpose of this investigation was to provide insight into the local implementation of large scale policy reform initiatives via small group strategies, in this case Professional Learning Communities (PLCs), where the reform is a nationally supported state driven initiative known as the Common Core (CCSS). This study also explored whether or not decisions on the use of small groups have been shaped by the research literature—specifically, PLCs—and/or shaped by the reports on small groups in education. Therefore, this study addressed the following three questions:

How does small group work support large-scale innovation (reform policy) implementation (in public schools)? How does actual practices vary from what previous research suggests? What do local public school administrators, staff, and faculty identify as issues facilitating and non-facilitating for the use of small groups in public schools?

**Study Limitations**

This study explored the perceptions of policy implementers in the classroom and at the organizational level in two Public School Districts. This study did not investigate or evaluate the quality of group work outcomes.

## Definition of Key Terms

To provide context, the in-text definitions are offered to create a shared understanding of the content, content and constructs discussed (Creswell, 2009). Descriptions of varying small group structures is offered in Chapter 2.

## Organization of the Study

Chapter 2 provides a review of the literature based upon the practical question posed in this chapter, conveys the complexities that support the research questions (what is known and how it relates to this study), and further establishes the importance of the study of small group dynamics in schools. Chapter 3 describes the data collection methods, including research design, participants, survey and interview procedures, and coding criteria. Chapter 4 displays the results of the data collection process. Chapter 5 includes a discussion of the results, reviews limitations of the study, and provides recommendations for further research.

# CHAPTER 2: LITERATURE REVIEW

Chapter 1 proposed a practical question for school leaders related to the use of small groups of individuals to carry out a task. This chapter includes group work definitions, theoretical frameworks for understanding small group design, management and organizational change.

Organizational change is a daunting task for any leader. In Educational settings the district and campus (site) administrator must organize and support self-directed, autonomous, professionals through educational reform policy that essentially rely on Teacher behavior change when curriculum is involved. 'Change management experts have emphasized the importance of establishing organizational readiness for change…' but according to (Weiner, 2009, p.1) scientific, extensive theoretical development or empirical research is limited on how to do this. Change effort and group work research emphasizes the need for implementer 'buy in' as the change requires planning, support and behavior change.

## Organizational Readiness for Change

Determining an organization's "readiness for change" is essential in large scale innovation implementation such as CCSS. According to Weiner (2009) this concept or construct has not been subject to extensive theoretical development or empirical study thus hindering institutions planning for a large scale organizational change or shift. Weiner's theory examines organizational members' commitment to an organizational change and their confidence in their collective abilities to do so (change commitment and change efficacy). He emphasizes collective behavior change as a necessary construct to effectively implement change and cautions that there is no 'one best way' to increase organizational readiness for change, as strategy effectiveness is dependent on context.

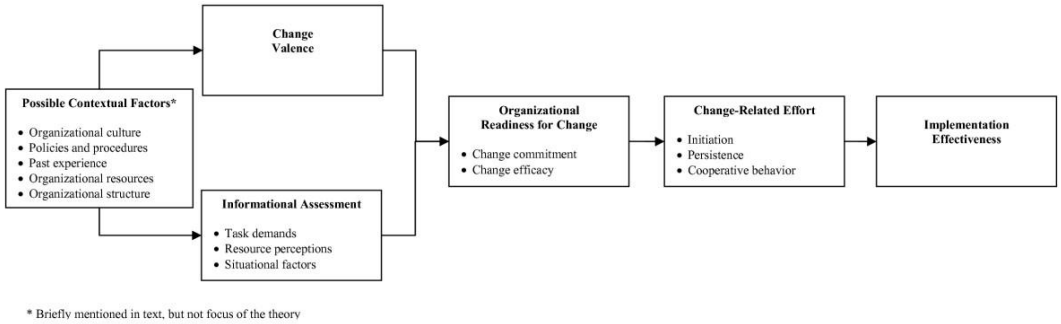


*Figure 1*. Determinants and Outcomes of Organizational Readiness for Change (Weiner, 2009).

Daniel T. Holt et al. (2007) presented an integrated definition of 'readiness' that places the focus on the individual's state of readiness based on behavior state not a 'trait'. The definition was a result of their review of the history of the readiness concept, perspectives used to assess the construct and psychometric properties of instruments intended to measure readiness. The proposed definition states "*Readiness for Change* is a comprehensive attitude that is influences simultaneously by the content (i.e., what is being changed), the process (i.e., how the change is being implemented), the context (i.e., circumstances under which the change is occurring), and the individuals (i.e., characteristics of those being asked to change) involved and collectively reflects the extent to which an individual or a collection of individuals is cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo" (Holt et al. 2007, p. 326).

Holt's definition is important to organizational leaders (or change agents) since the definition implies that the readiness construct may vary at any given time and is dependent on the traits of the organization (i.e., context). To re-iterate both Weiner (2009) and Holt et.al (2007) included organizational members as a factor for organizational change and

readiness given that the individual attributes may facilitate or hinder the change effort. They stated, "At any particular time or in any particular organizational setting, an individual may be more or less ready for a particular change. These different levels of readiness are due to the change (i.e., content), the facilitation strategies (i.e., process), the environment (i.e., context), the people (i.e., individual's attributes), or a combination of the four" (Holt et al. 2007, p. 327).

Weatherly and Lipsky's (1977) study on special education reform has various implications for school leaders. The authors suggested that autonomous priority setting by individual communities will occur when reform enactment requires the undertaking of more activities than funded. They predicted that states attempting reform will encounter coping behaviors, including school personnel routinizing tasks, rationing resources, diluting quality of services, and division of the population.

**Schools as Organizations**

According to Meyer and Rowan's (1978) interpretation of school in modern society from their work, *The Structure of Educational Organizations*, education is coordinated by a shared social understanding that defines the roles, topics, and contents of educational organizations. The school system serves to prepare individuals for participation in society by providing a set of standardized public credentials used to incorporate citizens into civilization by the production of categories of personnel.

The legitimacy of this role is publicly shared, as the institution of education gains importance in the allocation and membership process. The public expects the process to be controlled and standardized. This is achieved by the application of the *schooling rule* wherein "education is a certified teacher teaching a standardized curricular topic to a

registered student in an accredited school" (Meyer & Rowan, 1978, p. 203). This rule is justified on the grounds that state governments assume responsibility for inspection and control of instruction.

Meyer and Rowan (1978) described the state's role in the inspection and control process as artificial, given the enactment of the *logic of confidence* where "parties bring to each other the taken-for-granted, good-faith assumption that the other is, in fact, carrying out his or her defined activity" (p. 207). They described a sequence of confidences in which the state confides in the school district, which confides in the school that confides in the teacher. The teacher is said to be deserving of confidence due to his/her credentials from an accredited institution that also follows a similar chain of confidences in which the content of their courses was not inspected.

At the time of Meyer and Rowan's (1978) publication, the organization of a public school system was described as a loose relationship or discrepancy between what schools ought to do, the appearance of what schools are doing and how outcomes are evaluated. The authors referred to this looseness as "decoupling." This notion of "decoupling" protects local schools from too much external scrutiny. This protection leads to more autonomy at the local level for both the school site and the teachers, which indicates little concern for ineffectiveness, conflict, and inconsistency. The authors stated that this position occurred with the implied agreement of all external and internal actors, such as the community and school personnel, in order to legitimize the institution of education and their roles or status within them (see Figure 1).

*The Role of the Educator*

The role of the educator as a representation of a comprehensive group of individuals within the educational institution, who support the goals of said educational institution, aligns with the role of education and the *logic of confidence* model described above by Meyer and Rowan (1978). This interpretation describes the concept of distributed leadership. In a distributive leadership model, multiple individuals carry out the leadership function within different roles. These individuals include school and central office personnel, teachers, aides, and parents. (Smylie, Conley & Marks, 2002). Smylie et al. (2002) and his colleagues referred to a study on teaching teams which concluded that "people in many different roles can lead and affect the performance of their schools in different ways." The authors described this concept as the enactment of the *logic of distribution* in which "school leadership overall is ultimately enhanced by the different knowledge and skills brought by a variety of people and by the commitments that are developed among those who perform leadership tasks together" (Smylie et al., 2002, p. 177).

## Street-Level Bureaucracy Theory

Organizations, including educational institutions, depend on their employee's capacity to deliver on a given task, project, or initiative. Several approaches to group process theory have been proposed. Particular consideration is given to the way Gruenfeld et al. (1996), Sung (2012), and Weatherly and Lipsky (1977) contributed to the understanding of an individual's role in managing and pooling information from team members, the leader's role and approach to team management, and the contextual influences (for example) on the translation of policy into practice.

Street-level bureaucracy theory argues that *street-level bureaucrats* perform policy

implementation by exercising influence on how public policy is carried out. Weatherly and Lipsky (1977) introduced the term based on their examination of what happens at the point where policy is translated into practice. Street-level bureaucracy theory can be applied to teachers as these "workers" exercise power by discretion—that is, they have the autonomy to choose how to respond to situations, decide if/how to apply rules, and determine who receives what and when. The theory suggests that pressures from leadership to meet case counts or organizational goals can lead to negative use of discretion and influence of implementation such as adopting new practices that may cut short client services. They conclude that potential means of reducing the negative forms of influence is to create a system where the street-level workers become more accountable to their clients and less to leadership (Weatherly & Lipsky, 1977).

Street-level bureaucrats are the individuals who drive any business, organization, or initiative towards any subsequent success or failure by means of the quality of their work and disposition to provide quality work. Management, the customer and impacted community, is therefore dependent on individuals and their capacity to implement a given task, project or initiative. Success is dependent on these individuals and their designated roles to perform and provide a quality effort where their collective service results in what was envisioned or proposed.

The coupling of individual discretion with implementation strategy is critical for large-scale innovation implementation. School leaders must employ a 'large-scale' intervention that delivers critical policy decisions to the ground in a manner that persuasively engages workers and, ultimately, policy implementers to foster individual dispositions which achieve the leader's and organization's goals for the public institution to

which they are accountable. Small group theory 'couples' member congruence with manpower to reveal that members can thrive or stall depending on the leadership, management, and coaching of individuals as work groups. The leader's attention to purpose strategy is critical in designing effective groups and fostering individual and collective talents to serve each other and the agency. One of the most critical factors is the group's ability to create positive energy, sometimes referred to as 'synergy,' in which effective practices arise. These practices include the team members' ability to have a clear goal, know their role and the roles of others, pool information from each other, present valuable knowledge, skill, and expertise related to the task. Ultimately, team members are supported by the leadership and organization to carry out the task.

The strategies leaders employ to lead, manage, and organize individuals in a manner which effectively and efficiently moves the school towards a successful large-scale innovation implementation are critical. Wells and Feun's (2012) study on educational change and PLCs provided a descriptive study on the implementation of PLCs within 2 suburban school districts. Findings emphasized the need for non-autonomous enactment through centralization at the district level. The authors' comparisons revealed statistically significant differences in implementation. The implications reflected the strategies employed by the district and its leadership. Centralization of reform at the district level (i.e. district involvement at all levels of implementation, versus site-based, local, implementation) allowed for ground support of PLC implementation. In this case, the teachers interviewed expressed that the expectations for their involvement in PLC work were consistently reinforced throughout every administrative level from the central office of the building level (Wells & Feun, 2012). The study supports both practical questions wherein the strategy for

large-scale innovation implementation is strongly supported at the highest level by the organization's leadership.

### Individuals at Work: The Street-Level Bureaucrat

Street-level bureaucracy, introduced by Richard Weatherly and Michael Lipsky (1977), examined what happens at the point where policy is translated into practice. The authors argued that "street-level bureaucrats" performed policy implementation by exercising influence on how public policy was carried out. Street-level bureaucracy theory can be applied to teachers as these 'workers' exercise power by discretion—that is, they have the autonomy to choose how to respond to situations, how and if to apply rules, and to determine who receives what and when. Pressures from leadership to meet case counts or organizational goals can lead to negative use of discretion and influence implementation and adoption of new practices that may undermine client services (previously described). They conclude that potential means of reducing the negative forms of influence is to create a system in which street-level workers become more accountable to their clients and less to leadership (Weatherly & Lipsky, 1977).

## Individuals in Small Groups

One of the most critical factors in the utilization of small groups is making the correct determination that a small group is needed to perform the given task, project, or initiative and that the group has an appropriate composition of individual members with the needed skills, knowledge, expertise to perform the task. Second, the leadership and organization can readily facilitate and support the group work including issuing the appropriate amount of autonomy, providing resources including training, and time to perform the work. Lastly, group membership has the capacity to build group norms that lead

to positive performance processes and reduce "process losses" (Hackman, 1990; Hackman, 1987). In their paper *Teacher Work Group Effectiveness*, Conley and her colleagues, refer to a study on construction workers, whose findings support the theory that a group outcome of performance is group cohesiveness and members' satisfaction (Conley et al. (2004). These outcomes lead team members to desire to continue working as a team. A second study found that teams who were more developmentally mature (i.e., shared a strong sense of purpose, coordination, and unity) demonstrated a positive relationship between team process (e.g., information sharing and helping behavior) and job motivation (Conley et al., 2004). These findings were similar to Wells and Feun's (2012) conclusions in which professional learning community (PLC) implementation for the greater student outcomes was weakest in the school district with a first-time implementation goal of becoming a PLC, versus utilizing PLCs for achieving student gains (Wells & Feun, 2012). Weiner (2009), indicated that positive change related to the implementation climate, and a shared perception that change is expected, supported, rewarded; known as the pre-implementation stage, versus the point where the change has begun; known as the implementation stage.

Further, the familiarity construct aligned with the group maturity construct in which developmentally mature groups demonstrate positive team processes and behavior of familiar group members. Developmentally mature groups are more predictable than behavior of strangers as they have had the opportunity to build norms leading to positive performance processes.

**Defining Work Groups/Work Teams**

The definition of a work group is complex, particularly when discussing its use in organizations. It is common to use the term work group and work team interchangeably but,

each can be uniquely different. Eric Sundstrom and his research team released an article in 1990 entitled *Work Teams: Applications and Effectiveness*. They defined work teams as "interdependent collections of individuals who share responsibility for specific outcomes for their organizations" (p.1). For the purposes of the current study, a work team presupposes a working relationship and interdependency between a membership of individuals working towards a common organizational goal. On the other hand, a work group is more loosely composed. Work groups may take form as loosely linked independent individuals for whom membership comes together in an ad-hoc, as needed manner for macro involvement in a given project, initiative, or task on behalf of the organizational goal.

One of the most prominent and highly cited researchers in the specialization of work team design and management is Richard Hackman, Professor of Social and Organizational Psychology at Harvard University. Hackman's (1983) *Normative Model of Work Team Effectiveness* provided suggestions for organization context, group design, and the process criteria for effectiveness. He described a "pre-work" phase in which a manager makes the effort to create a good group design by walking through four essential levels of questions. These questions cover: a) complete review of the task and what is to be accomplished; b) the performance strategy, including the effort, knowledge, and skills necessary to accomplish the task; c) the level of autonomy the group will need. For instance, is the group manager-led or self-managed [self-directed]; and d) the advantage and feasibility of assigning the task to a team/group. Layered on top of these essential questions is the ability of the organization to provide the resources and support to properly execute the task and the manager's availably and ability to oversee the work of the group (Hackman, 1983).

*Public School Work Groups*

In the public school setting, an example of a work group with the definition above is the clerical team within a public school site. These personnel are often referred to as the 'office staff' with membership composed of individual secretaries and clerical support staff who are connected through the grouping of classified staff. Members of this work group have similar abilities (often differentiated by occupational experience) and a common goal to carry out the clerical duties of the school site. Tasks and responsibilities of the clerical team include, but are not limited to, communication with parents, coordination of events, and collection and dissemination of essential data such as attendance and grades.

Members of the clerical team function independently (with loose interdependency) with other office staff. Their work is routine and their contribution to the group is specific. Typically, office staff is organized in 'teams' in which a lead member provides training, support, and guidance in the completion of routine work. The team may come together for staff meetings to discuss overarching goals, problems, and solutions. However, it is unlikely that this clerical team would be charged with a specific task requiring the use of a formal work team.

In the public school setting, an example of a team which uses the group design elements provided by Hackman (1983), is the Guidance/Counseling services team. This group is composed of individual professionals connected by the grouping of certificated staff. They hold similar abilities, but may vary in their specialties (such as Special Education or English Language Learners) and share the task of delivering guidance and counseling services to the entire student population. Tasks and responsibilities of this group include, but are not limited to, delivering guidance/counseling services, documenting sessions,

communicating with parents, negotiating with other personnel on behalf of the student, and reporting to a manager/team leader on a regular-basis. These group members are managed by a site administrator (such as the Vice Principal) and, for all intents and purposes, are considered self-managed.

The task of guidance/counseling groups is to deliver guidance/counseling services to the entire student population by breaking up the work into caseloads, as a sufficient number of group members with the appropriate knowledge, skills, and expertise to deliver services is critical. Members of this team meet regularly to discuss the status and progress of their individual and collective work, negotiate caseloads, receive support with a specific case or problem, and/or to request additional resources.

**Defining a Community of Practice (COP)**

A community of practice (COP) is an organic, naturally forming, non-formal group. Typically, these groups come together by interest, hobby, or problem to solve. Members of the group voluntarily participate in order to fulfill their interests or needs. Wenger, an educational theorist, and Lave, a social anthropologist coined the term while studying apprenticeship as a learning model. Wenger & Lave (2002) defined COP as "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly".

Wenger (2002) has gone on to author various articles and books on COP. He introduced seven principles for cultivating COP:

1. Design the group to allow for evolution, for example, allow membership to pull the focus of the community in different directions, adding new members or inviting guests of different disciplines to participate;

2. Open dialogue between inside and outside perspectives. For example, membership is well aware and able to speak to the core issues that bring the group together and attention has been given to other external factors that have impact or (negative or positive) influence on the group's work or perspective;
3. Invite different levels of partaking by not imposing strict participation rules. For example, the group allows and invites individuals to join as core members, active members, or peripheral members;
4. Develop both public and private community spaces. Cultivation of the group in this instance includes relationships amongst the community members as a whole and individually. For example, members have relationships outside of the group which, in turn, support the interactions between membership during a community meeting;
5. Focus on value, including encouraging members to share the value of their participation early on and throughout the life of the group. These discussions support and help potential members and stakeholders to understand the positive impact of the COP;
6. Combine familiarity and excitement to avoid settling into a pattern of regular meetings, conferences, or projects. This keeps the community a neutral place to introduce or discuss new and/or provocative or controversial ideas that provoke thinking and discussion; and
7. Create a rhythm for the community through a combination of whole and small group gatherings to encourage balance and contribute to a pace that is not too fast or too sluggish, which often results in a drop in participation (Wenger, 2002).

COP typically do not have an agenda and levels of participation vary (including attendance). A public school system example of this is a leadership group composed of various principals. In its purist form, the principals would come together organically to discuss common issues or strategies related to their principalships. However, since this is no longer a new concept, it is possible that the public school system (at the district level) has come to support the use of COP and promotes/coordinates participation in order to strengthen leadership at school sites and provide support to administrators who are or may be isolated. This support may be attributed to the fifth principle, in which previous members have shared value in participating in a principal leadership CoP and critical stakeholders acknowledge that value.

**Defining a Professional Learning Community (PLC)**

It can be argued that a COP is an early, informal version of a Professional Learning Community (PLC) and a work team charged with improving their practice. The Annenberg Institute for School Reform (AISR) at Brown University describes PLCs as "groups of educators, administrators, community members and other stakeholders who collectively examine and improve their own professional practice. Typically, individual groups are small and meet regularly over a significant period of time."

A department meeting at the secondary school level is a typical COP/PLC hybrid at work within the public school system. In these meetings, the department chair of a given discipline facilitates a meeting of all faculty in that discipline to discuss a specific practice, rather than meet to discuss various topics not focused on practice.

PLCs are considered effective for influencing school improvement when utilized by entire districts as an overall reform support strategy (AISR, 2004). They allow for formal

environments in which members, particularly educators, can come together to solve a particular problem, plan for ongoing implementation of a school reform effort, gain new knowledge in a specific content area, and/or gain new knowledge via discussion of a particular context or problem. Currently, the most common use of formal PLCs in the public school system is for the planning, implementation, and ongoing assessment of the CCSS.

According to research conducted by Caryn M. Wells and L. Feun (2012), centralized district implementation yields the best results when PLCs are introduced as a reform support strategy. Their 2009 descriptive study examined the implementation of PLCs within two suburban school districts. The goal of the study was to discover what happened during the implementation of PLCs across eight middle schools. The findings revealed statistically significant differences in implementation. Specifically, the more successful district used a top-down implementation approach, centralized at the district level. The unsuccessful district's goal was to become a PLC, whereas the successful district's goal was to increase student gains using PLCs. The confusion between the goals of utilizing PLCs for achieving student gains versus becoming a professional learning community can have large implications for the success of the intended reform strategy. This finding also has important implications for school leaders as Wells and Feun's (2012) study indicated the communication failure from the beginning and throughout on the goals for small group work.

**The Use of Group Work**

The use and adoption of "self-managing" teams in many types of organizations, including educational institutions, can be attributed to the idea that employee commitment and improved outcomes will be stimulated by utilization of work groups who work together to design their own methods for pursuing collective, organizational objectives as opposed to

using top-down management controls to govern employee behavior (Conley et al., 2004; Hackman, 1986). Assessment of the management literature reveals that large organizations with many self-directed teams can experience serious problems coordinating activities and reaching agreement on strategic issues at the organizational level (Smylie; Yukl, 2008, et al., 2002). Small group and teacher autonomy in a decision-making capacity has often been absent from previous reforms. By not introducing a systematic structure (way of doing things), the process denied implementers, principals, and teachers both the opportunity and responsibility of making key decisions about the intervention implementation.

**Facilitating Small Group Work**

Given the varying nature of work group composition (i.e. member familiarity, experience in the field, and individual expertise) from school site to school site, it is imperative that the manager leads and supports teams as needed. This entails practicing various roles at various times (i.e. manager, supervisor, coach, facilitator, evaluator, customer, and student advocate) while managing autonomy levels of the self-managing work teams as part of a distributed leadership model.

The organization, via the leadership and management of a site administrator, must allocate the sufficient resources and primarily time to their work teams. Conley et al. (2006) referenced two different studies in which teaching teams, due to lack of adequate time for team meetings during the school day, hampered coordination efforts, planning and decision options, and overall team effectiveness. They found that the team members often utilized team-meeting time to communicate about non-teaming issues not focused on interdisciplinary curricular planning, which was the goal of the group work.

It could be argued that a Community of Practice (COP) is an early, informal version of a Professional Learning Community (PLC) and a work team charged with improving their practice. The difference for a school site and administrator is the targeted investment in offering professional development time via the casual exchange of interest topics or problems to solve, such as talking through student behavior issues on campus (COP model), versus utilizing work groups to act on behalf of the organization to plan, coordinate, and support the implementation of campus-wide school reform efforts (PLC model).

A 2012 study by Sun Young Sung and Jin Nam Choi surveyed a large Korean insurance company to determine the effects of team knowledge management on the creativity and financial performance of its organizational teams. The authors recognized that individuals may not have difficulty in applying their knowledge to a given solution when they already possess a wide array of knowledge and information. However, at the team level the mere possession of knowledge by individual team members is insufficient if that knowledge is not shared, which in turn fails to influence the collective problem solving process (Sung & Choi, 2012).

Sung and Choi's findings indicated that positive effects of knowledge utilization (process of using team knowledge) were stronger when team leaders had a systematic cognitive style (provided highly structured situations, which allow teams to focus on clearly defined sets of elements to solve problems), and when teams were exposed to high environmental uncertainty. This leadership style was also attributed to having a positive main effect on team creativity and positively moderated the relationship between team knowledge stock (presence of knowledge within a team) and team creativity. They proposed team knowledge utilization as an overarching construct that indicates the intent to which the

pools of available knowledge and expertise are activated and exploited within teams (Sung & Choi, 2012).

The infrastructure of an educational institution, as the organization seeking school reform, will depend on the site administrator—the manager—to create, utilize, and foster the development of the 'teams' needed to successfully plan and implement a sustainable process for greater long-term student outcomes. The site administrator, likely the Principal, exercises authority to promote team creativity by keeping the goal clear to the entire team and systematically organizing and managing problem-solving processes which impede the utilization of the available knowledge stock, which is contingent upon existing contextual and interpersonal processes within the group (Sung & Choi, 2012). In the case of the centralized implementation model from the district-level (Wells & Feun, 2006), the Principal serves as proxy to the Superintendent who views the entire district as an assortment of small groups working towards common goals, interdependent on the success of one another. The use of PLCs serves as a platform and resource for carrying out school reform.

**The Leadership and Management of Small Groups**

Group leadership is dependent on the work group type and the context and frame in which the question "who is the leader of this group?" is being asked. Literature has failed to provide succinct definitions for leader or manager (Razik & Swanson 2010) and leadership is often confused with management.

In public education, leaders are typically viewed as principals, superintendents, and teachers where as they "too often are scapegoats for larger institutional, societal, and even global problems" (Razik & Swanson, 2010). This further supports Hackman's (1987) Stage

1 (pre-work) and Stage 2 (member selection) managerial work in creating effective teams, as the group's positive or negative performance and effectiveness—particularly in educational reform efforts—will be reflective of formal leadership positions within the institution.

A breadth of research is available on educational leadership (e.g., the Razik and Swanson, 2010 text), however, this paper focuses on small groups in action. The majority of the research cited in this dissertation does not note or distinguish the leader's role, particularly in experimental groups. However, managerial work as described by Hackman (1983) provided the framework for thinking about how the use of small groups for task or project completion should be considered and composed. The leadership of a small group will vary by group type and context, particularly in highly bureaucratic organizations like public school systems. The leader's/manager's role in group composition, ongoing support and facilitation, and ongoing monitoring and evaluation is critical to the success of the small group/work team. Nevertheless, the leaders' role cannot be viewed in isolation of the organizational context, which ultimately provides the resources necessary for the group to be successful.

**Designing Small Work Groups**

As noted by Hackman (1987), the manager/management team must invest time in the "pre-work" stage to ensure that "the organizational landscape" is not cluttered with "yet another unnecessary or poorly designed team" (p.335). Hackman (1983) offered a four-stage model which described the "stages of managerial work in creating an effective group:"

Stage 1. Pre-work phase

Stage 2. Creating performance conditions

Stage 3. Forming and building the team, and

Stage 4. Providing ongoing assistance [to the team] (see Figure 2).

Hackman's (1983) stages emphasized purpose, careful selection of members, support, and resources for the team. His model places the manager in a facilitation/support role, similar to the PLC work. His model assumed that the work of Stages 1 and 2—the pre-work and performing conditions stages— allowed the management team to carefully examine the task at hand, identify the number of people needed to complete the task, select team members, and allocate a reasonable estimate of the resources/authority to the group. Stages 3 and 4 are focused on ongoing support and assistance to the group.

The managerial model fits well with public school systems and implementation of PLCs as a reform support strategy. It provides a conceptual framework for evaluating the decision-making process behind the use of PLCs and can possibly help predict, similarly to Wells & Feun (2012) research, how successful PLC implementation will be.

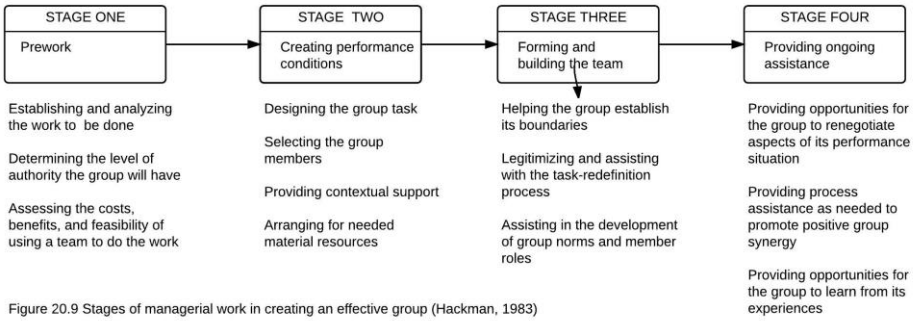

Figure 20.9 Stages of managerial work in creating an effective group (Hackman, 1983)

*Figure 2.* Adaptation of Hackman's (1983) Stages of managerial work in creating an effective group[1]

[1] From Hackman, 1987, p.338

The COP small group model relies on members to create value in participation. Problems may be solved or remain unresolved; however, members would find contentment in discussion, exploration, and possible transfer of knowledge that may occur within and between members of these groups. Wenger's (2002) *Seven Principles for Cultivating Communities of Practice* included uses that were believed to add value such as inviting a diverse membership to participate at various levels of the group. With regard to small group work and task-oriented group work, COP do little for moving a project or task along, therefore, COP do not constitute the need for a manager. Nevertheless, Wenger (2002) would argue that participation in such a group benefits the individual participant and any stakeholders as the participant may walk away with a new skill or process which may benefit a task-oriented work group. Ultimately, this COP small group model would benefit the public school system by providing a system for support to individuals for "job-alike" COP. The management team's role in facilitating these groups is minimal and, perhaps, limited to release time.

**Research on Group Development and Performance**

The typical work team small group model relies on its members to contribute task-relevant knowledge, skill, and expertise to the task/project at hand. At the initial outset of a work team, it may be assumed that the manager has composed a group based on the demands of the task and available human resources suitably matched to execute said task. This may not always be the case. Small work groups work in self-directed capacities—common practice in public school systems—and must go through a process to assess and/or re-assess the task and availability of the human and organizational resources. This process,

and the ways in which the group navigates through it, impact the group's dynamics and ultimate effectiveness.

Deborah H. Gruenfeld and her colleagues' (1996) research on group composition and decision making examined the role of group composition and information distribution (pooling) on group process and decision-making. As mentioned in the previous chapter, the authors used three-person groups (with variations of all participants familiar, to two familiar, to three strangers) to solve a murder mystery. Each person and group was provided varying levels of evidence from partially shared to fully shared. The analysis revealed that the participant's ability to guess correctly was due to their ability to "pool information" from the other group members. This strategy, which was most common when familiarity of members was high, resulted in the highest level of group effectiveness in executing the task (e.g. solving the murder case). The researchers found that when group unfamiliarity was high, participants tended to aggregate in order to be socially accepted, and were less likely to guess correctly.

Gruenfeld et al.'s (1996) work highlights the importance of member familiarity as it relates to ability to identify and "pool" specialized information from individual members. Her work also illustrated and supported the notion and benefit of membership diversity. Gruenfeld et al.'s (1996) team supported the theory that heterogeneous groups demonstrate creative problem-solving and innovation, thereby outperforming homogeneous groups who experience increased cohesion leading to harmonious groups with redundant knowledge.

Hackman's (1983) model for work team effectiveness was largely focused on the managerial roles, but he did include "group synergy" as a condition that supports performance strategies. Hackman (1983) warned of process losses by a) norms that do not

foster strategic planning, b) the group's collective failure to exploit a highly favorable performance situation, and c) falling into a toxic cycle of re-inventing the performance strategy. When it comes to group composition, teams may encounter employees who disrupt the team's efforts and become problematic to the success of the group's efforts. These disruptions come in the form of conflicts, disagreements, social loafing, lack of commitment, and inadequate and/or poor social skills (Levi & Slem, 1995). These cautions can be traced back to group design, membership selection, and ongoing managerial support.

Group development and group dynamics are interdependent, as group dynamics are often the result of the development process of membership transition from work group to a work team. Chang, Bordia, and Duck (2003) explored Gersick's (2003) punctuated equilibrium model and Wheelan's (1994) integrative model of group development and proposed that the models work together to provide a comprehensive framework for group development and performance. Gersick's (2003) punctuated equilibrium model, as interpreted and applied by Chang et al.'s (2003) research team, stated that instead of group development occurring over time, work groups experience long periods of inaction punctuated by concentrated "revolutionary periods of quantum [significant] change" (p.16). These periods of time are broken into a two-phase model in which Phase 1 is composed of basic strategies for completing the task, and Phase 2 is the mid-point at which the group undergoes a transition that sets a revised direction based on members' awareness of the amount of work to be accomplished by a given deadline. According to this interpretation, Phase 1 and Phase 2 are similar lengths of time wherein the transition from Phase 1 to Phase 2 is considered the 'mid-point.'

Wheelen's (1994) Integrative Model, as interpreted and applied by Chang et al.'s (2003) research team, was based on four decades of group development research. In this study, groups were viewed as progressing through five developmental stages (from Chang et al., 2003):

Stage 1: Dependency and inclusion

Stage 2: Counter dependency and fight

Stage 3: Trust and structure

Stage 4: Work

Stage 5: Termination

(e.g. Tuckman's 1965 and 1977 model of effective group performance: "forming, storming, norming, performing, and adjourning).

A walk through the stages reflects a work group's transition from first entering the group and having the group situation clearly defined and members focused, to groups becoming frustrated with leadership and clinging to homogeneity and independence, which leads to conflict resolutions, clarity of goals, increased cohesion, negotiation and task-oriented practices; then development of established norms of high productivity and effectiveness; and concluding with an end point at which time, evaluation and reflection of the process can take place (Chang 2003).

**Research Importance of Work Groups/Work Teams**

It is likely that many of the work group/work team models said to work in a complementary fashion are actually depicting the same description, or related particulars, due to the frame or lens being used to capture the group process as it is varied. For example, Hackman (1983) spent a majority of his tenure observing and consulting for large

organizations (such as Ford Motor Company) on research related to work team design and reaching work team effectiveness. He was highly focused on the manager and organization's role.

Wenger (2002), currently in his tenure, continues to consult and provide ideologies on the benefits of COP. The remainder of the research base is currently examining the use of PLCs for school reform and small work teams for task completion, with each attempting to answer the questions associated with work team design.

When it comes to composing teams or small groups in the workplace it is critical to return to Hackman's 1983 managerial stage, to determine if a work group was necessary to accomplish the intended task/project outcome (see the Pre-Work stage, Figure 2). "When teams have weak leadership or are self-managing, there is no one in a management position who can remove or discipline a problem employee [team member]. Team members are [therefore] often reluctant to report the problems with a team member to a manager not directly involved with the team" (Levi & Slem 1995, p.40). Self-managing teacher teams are a common occurrence in public school systems (e.g. PLCs at the school site). The self-managing conditions make the team more vulnerable to interpersonal problems [and process losses] (Levi & Slem, 1995).

DuFour (2004) warned in relation to the use of PLCs, "people use this term to describe every imaginable combination of individuals with an interest in education…the term has been used so ubiquitously that it is in danger of losing all meaning" (p.6). DuFour's (2004) warning is applicable to small group work as careful consideration to the group type must be given in order to avoid the pitfalls of "this all-too-familiar cycle". DuFour accounts for when group formation and roll-out has not been carefully planned by management.

In a clarifying article published in the journal of *Educational Leadership*, DuFour (2004) stated that "initial enthusiasm gives way to confusion about the fundamental concepts driving the initiative, followed by inevitable implementation problems, the conclusion that reform has failed to bring about the desired results, abandonment of the reform, and the launch of a new search for the next promising initiative" (p.6). Notably, the PLC roll-out described by Wells' (2012) study of two suburban school districts depicted the negative outcome described by DuFour (2004). For the decentralized roll-out of PLCs in which the unsuccessful district reflected confusion amongst school site teaching staff, lack of confidence in on-site leadership and a 'this too shall pass' attitude was evident.

**Small Group Research Examples**

*Group Development*

Chang et al.'s (2003) empirical study was designed to reconcile the punctuated equilibrium model (Gersick, 1988; Gersick, 1989) and the integrative model (Wheelan, 1994) of group development. Twenty-five groups of first year university psychology students (8 groups of five and 17 groups of four) participated in Chang et al.'s (2003) experiment for partial fulfillment of a psychology course requirement. The participants included 69 female and 38 male students who formed 2 all-male, 7 all-female, and 16 mixed gender groups. Contrary to other research findings that gender has no influence on patterns of group development, the author's observations later indicated that the all-male groups were less committed to the task than the other groups.

Chang et al.'s (2003) laboratory study was modeled after Gersick's (1989) study. In Gersick's (2003) study, participants were told to assume the role of professional advertising writers charged with designing a pilot commercial for a well-known airline at a major urban

radio station. Each team was given the same instructions and asked to note the time their group began and to submit their products in exactly 40 minutes. To incentivize participation, the researchers indicated that it was a competition.

The group meetings were videotaped for further analysis and all interactions were transcribed verbatim for coding and analysis. Statements were coded for elements of the punctuated equilibrium model and the integrative model. The results showed both punctuated equilibrium and linear progression could be observed simultaneously in their simulated project teams. The punctuated equilibrium model describes changes in a group's time awareness, pacing activities, and changes in its task activities over time. The integrated model describes how the group's structure and process changes along both task and social emotional dimensions.

Transcripts of the simulated study were coded with both coding systems. However, it was difficult to understand subtle changes in group processes on a social-emotional level. Results showed that the two models complemented each other to provide rich information on the developmental patterns of project teams over time. The authors reported that the artificial laboratory setting and the small sample were the major limitations of the study.

*Effects of Team Knowledge Management on the Creativity and Financial Performance of Organizational Teams (2012)*

Sung and Choi (2012)'s study investigated the effects of team knowledge management (TKM) on creativity and the financial performance of organizational teams. The final sample included 307 individuals from 65 sales teams across 35 branches of a Korean insurance company. Demographics included 35 branch managers, 65 team leaders, 207 team members (3.2 members per team), 59% men, with a mean age of 39.6, and an

organizational tenure average of 4.5 years.

Data was collected using four different survey instruments which were designed for four distinct groups of respondents from each branch, including branch managers, team leaders, and two separate subgroups of financial planners. Team leaders rated knowledge stock, cognitive styles, and team creativity. Branch managers rated environmental uncertainty. Team financial performance was operationalized as the rate of change in team financial performance over a 6-month period following the survey. The response format for all of the scale items was a 6-point (1-6) Likert scale with operations ranging from strongly disagree to strongly agree.

To identify the "core set of knowledge" required for the current task domain, a preliminary survey was sampled with three team leaders and 47 financial planners. Respondents were asked to list knowledge and skills important for high performance by financial planners. Researchers analyzed the content of their responses to identify five areas of knowledge and skills that reflected the current task area, and they were converted into measurement items. Both members and leaders reported the extent to which they possessed the task-related knowledge and skills.

*Educational change and professional learning communities: A study of two districts (Wells & Feun, 2012)*

Wells and Feun's (2012) study took an in-depth look at middle schools and reviewed how teams that were already established and working together differed from high school teams formed specifically to work as a PLC. The study included two districts with four middle schools (comparable in size, ethnic diversity and socio-economic level) in the same county and classified as suburban. The two districts were also similar in terms of number of

elementary (13 vs. 14), middle (4), and high schools (3). The student population was predominantly white. However, each district experienced an increase in diversity.

This descriptive study used quantitative and qualitative information gathered from standardized, open-ended interviews with teachers and administrators. The researchers developed a mixed-method survey to record both quantitative data (Likert scale) and qualitative data (open-ended) questions to gather a rich set of data that would help them understand the transition that occurred during the implementation phase of a PLC. The quantitative data allowed for the drawing of comparisons across the five dimensions associated with Hord's (1997) definition of PLCs (i.e., supportive and shared leadership; collective creativity; shared values and vision; supportive conditions and shared personal practice).

The open-ended questions were designed to capture the voices and feelings of the various teachers and administrators who were leading the efforts to implement a PLC, including their suggestions for what should happen in successful PLC implementation. Likert scales were used to generate quantitative data while explanations for questions provided qualitative data. The survey was used in interview format to maintain consistency between the interview questions and the follow-up questions in order for respondents to explain or clarify their answers. Results of the study revealed statistically significant differences between the two school districts with regard to PLC implementation.

*Teacher Work Group Effectiveness (2004)*

Conley et al.'s (2004) study utilized Hackman's (1983) model to explain group processes related to the group's effectiveness. The study was conducted in a large urban district with 15 middle-grade schools (grades 7 through 9), approximately 16,000 students.

Teachers responded to a survey instrument about the nature of their work teams (the teams had been established for a year or more). Responses were anonymous, but the surveys were color-coded by school. The response rate was 52% (352/680) and incomplete responses or responses from non-teachers were deleted from the dataset, which resulted in 174 teachers. Demographics included 41 men, 129 women, and 4 unknown. Teachers had an average of 13.9 years of teaching experience and organizational tenure averaged 4.5 years.

This was a descriptive and correlational study using survey data to describe major work group effectiveness variables and their interrelationships. Individual responses were used as the unit of analysis. Independent variables were process criteria and dependent variables were criteria for work group effectiveness. The limitations, as reported by the authors, were that the researchers were unable to link teaching teams to associated student groups or their corresponding academic achievement data due to technical limitations.

The instrument (survey tool) used was a Likert-type scale developed to capture the concepts in Hackman and Oldham's (1980) work group effectiveness model, adapted to school and teaching context. The survey questions were designed to describe respondents and the teams they were a part of. All items were measured on a 6-point Likert-type scale with one of four sets of descriptors.

**Implications Small Group Research Examples**

According to Light et al. (1990), elaborate statistical analysis can rarely, if ever, retrospectively correct weak project design. The author emphasized that researchers should think through their design carefully before collecting data in order to yield useful and convincing results. A review of the literature concluded that it is difficult to explore any complex research problem, such as small group processes, without using both quantitative

and qualitative reasoning (Vogt, 2007). The questions that drove this review, and selection of these five studies, were:

1. How has small group research been accomplished in the past?

2. What elements of small groups were under review?

3. Who were the participants?

4. How were the findings analyzed, interpreted, and recorded? (Light et al., 1990)

The five studies reviewed here were published between 1996 and 2012, and they are considered examples of modern and current research on small groups. Two studies included adult students as their participants, a second set used public school teaching teams, and the final set of studies used business organizational teams. All five studies sought to explore small group performance situations and processes in some form from—from the development and support of those small groups to the particulars of the situation. The studies referenced above use both types of methodology (qualitative and quantitative) via survey tools to gather data from participants about their experience and conducting observations and interviews to construct meanings or confirm those experiences.

A review of the findings did not reveal any particular or systematic process for pursuing small group research or reveal a single theory that can describe the complexity of small group processes or predict how to establish an ideal context for small group work. Context is ever-changing and complex, encompassing elements from organizational structure and support, leadership styles and capabilities, and individual capacity and motivation to engage with other members in the completion of meaningful work. Given this complexity, it is important to note that all five studies referenced above were designed and carried out by research teams. Many of the researchers were on teams of two or more. It

will be imperative for small group studies to be conducted by capable researchers operating with the same particulars that support small group 'success' in order to attempt to address as many of the small group particulars having to do with the critical elements of small group work (i.e., organizational support, leadership support, design and composition of the teams, and individual disposition to perform and participate).

As suggested by Chang et al. (2003), small groups are fluid, as their development occurs overtime and is influenced by various elements such as the task at hand and the duration of the group composition. This study was based on a 40-minute task of a group put together to complete what the author considered "ad-hoc" work—it was temporary and necessitated no more than minimal group work time. It was observed that some members did not buy-in to the group situation and therefore, did not engage or fully participate. Based on the specifics of this experiment, the findings cannot be generalized. Nevertheless, this study does contributed to Gersick's (2003) and Wheelen's (1994) theories of the stages of group processes.

**Recommendations for Small Groups**

The collective organization functions together to legitimize its capacity in its 'educator role' within society. Therefore, it must ensure the success of its membership up and down the lines of the organization. Supporting the team, and supporting individuals as an autonomous function, is necessary for individuals to view themselves as part of the team (and larger organization), have the ability to pool information from one another, and ensure that their knowledge and skill contributions are readily available to the team.

The management team must be prepared to support the teams and participate in their own self-reflective, self-fulfilling professional development and practice improvement via

an informal group process. as described in the local example of small group work. These managers can collectively design and implement a highly structured model backed by the district to create coordinated work teams of highly-skilled individuals at each school site. Manager participation in both types of groups (management team and small group site-leader) is necessary to model and support the use of work teams who will utilize PLCs as a strategy for school reform. It is also necessary to provide a venue in which site personnel can engage in informal groups to review any particulars impacting their practice but not specific to school reform, otherwise teams will begin to use their group time for discussions that do not directly support the task at hand (Conley, et al., 2004).

Once the manager has determined that a work team is necessary to accomplish a given goal or task, it is imperative that the manager structure the group and align the organizational resources to make the most of the work team (Hackman 1983). Factors that support successful work teams include the appropriate selection of the number and type of members (e.g., knowledgeable, skilled, expert, familiar, unfamiliar), clarification and reorientation of the group to the goal, and fostering and promotion of group cohesiveness. Over time, members of cohesive teams who are familiar with each other are more readily able to pool information from one another and collectively form norms that promote positive performance and effective use of time (Sung & Choi, 2012).

It is necessary that groups be provided with clear tasks, capable members, and a process for seeking additional support or resources. An individual team member readily participates in the group when he or she finds value in participation (Wenger, 2002). For example, PLCs in the educational system depend on decision-making at the group level for direction on what should be happening in classrooms to ensure that students are learning.

According to Weatherly and Lipsky (1977), teachers have been allotted sufficient autonomy and discretion at the classroom level. This allows for implementation of policy as teachers interpret it or as they see fit.

Weatherly and Lipsky's (1977) recommendation to create a system in which street-level workers become more accountable to their clients is being addressed with the introduction of PLCs as a school reform strategy and with the local management's decision to assess effectiveness via rubrics created by teaching teams. Teachers are still accountable to leadership for their participation in PLC work, however their teaching counterparts evaluate them via a common rubric. Overall, successful PLC implementation can lead to the reduction of negative forms of influence and the point at which policy is translated into practice.

Meyer and Rowan's (1978) application of the *logic of confidence* (discussed in Chapter 2) in how state governments deliver educational services and oversight is important. The theory identifies the interdependence between society and our educational institutions. This interdependence includes society's dependence on the educational infrastructure to categorize citizens into professions and inherent social classes and the public school system to deliver educational services and maintain the legitimacy of the institution of education and their roles within.

The entire educational system depends on individuals to come together collectively and deliver educational services that prepare students for participation in society. At this point, the role of the leadership and management teams is to organize and distribute the work in a way that results in demonstrated effectiveness and generates continued confidence

in the school system. Each individual acts with discretion to perform a given task, including participating in a work group.

Small group work is common in all industries, including all levels of public education. Therefore, small group work is studied in various contexts and various disciplines (e.g., sociology, psychology, human resources, organizational behavior, and education). This literature review offers a review and critical discussion of the major contributions to theory and research on socially situated small group work, with particular reference to educational settings (e.g., Hackman, 1987).

The use of small group work is common at the administrative level of a bureaucracy and the public school system is no exception. Group work has gained a reputation as a quick fix or reliable solution for leaders to resolve a problem or complete a particular task. This reputation has been bestowed on the premise that diverse membership of personnel or partners will yield the best results in problem resolution or task completion. Internationally, research on group work has become a popular phenomenon across various disciplines due to its complexity of elements such as design, roles, leadership, process, effectiveness, interdependence, behavior, creativity, misuse, etc.

The public school system utilizes group work at all levels of the organization, from the Board of Education which oversees the public school district as a whole, to the administrative teams (i.e. Superintendents, Directors, and Principals) who oversee individual schools, the classified staff who support the operation of the school system (including support services), to classroom teachers and assistants who deliver instruction to students. Based on the literature covering work groups/work teams, communities of practice (COP),

and PLCs the author presents common use of work groups, and infers the best use of work groups within and across the public school system.

## Preparation for the Study – Two Pilot Studies

Two independent pilot studies were conducted in preparation for the present study. The initial study took place between Summer and Fall 2012 (Estrada, 2013). Three participants were selected from the University Joint Doctoral Program (JDP). The participants served as a three-person research team to collaboratively complete a graduation milestone known as the Professional Development Practica (PDD). The PDD was an ongoing action research project focused on a regional educational problem.

The pilot study confirmed that scope of the research was possible with a small group of participants who identified as a group created by a manager and served as a collaborative group with a common general goal, yet independent accountability. The purpose of the project was to explore techniques to use when interviewing work teams, particularly question formulation, probing, and follow-up processes. The pilot allowed for a trial run of interview protocols and conducting interviews over an Internet chat. A standardized open-ended interview included the following three research questions and was used to discuss the small group process with the PDD group:

1. Who provided support and management for the group?
2. How did group members perceive group process?
3. What tangible learning took place?

Hackman's (1982) work was highly influential in this project. Hackman's (1982) model focused on a Process Criteria of Effectiveness that included the following factors, effort, knowledge and skill, and performance strategies. He further outlined the three impact

variables of those criteria, which included work team design, organizational support, and group synergy. Although descriptive, the model focused largely on management and organizational factors of influence resulting in limited applicability for actual group members. The research interest was therefore focused on identifying how groups go about applying their knowledge and skill in order to achieve group task effectiveness. Furthermore, how the group determines which performance strategy is most appropriate for the task given and the collective knowledge and skill available.

Hackman's (1982) work has been researched in large and small organizations and with various group types, such as self-managed, ad-hoc, and service. This project focused on the educational setting, specifically a graduate program that focused on preparing future researchers. A student group was interviewed individually to gain insight on their group performance process after working together on the PDD, a graduation milestone.

The result of this experimental activity was to inform the interview protocol so that the formal investigation would be better suited to support the development of a theory on how small groups assess available group resources.

The second pilot study took place between Winter and Spring 2013 (Estrada, 2013). The work group interviewed was a research team at a public university. The team used student work teams to conduct educational research across two universities in a large-scale, federally funded research study. A faculty coordinator at a partner university remotely managed the graduate students while faculty at the university served as local resources and support.

The four participants were selected. The participants served across two separate research teams in which one person uniquely served on both teams. Participation in a graduate researcher capacity varied from grade-based to the availability of monetary compensation.

The purpose of this study was to describe how a small group came to acknowledge and address the problem of absent talent, knowledge, or expertise required to carry out the common objective of the work team. In this case, a student research team on a public university campus. The questions outlined in individual interviews supported the exploration of the following question: How do teams come to understand that needed knowledge, skill, or expertise is missing in order to complete the group task, and how do teams respond to insufficient resource(s).

The members of this student group were interviewed individually to gain insight on their group performance process after working together on a longitudinal educational research project. The goal was to derive a detailed account of a team process that took place within a hierarchical bureaucratic organization in order to understand formal team formation processes, elements of team design, skill assessment, and role assignments, similar to Hackman's (1983) model of work team design. The results revealed a much more relaxed structure in which an expectation of available skill existed, set from the graduate students working on the project and available support for those students from the university faculty. Rather than functioning as formal work teams, wherein team members are autonomously and interdependently striving towards a common goal, the team resembled more of a grassroots community of practice. It became clear that the term "team" could be used loosely as this particular set of participants belonged to a more collective group of

independent, self-directed researchers who came together as needed to support the larger-scale research project.

In order to understand the university research team process, more time discussion and observation would be needed to gather enough information about the group processes and to understand the nuances of the group work. Additional time invested in interviewing the campus faculty who provided support on-site, and the coordinator at the main site, would support and add to a deeper understanding of all members' perspectives on the group work experience and the effectiveness of such work.

**Implications of the Pilot Studies on the Current Study**

The two pilot projects set the stage for the current study, which will continue to focus on the use of small groups in educational settings. The current study provided a description of how small groups were being used as a strategy to implement a large-scale innovation reform effort in multi-site organizations—in this case, two public school districts. This body of work on the study of work teams across school sites was gathered and described here to explore and explain the practices that are supported by research as best practices and utilize contextual factors to differentiate what is deemed effective and ineffective based on teacher perceptions.

The current study documented the progress of teachers in public schools (elementary and secondary) who worked to implement PLC concepts (Wells & Feun, 2009). Given that small groups are an existing strategy in schools, commonly known as "teaching teams" (Conley et al., 2004), the focus is on how established teams work together to implement CCSS as PLCs, whether that strategy is "effective" based on administrative and faculty perspectives, and if

it can be determined where a district's goal was to utilize a PLC for greater student gains or whether the goal was to become a PLC from the research vantage point.

Theoretical and empirical research will likely continue to collect data to support the understanding and identification of the collective budget assessment process of available versus needed knowledge, skill, or expertise needed to complete the group task for each work group. However, it is not the primary focus of the study. The focus for this study is placed on what was accomplished as a result of these collaborations (Wells & Feun, 2009) and how the leader has, and continues to use, that information communicated through the teams and his appointed leaders to continue to plan for and lead/direct the reform from the district level. Each member's experience contributed to the identification of themes that illuminated the entire CCSS implementation process via the 'Professional Learning Communities' strategy.

# CHAPTER 3: METHODOLOGY

This chapter provides a description of the specific steps involved in designing and executing this case study of school reform implementation through the use of small groups referred to as 'Professional Learning Communities' (PLCs).

This study aimed to explore and understand how the use of small group work in public schools supported or hindered CCSS policy implementation at the local level. The factors that impacted group work at the district and local levels led to an overarching practical consideration of the formal use of small groups (e.g. PLCs) in a setting that has been structurally organized for autonomous, asynchronous work. Additionally, competing priorities such as professional development and student learning intervention small group meetings were being re-envisioned universally without careful consideration of the organization's readiness for this change.

The data was collected with the intent to compare, contrast, and analyze factors known to impact the critical focus areas involved in a successful large-scale innovation reform implementation. A case study method was selected to understand the manner in which small group work supported or impeded large-scale innovation projects in public schools and how the leadership and management of such group work impacted the results. This method of study was generated after careful consideration of the research question and a review of the methods through which the questions could be answered.

## The Qualitative Case Study Research Method

Case studies are one of the many types of qualitative study methodologies available to researchers (Patton, 2002). The case study design is utilized when "the research addresses either a descriptive question (what happened?) or an explanatory question (how or why did

something happen?)" (Green et al., 2006, p. 112). Given that PLCs are widely promoted as effective professional development strategies, a case study design allows for addressing the descriptive or explanatory questions first hand via the direct inquiry into an exemplar of a successful or unsuccessful 'case'. Case studies emulate principles of scientific research, as they start with explicit research questions, use a research design to address research questions, collect and fairly present evidence to support interpretations, and reference related research to aid in defining questions and drawing conclusions (Yin, 2006).

Patton (2002) described qualitative research as having three types of data collection: "(1) in-depth, open ended interviews; (2) direct observation; and (3) written documents" (p. 4). This qualitative case study design relied on in-depth, open-ended interviews and written documents. In this case study, participants were interviewed and their answers analyzed for the identification and triangulation of themes related to the perceived success of the implementation strategy of CCSS and documentation of the implementation processes over three years.

According to Yin (2009), case studies are the preferred research method when research questions address the "why" or "how" of a given phenomenon, as the findings will result in an explanation. Yin (2009) provided examples of possible case studies in education and specifically named the use of informal planning groups for improving instruction by teachers. This example is a variation of the current research question with one disparity—that the planning groups were formal PLC's, and the approach to improving instruction was the through use of the CCSS framework (Yin, 2006). Figure 3 reflects Yin's (2006) case study definition.

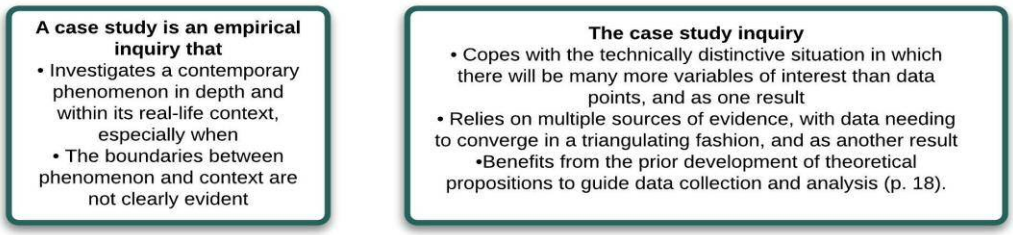


*Figure 3.* Adaptation of Yin (2006) Case Study Definition & Criteria

The *unit(s) of analysis* can be the individuals, events, entities, decisions, programs, implementation processes, and organizational changes that occur within the compounds of the case (Yin, 2009). Two school districts were examined and the case study focused on a vertical bureaucratic administrative scale and horizontally across schools and classrooms. Specifically, the study explored how decisions on both scales affected policy, courses, staff, faculty and, ultimately, students. Therefore, the 'individuals' in this study were the primary source of data collection for the unit of analysis—the organizational structure.

Case studies vary in data sources. According to Yin (2006), researchers should be comfortable with and adept at working with both qualitative and quantitative data when conducting case studies. This small group teacher perception study resembled Yin's (2009) example of a case (which indicated how student achievement had improved in conjunction with a combination of interventions) that was both heavily qualitative and quantitative. Patterns and analytic techniques can be planned during the case study design and support pattern matching during analysis.

## Context for the Study

As a descriptive case study, this research used information collected without changing the environment, including quantitative and qualitative information gathered by a

survey and standardized, open-ended interviews with teachers and members of school district management teams. The setting included two California public school districts, an (a) elementary and (b) combined elementary and secondary district. The study was loosely modeled after Wells and Feun's (2012) work focused on district level policy reform in public schools and an extension of two previous pilot studies on small group dynamics.

This study focused on large-scale reform efforts in two public school districts in Southern California; a comprehensive review of how elementary and secondary school sites were led and managed toward the goal of implementing the Common Core State Standards (CCSS). Both districts identified PLCs as a primary strategy for Professional Development and policy implementation. The artifacts collected and examined included teacher, coach, and administrator perceptions and perspectives, meeting agendas, training documents, and internal and external progress reports.

At the time of this study, public schools were well-established in CCSS implementation. It was necessary that this case study follow a research approach which used a range and depth of research traditions represented in the field of education. This approach was designed to understand what effect a national, large-scale innovation policy had on the production of desired outcomes. improving student performance, addressing the achievement gap, and changing how teachers teach. This interdisciplinary approach utilized complementary research methods, particularly survey and interview, and resulted in a broad conceptualization of the policy implementation problem (Green et al., 2006). According to Siebere (1973), the complementarity between case studies and surveys has long been appreciated. Case studies are often viewed as additions to experiments, rather than alternatives to them, and enjoy extensive use as teaching tools and ways to improve practice

(Green et al., 2006). Yin (2006) added that case studies benefit from multiple sources of robust evidence that support a triangulation of two or more independent sources that point to the same set of events or facts.

The case study design provided a framework for utilizing both quantitative and qualitative data to measure practices for the utilization of small groups as a strategy for large-scale innovation projects, as represented in the literature. This mixed-methods approach provided the opportunity to probe representatives engaged in those efforts and allowed for the gathering of information at a micro-level. The robust information gathered from a mixed methods approach provided a better understanding of the complicated details of the structure and process of such an effort.

## Research Design

*Participant Sample*

Data collection for this study was threefold—individual in-depth, open-ended interviews; a survey; and a collection of physical artifacts. District A and District B varied in level of participation and were studied individually. At the time of the design, it was not clear whether the two cases were replications, if they contrasted, or if they were theoretically diverse cases (Yin, 2009), as both districts claimed to specifically utilize PLCs as a strategy for professional development and policy implementation. Therefore, the need to explore the various perspectives of faculty, staff, and an administrator regarding small group work and the effect on school reform policy implementation required the gathering of teacher perspectives. At District B, data were collected via a survey in which participants self-selected availability for a follow-up interview. Both districts included; administrator

interviews, however, the composition of the administrative team varied (secondary versus elementary, district versus site level).

*Participant Selection*

A nonrandom procedure was utilized to select participants from two public school districts to examine the use of small groups in public schools. Three local school districts identifying PLCs as their professional development strategy for the implementation of CCSS were contacted to participate in the study. Two districts responded, confirmed utilization of the PLC strategy and agreed to support participation in the study.

For District A, a series of comprehensive open-ended structured interviews were conducted with the Assistant Superintendent of Secondary Education who led the effort. The district office arranged interviews.

For District B, a questionnaire was administered to all elementary and middle school teachers (n=42). An open-ended structured interview was then conducted as a follow-up with elementary (n=2) and middle school teachers (n=2), district staff, including TOSA (n=1) supporting the CCSS implementation effort, and two site principals (n=2). The district office disseminated the electronic questionnaire. Interviews were arranged by the researcher based on survey responses. Respondents who indicated their willingness to participate in a follow-up and with district staff were contacted directly.

District A

Data for District A included in-depth interviews with the lead Administrator who represented teachers and staff involved in the reform effort. Interviews and artifacts provided information about teachers who were members of site-based PLC teams, the administrative team composed of the Assistant Superintendent of Secondary Education, and

Principals who oversaw PLC implementation across six schools (four high schools and two junior high schools), and the Coaches known as PLC leads or Teachers on Special Assignment (TOSA) who supported Teachers on the ground (e.g. in classrooms). District A's total enrollment consists of 15,593 students (CDE, 2015).

District B

District B's data included a Teacher Survey, interviews with members of site-based PLC teams, and members of the administrative team composed of the Assistant Superintendent of Curriculum, Instruction and Assessment, and district staff who oversaw CCSS implementation across nine elementary schools and four middle schools. District B's total enrollment consists of 7,401 students (CDE, 2015).

**Data Collection**

*The Survey*

The survey and interview protocols used in this study were previously developed, tested, and retested in two pilot studies, as discussed in Chapter 2. Instruments for measuring organizational readiness for change, including peer reviewed, exhibit limited evidence or reliability and validity (Weiner, 2009). For the large scale undertaking of evaluating organizational readiness for change Weiner states that none of the instruments he examined was deemed "suited for measuring Organizational readiness for change as defined….due to the focus on individual readiness rather than organizational readiness, or because they treat readiness a general state of affairs rather than soothing change-specific, of because they include items that theory he presents as "determinants of readiness" rather than readiness itself" Weiner (2009). According to Weiner, organizational structures and resource endowments [allocations] shape readiness perceptions" where organizational readiness is

viewed in psychological terms (e.g. team members willingness for change) rather than structural terms (e.g. resources for the change). Intra-organizational variability in readiness perceptions, based on inconsistent messaging, lack of opportunities for intra-organizational groups or units to interact/share information, indicates lower organizational readiness for change and could signal problems in implementation offers that by nature demand coordinated action among interdependent actors.

Weiner (2009) suggests a four-step framework for exploring the construct of organizational readiness for change:

1. Utilizing a means of focusing on the change (e.g. Survey includes brief description of the change),

2. Utilization of group-referenced items versus self-referenced (e.g. Questions about collective commitment and capability rather than personal),

3. Including items to capture the change commitment or change efficacy not related constructs (e.g. Questions about current value of the change versus preceding conditions), and

4. Efficacy items tailored to the specific organizational change (e.g. questions for the specific context).

The survey developed for this study follows Weiner's (2009) suggestions for exploring organizational change readiness, incorporates theory on group effectiveness and was pilot tested (see survey in Appendix D). The process for establishing content validity was not followed; however, three Professors familiar with small groups—particularly PLCs and COP, teacher teams, organizational change, and educational leadership—indicated a

strong agreement in the quality of the questions that measured the dimensions of small group work (Wells & Feun, 2009).

The survey began with a logistical question for informed consent. After the person agreed to participate, the survey generated a background questionnaire (12 questions) to learn more about the participant's background as it related to their knowledge, skill, and teaching experience, and experience with small group work. This data served to group participants for an analysis of teacher groupings demographically and by ranked perceptions. The survey questionnaire was launched (86 questions) after background information and willingness for a follow-up interview was collected. The purpose of the survey was to learn more about participant perceptions as they related to the use of small groups for large-scale reform, the process of large scale reform implementation, effectiveness, and secondarily, leadership and organizational support based on their current organization's process.

Eighty-six questions on the survey were delivered via 6-point Likert scales, *Strongly Agree*, *Agree*, *Disagree*, *Strongly Disagree*, *N/A*, and *I don't know (See Appendix C)*. The questions were developed by the researcher influenced by elements of organizational readiness (per Weiner, 2009) and PLC structural and support of Wells and Feun's (2009) study.

The survey was categorized in the following way:

Theh first section focused on large-scale innovation sentiments, group work sentiments, campus PLC work, department PLC work/my PLC, district plc work, time out of classroom, plc benefits/damages, and overall. Particular attention was also given to the following areas: familiarity with common core (CCSS) goals, standards in general and standards in my grade/discipline and two previous reform efforts (race to the top and no child left behind).

Participants were provided an open-ended area to provide clarification or additional anecdotes for the researcher to consider (see Appendix E).

The second section focused on the importance of meeting dynamics such as structure, leadership qualities, and teacher qualities. The final section addressed level of confidence in their ability to translate policy into practice and the group's collective ability in policy implementation and their perceptions on whether their credentialing programs prepared them sufficiently for working in groups or PLCs.

**Interview Protocol**

Each question asked in the series of District A interviews was linked to the initial research question, implicitly or explicitly. A semi-structured interview accounted for and expanded on the responses to the 86 survey questions gathered from District B. Given that the study explored perspectives of these specific individuals, vertically and horizontally, selection of participant types (faculty, school site and district administration) was inherent.

**Materials**

The materials for this study consisted of the following:

1. PART 1: The Survey (District B)
2. PART 2: Interview – Teachers
3. PART 3: Interview – District Staff, TOSAs, Administrators – Principal, Assistant Superintendents
4. PART 4: Artifacts from District A and District B

*Survey Participants*

District B survey participants provided insight into the teacher reform experience with representation from both the elementary and junior high realms (10 of 11 schools, see

Tables 1 and 2) and via various demographics such as: English Language Arts (ELA) and Math across grade levels (see Table 4); normal distribution of ages (20-69 years) (see Table 5) and nearly equal representation of minimum educational requirements BA and Credential (58% vs. 42%) a master's degree. Differences were observed by Gender (94% female / 6% male); levels of experience (14% less than 5 years' experience vs 84% 6 years' experience) (see Table 3).

*Interview Participants*

Interviewees (n=8) provided insight into the teacher and administrative reform experience with representation from site level teachers and principals; and district personnel, TOSAS and Assistant Superintendent (CCSS Lead). Interviewees responded to data from the Teacher survey to validate or dispute perceptions by providing anecdotes and historical / current context (see Table 7).

Table 1

*Characteristics of District B Schools & Survey Response rates*

| School | Number of Students | Number of Teachers | Percentage of Teacher Responses[2] |
|---|---|---|---|
| Elementary | | | |
| School 1 | 385 | 21 | 11% |
| School 2 | 331 | 25 | 7% |
| School 3 | 378 | 23 | 0% |
| School 4 | 690 | 34 | 11% |
| School 6 | 492 | 25 | 11% |
| School 7 | 563 | 28 | 15% |
| School 9 | 661 | 31 | 4% |
| School 10 | 593 | 25 | 19% |
| School 11 | 690 | 32 | 4% |

[2] All District B Teachers received an email invitation and link to the online survey. A second and third reminder were also emailed by the researcher.

| | | | |
|---|---|---|---|
| Middle School | | | |
| School 5 | 999 | 41 | 19% |
| School 8 | 866 | 40 | 4% |

Source: California Department of Education Enrollment & Staffing Reports, 2014

Table 2

*Participant Quantitative / Survey Data, Grade Level Counts*

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | Preschool |  | 1 | 4% |
| 2 | 1st Grade | | 2 | 7% |
| 3 | 2nd Grade | | 6 | 21% |
| 4 | 3rd Grade | | 5 | 18% |
| 5 | 4th Grade | | 7 | 25% |
| 6 | 5th Grade | | 8 | 29% |
| 7 | 6th Grade | | 5 | 18% |
| 8 | 7th Grade | | 3 | 11% |
| 9 | 8th Grade | | 5 | 18% |
| 10 | TK | | 1 | 4% |
| 11 | K | | 1 | 4% |

Table 3

*Participant Quantitative / Survey Data, Education & Experience*

| Demographic | Classification | # |
|---|---|---|
| Teaching Experience | < 2 years | 2 |
| | 3-5 years | 2 |
| | 6-10 years | 10 |
| | 15+ years | 15 |
| Credential Types | MS Credential | 12 |
| | Single | 4 |
| | Both MS / SS | 4 |
| | Special | 4 |
| Education | Master's Degree | 17 |
| | Science / Engineering | 9 (31%) |
| | Business | 1 (2%) |
| | Education | 3 (10%) |
| | Arts, Humanities, Other | 16 (55%) |
| | Decline to State | 1 (2%) |

Note: All questions were optional therefore not all data is available per respondent
*42 respondents in Survey, 31 responded to Job Title: 5 were not Teachers / data removed, 29 provided Education Types, Education Categories provided by US Census, 2015

Table 4

*Participant Quantitative / Survey Data, Subject Matter*

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | English / Language Arts | | 19 | 68% |
| 2 | Math | | 18 | 64% |
| 3 | Other | | 19 | 68% |

Table 5

*Participant Quantitative / Survey Data, Ages*

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | 18-20 | | 0 | 0% |
| 2 | 20-29 | | 3 | 10% |
| 3 | 30-39 | | 9 | 29% |
| 4 | 40-49 | | 7 | 23% |
| 5 | 50-59 | | 5 | 16% |
| 6 | 60-69 | | 7 | 23% |
| 7 | 69-70 | | 0 | 0% |
| 8 | Over 70 | | 0 | 0% |

**Procedures**

Initial contact and cooperation procedures were administered at the district level. Three local school districts indicated the use of PLCs as their strategy for professional development and implementation of the CCSS were contacted to discuss and explore participation in the study. Two districts responded and the following section describes when, where, and how the data were collected and includes a detailed description of the exact steps taken to contact research participants, obtain cooperation, and administer surveys and interviews.

*District A*

Interviews with District A commenced at the time CCSS was introduced and on the horizon of implementation (2014). Per the Assistant Superintendent, PLC work was at the center of the strategy, with full district involvement and support. The following steps were utilized to engage District A: (a) email to the Assistant Superintendent of Secondary Education to request a meeting, (b) meet to discuss CCSS implementation strategy using PLCs, (c) meet subsequently to gather information (1 year of semi-structured interviews) and documentation on implementation processes, successes and challenges, and (d) follow-up via email for clarification.

*District B*

District B's website identified PLC's as central to the CCSS strategy, with full District involvement and support. District B is an elementary school district and resided in a different county from District A. The following steps were utilized to engage District B: (a) email to the Superintendent to request cooperation with completion the teacher survey, (b) email to Superintendent Assistant to request email addresses, (c) draft email sent to Assistant to email on Researcher's behalf, (d) email sent to all teachers by the Superintendent's office, (e) online Teacher survey commenced, (f) follow-up one week later to request a reminder email, (e) email to Assistant Superintendent of Curriculum and Instruction to meet to discuss CCSS implementation strategy using PLCs (referred to TOSA 1), (f) meet with TOSA 1 (as delegate of Assistant Superintendent) subsequently to gather information and documentation on implementation processes, successes and challenges, (g) secure teacher and principal interviews, (h) collect informed consent for interview, (i) conduct interviews, (j) follow up via email for clarification.

*Interview Method*

All interviews were conducted near the end of the school year (September 2015 and April 2016 and May 2016), after the participants had completed their small group tasks, district training, and state testing for the school year. Interviews captured individual perceptions of the group process as a work group described by Hackman (1983) and other small group theories such as PLC framework literature (see Chapter 2), as well as perceptions regarding individual and organizational readiness for change. A standardized open-ended interview was used to capture perceptions and self-assessments of the group process. This method provided forethought for the chronological discussion.

Table 6

*Participant Qualitative / Anectodal Data from interviews with District A & District B*

| Classification | Gender | Years of experience | Subject Matter | Grade Level |
|---|---|---|---|---|
| TOSA 1 | F | unknown | N/A | N/A |
| Teacher 1 | F | 26 years | ELA/MA | 5 |
| Teacher 2 | F | 8 years | ELA/MA | 3 |
| Teacher 3 | F | 12 years | ELA | 6 |
| Teacher 4 | F | 15 years | MA | 6 |
| Principal 1 | M | 1 year | N/A | N/A |
| Principal 2 | M | 1 year | N/A | N/A |
| Assistant Superintendent 1 | M | 2 years | N/A | N/A |

Interviews were not the primary source of data for this study; a teacher survey and review of physical artifacts and researcher field notes were also included for analysis and conclusions. Yin (2009) stated that "even though your data collection may have to rely heavily on information from individual interviewees, your conclusions cannot be based entirely on interviews as a source of information" (p. 88). The focus was and remains at the organizational level, as it is an organizational change related to policy implementation. Common confusion between unit of data collection and unit of analysis "begins because the

data collection sources may be individual people (e.g., interviews with individuals), whereas the unit of analysis of your case study may be a collective (e.g., the organization to which the individual belongs)" (Yin, 2009, p. 88).

**Data Analysis**

The methods associated with this case study provided both quantitative and qualitative data that could be used to extrapolate themes, generate claims, and produce robust triangulated findings. The intention was to discover how a small group strategy and administrative leadership (e.g. Assistant Superintendents, Principals and Teachers on Special Assignment) involved in an organizational change supported or impeded a school reform policy implementation process.

Both districts belonged to similar bureaucratic infrastructures, however District A was a secondary school system and District B was an elementary school system. Both systems had Assistant Superintendents to implement CCSS and both had determined PLCs as the best implementation strategy. Having spent over a year reviewing District A's comprehensive plan for implementation (in which PLCs were used as a strategy) and reviewing District B's public resources – utilizing PLCs for professional development (discussed in Chapter 4), it was not surprising that the participant responses in the survey and interviews differed.

In fact, the differences validated and substantiated Wells and Feun (2009) findings, which suggested that implementation could be derailed when the goal was to "become a PLC" rather than strategic use of a PLC. District B identified with the latter (at the district level), but teachers disagreed. One teacher said, *"I don't even know what PLC is. I work with the other 4th and 5th grade teachers just to survive. We had two lousy training days with*

*most teachers balking as the outcomes and expectations are unrealistic. We've had a couple of grade level meetings this year, but it was mostly about district benchmark tests."*

*Interview Data*

The interviews for District B presented several patterns and helped explain differences in order to report how questions were interpreted, specifically the context in which participants responded and if their responses had changed since completing the survey. Interview participants include: Teacher 1, Teacher 2, Teacher 3, Teacher 4, TOSA 1, Principal 1, and Principal 2.

In the absence of the survey for District A, interview data and the physical artifacts helped explain if the district's PLC strategy was perceived as effective at the implementation level. The interviews provided the researcher with context, rationale, and examples of group or individual perception. A protocol was created to outline the logistics of the interview and general questions formulated to address the purpose, confidentiality, and consent process. The questions were intended to understand how the district and school sites operated and asked representatives to recall the processes and identify the strengths and problems associated with the district's approach, particularly amongst administrative personnel. The structure of the interview protocol reflected a deductive approach, as defined by Brenner (2006), in which "…a researcher brings theoretical constructs to the research project. Questions are framed using these constructs and analysis can be done by examining how the informants address these constructs during an interview" (Brenner, 2006).

**Coding and Themes**

The interview responses were coded and and categorized by themes (discussed in the next section). If the interviewee mentioned a concept, offered an anecdote, support or

criticism at the district or site level support the comments were classed in groups. Interviews were coded in multiple sessions by the primary researcher therefore interrater reliability was not established as the primary researcher conducted all coding.

**Analysis**

The five phases of critical decision point or phases in a systematic analysis framework (post interview data collection) include transcription, description, analysis, interpretation, display (Brenner, 2006). Brenner (2006) also suggested that the process not be linear but cyclical, wherein the researcher returns to the data various times with different perspectives, similar to what Glaser and Strauss (1967) termed a constant comparative method (Green et al., 2006). For this case study the five phases were incorporated in the analysis as follows:

1. Transcription

   The data was prepared for analysis. This case study utilized field notes and a transcription service. In addition, annotated summaries were produced after a complete analysis of those products was conducted. Given the political nature of public schools audio recordings were not utilized to support confidentiality, anonymity and sharing of anecdotes by teachers, staff and administrators.

2. Description

   Examined the content of the data collected in order to code, conduct thematic analysis, and identify incidents and telling of incidents.

3. Analysis

   Examined relationships in the data (i.e., across informants, within one interview, etc.). Attempted to identify broader themes related to the particulars of an

individual experience and coding system. Abstractions and/or theoretical dimensions were also identified.

4. Interpretation

   Connected case study results to larger theoretical issues. For relevance to other contexts and to other research(ers).

5. Display

   Determined what data would be included in the final report such as verbatim quotes, in-depth examples, mini case examples, tables (such as frequency, etc.)

Creswell (2009) described an interactive approach to analysis of qualitative data see (Figure 4). After the initial review of the data is conducted, data is coded, organized into categories, then assigned meaning. This approach allows for the study to be adapted when the need for new codes emerges.

The researcher reviewed each line of text and assigned code in addition to uploading the qualitative data into qualitative statistical software, Qualtrics and SPSS. The software facilitated comparisons between groups and frequency. Coding supported the identification of themes in this case study. Themes were identified per case or across cases.

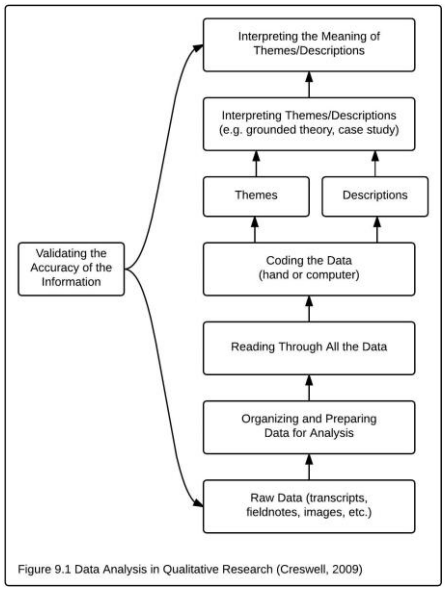


*Figure 4.* Adaptation of Creswell (2009) Data Analysis in Qualitative Research Model

**Interpretation**

The qualitative data was interpreted and compared to the literature. Themes were identified in both districts and compared with each another. Narrative samples were utilized to explain, expand, or offer insight into the resulting interpretations.

For this study, in order to extrapolate common dimensions of a successful small group strategy at the ground level for each school's experience, a five-stage research approach was employed:

Stage one focused on the collection of respondents' demographics. This data provided relevant context of the informants and supported the identification of themes in the data analysis process, as the demographic data related to knowledge, skill, and expertise in teaching and working in groups. Education, teaching tenure and experience in reform implementation may have impacted perceptions reported in the survey.

Stage two employed a quantitative measure in the form of a Likert scale survey. Survey questions on the survey were direct and aimed to collect data on the perceptions of the respondents at the time of the survey and gather retrospective data. A tool created by the Principal Investigator categorized responses from the demographic component of the survey (see Tables 3 - 4). Based on quantitative findings (e.g. levels of satisfaction), follow up in the form of a semi-structured interview commenced with respondents who served as representatives of a 'site, group'. Respondents were probed for anecdotes that support or dispute data from the survey and asked to reflect and provide rationale and/or examples for the findings.

## Summary

This study assessed the success of PLCs as a strategy for large-scale innovation implementation. In order to understand participant's views of the effects, teacher perceptions of organizational support related to group work (independent variable) and effectiveness of small groups in CCSS implementation (dependent variable) were gathered via a survey and interviews with key personnel. In general, the interaction effects of independent variables needed to be ruled out before assessment of the respective main effects of those two independent variables became meaningful.

A case study design was adopted for data collection to gather information on the experience of two school districts. This study used existing groups in a specific case of an organization involved in the use of a particular small group type. Therefore, generalizable and causal effects were not sought, rather the effects in this particular case were desired.

## CHAPTER 4: PRESENTATION & ANALYSIS OF DATA

This chapter documents the responses of teachers, district support staff (TOSAS) and administrators who described what was happening in their schools as teachers worked to implement CCSS and participated in 'Professional Learning Communities'. The teacher perspective will result in emphasis on District B (District A did not include the Teacher survey). The interviews include questions focused on successes and challenges of attempting large scale reform, probing questions to support or dispute Teacher survey data (District B) and anecdotes to tell the story for each District (District A includes Administrator interviews).

This study focused on two school districts in which successful implementation of a large-scale reform effort was attempted. As such, participants were not randomly selected. Participants of this study included public school teachers from elementary and secondary education schools, grades K-8 in District B, and Grades 7-12 in District A. Participants at District B were asked to complete the survey tool in May 2015, descriptive statistics and preliminary analysis were conducted soon after surveys were collected. Qualtrics software, 2016 Qualtrics, LLC, an online survey and data analysis research suite, was used.

### Results of the Study

*Research Questions*

How does small group work support large-scale innovation (reform policy) implementation (in public schools)? How does actual practices vary from what previous research suggests? What do local public school administrators, staff, and faculty identify as issues facilitating and non-facilitating for the use of small groups in public schools?

*District B Survey Results*

Survey participants were provided the following prompt to provide context for survey questions: "To help understand your perception of the use of small groups, particularly Professional Learning Communities (PLCs), as a strategy for large-scale innovation programs in school districts please complete this survey by responding to each individual statement".

The coding was: Strongly Agree (Value =10), Agree (Value =7), Disagree (Value =3) or Strongly Disagree (Value=1), Does Not Apply (No Value = data dismissed), I Don't Know (No Value = data dismissed). Participants were also informed, "If you believe the question can be interpreted various ways, please provide a note and the bottom of that section to clarify" (See Appendix X).

The Teacher Survey revealed that the majority of teachers (who responded to the survey) support the "principles underlying the Common Core", *M*= 8.2 (see Table 8). Additionally, participants stated they enjoy "working with others on common problems in group settings", *M*=7.67; "know the role of the PLC strategy for implementing large-scale innovation programs", *M*=7.28; and that CCSS implementation was not their first time participating in reform programs, M=3.43 (disagree it was their first time); and that small group work coordinated at the district or campus level was not new, *M*=3.43 (disagree small group work was a new strategy). A few variations in context were observed on experience in working in "long-term" group projects, *M*=6.05; and that the participant's definition of a PLC has evolved, *M*=5.94).

Table 7.

*District B Individual Context Questions*

| Question | Mean | ID |
|---|---|---|
| I support the principles underlying the Common Core | 8.20 | IC |
| I enjoy working with others on common problems in group settings | 7.67 | IC |
| I know the role of the PLC as a strategy for implementing large-scale innovation programs | 7.28 | IC |
| Prior to the small group work associated with the Common Core, I had worked on many "long-term" group projects in various topic areas | 6.05 | IC |
| My definition of a Professional Learning Community has evolved | 5.94 | IC |
| The implementation of the Common Core is my first time participating in a large-scale Innovation Program | 3.43 | IC |
| Prior to the Common Core my campus did not utilize small group work coordinated at the District or Campus level | 3.17 | IC |

ID KEY
IC = Individual Context
Strongly Agree =10, Agree =7, Disagree =3, Strongly Disagree =1
NA / Don't know = no scoring value

The Teacher Survey individual context questions indicated neutrality that individual campuses had provided a PLC definition, "my definition of a PLC has evolved", M=5.94, (see Table 8), however acknowledge the role of the PLC as a "strategy for implementing large-scale innovation programs", M=7.28. Additionally, they agreed that their sites have been utilizing small groups coordinated at the District or campus level (M=3.43, a disagreement question), enjoy working on common problems in group settings (PLC component), M=7.67, knowing that a PLC is a "small group for addressing a common goal", M=7.28. These commonalities indicate the presence of PLC elements, confirm small group structures in practice however lack the clear definition at the administrative level that this strategy is intentional and in practice at their sites.

The Teacher Survey individual perception questions reflect perceptions at the organizational level such as, "my campus's definition of a PLC is a type of small group for addressing a common goal", M=7.67 indicating general agreement that the definition had been provided or perceived as provided at some point in time. Additional agreement was found on the campus goal of "becoming a PLC vs utilizing a PLCS as a strategy", M=7.00. This question is based on Wells & Feun, 2002 where the organization focuses on implementing a given strategy rather than the outcomes possible (see interview themes below about district level PLC attempts). Agreement, M=6.15, dwindled some when participants were asked "my campus utilizes small group work as a strategy for implementing the common core". This reflects their perception about intentionality, for example, they have prep time, small group time "job-alike" however are those meeting times directed towards working on a common problem and/or agenda items specific to CCSS. Ambiguities between Agree and Disagree were observed in items related to satisfaction with the PLC work occurring on campus and activities of the PLC, rather than select N/A or I don't know participants selected Agree or Disagree. The researcher intentionally left out a neutral component to secure a clear response however this lead to inconsistencies in responses where participants somewhat agree, M=4.2 that their campus is an exemplar for others doing PLC work and being satisfied overall with the use of PLCs at their campus, M=5.72.

Table 8.

*District B Individual - PLC Perception Questions (Organizational Level)*

| Question | Mean |
|---|---|
| My campus's definition of a Professional Learning Community is a type of small group for addressing a common goal | 7.67 |
| The goal of my campus is to become a PLC vs utilizing a PLC as a strategy | 7.00 |
| Small groups focused on Academic topics are successful when membership is carefully considered and planned by leadership | 6.85 |
| My campus utilizes small group work as a strategy for implementing the common core | 6.15 |
| My campus utilizes small groups known as Professional Learning Communities | 5.90 |
| Overall, I am satisfied with the use of PLCs at my campus | 5.72 |
| I know my role within my PLC | 5.72 |
| Before the introduction of the Common Core I felt "something" had to be done on a large-scale | 5.45 |
| I consider the implementation" of the Common Core as successful | 4.70 |
| I know the Common Core Curriculum Standards relevant to my work because of my participation in my PLC | 4.32 |
| PLCs on my campus are viewed as a time for reflecting | 4.00 |
| PLCs on my campus are viewed as a time to learn new teaching/testing methods | 3.39 |
| My PLC is an exemplar for others doing PLC work | 3.14 |
| Prior to the PLC work I had more autonomy and discretion in working towards student learning outcomes | 3.00 |

ID KEY
IP = Individual Perception
Strongly Agree =10, Agree =7, Disagree =3, Strongly Disagree =1
NA / Don't know = no scoring value

The PLC Dynamics and Satisfaction Perception Questions revealed the highest levels of disagreement. Questions focus on work team design, logistics, roles and synergy questions. Means for this section were between 2.74 – 6.10, see Table 10 & 11. The question with the highest mean, M=6.10, was related to the learning that took place from other members in the group (Agree = 7 and Disagree = 4). The following three questions, M=5.17, M=5.05 were to satisfaction with the group composition, agreement that meetings were constructive and that the discussion included instructional methods and strategies. The lowest means had to do with satisfaction with PLC planning: the number of PLC days the

team received, M=2.74, overall satisfaction with planning days M=3.14, positive impact of PLCs on planning days M=3.21 .

Table 9.

*District B - PLC Dynamics Questions*

| Question | Mean | ID |
|---|---|---|
| I personally have learned something useful from other members | 6.10 | IP (D) |
| My PLC meetings are constructive | 5.17 | IP (D) |
| We discuss instructional methods and strategies | 5.05 | IP (D) |
| I am satisfied with my PLC group composition | 5.05 | IP (I) |
| Overall, I am satisfied with the PLC (Small Group) as strategy for increased teacher engagement | 5.00 | IP (I) |
| My PLC meetings start and end on time | 4.84 | IP (D) |
| The overall goal of the PLC is known / shared and always at the forefront of our meetings | 4.47 | IP (D) |
| My PLC utilizes PLC time to determine most essential outcomes for courses | 3.68 | IP (D) |
| I have supported a fellow member in developing an identified growth area within a PLC structure | 3.63 | IP (D) |
| The PLCs have improved my working conditions | 3.35 | IP (I) |
| If it were up to me I would change my PLC composition | 3.29 | IP (D) |
| PLCs have positively impacted the use of my planning days that I receive | 3.21 | IP (I) |
| Overall, I am satisfied with my planning days | 3.14 | IP (I) |
| We do not accomplish much at the PLC meeting | 2.89 | IP (D) |
| I am satisfied with the number of PLC days that I / my team receives. | 2.74 | IP (I) |

ID KEY
D = Dependent Variable (effectiveness of SG)
I = Independent Variable (organizational support of SG)
Strongly Agree =10, Agree =7, Disagree =3, Strongly Disagree =1
NA / Don't know = no scoring value

Table 12 highlights PLC satisfaction at the group level (dynamics) and at the organizational level (support). In general, there was agreement that the PLC participants participated satisfactorily, M=6.82 and that the Principal was positively involved in the PLC process, M=6.39. Highest level of disagreement, M=2.40 arose with opportunities for time

off, planning time and professional development time related to PLC work. Satisfaction with the Vice/Assistant principal was also low, M=3.21. varying means were observed 4.29-5.72 on satisfaction with short-term progress the PLC has made, roles played within the group, contributions to the curriculum implementation plan and associated activities produced by the group. Low level disagreement (that is, agreement) was observed on average with viewing the role of the TOSA as part of the campus team (it is known that the TOSA is housed at the district), M=4.29.

Table 10.

*District B - PLC Satisfaction Questions – Dynamics and Organizational Support*

| Question | Mean |
|---|---|
| I am satisfied with the participation of my PLC member's in the group process | 6.82 |
| I am satisfied with the role of the Principal in the PLC process | 6.39 |
| I am satisfied with my short-term progress my PLC has made | 5.72 |
| The roles my group members and I play are all the same within my PLC | 5.33 |
| I am satisfied with the acceptance of my contributions to the Common Core Curriculum Implementation Plan we have created | 5.22 |
| I am satisfied with the Common Core Curriculum Implementation Plan and associated activities we have produced as a group | 4.40 |
| I am satisfied with the role of the TOSA within the PLC as part of the campus team | 4.29 |
| I am satisfied with the role of the Vice / Assistant Principal in the PLC process | 3.21 |
| I am satisfied with my opportunities for time off, planning time, and professional development time to work with my PLC. | 2.40 |

ID KEY
IP = Individual Perception
Strongly Agree =10, Agree =7, Disagree =3, Strongly Disagree =1
NA / Don't know = no scoring value

High level of disagreement, M=2.48 arose when teachers were asked if they meet with other Teachers who teach the same course/grade within their PLC. This was followed

by disagreement that the PLC examined and compared learning results, M=3.63, creates common assessments M=4.26, and interventions (plans of assistance), M=4.63.

Table 11.

*District B - PLC Dynamics and Individual Context Questions*

| Question | Mean | ID |
|---|---|---|
| Pre – PLC implementation I worked with the members of my PLC anyway | 6.15 | IC |
| My PLC discusses and creates plans of assistance for students | 4.63 | IC (D) |
| My PLC develops common assessments for their courses within a PLC structure | 4.26 | IC (D) |
| I meet with Teachers who Teach the same Course / Grade who are not in my PLC and not on my campus | 3.95 | IC (I) |
| My PLC examines and compares student learning results | 3.63 | IC (D) |
| I meet with Teachers who Teach the same Course / Grade (within my PLC) | 2.48 | IC (I) |

ID KEY
IC = Individual Context
Strongly Agree =10, Agree =7, Disagree =3, Strongly Disagree =1
NA / Don't know = no scoring value

The highest mean for the Teacher Survey indicates high level support for the principles underlying the Common Core, M=8.2. Additionally, agreement was also observed in the participants enjoyment of working in group settings M=7.67. Participants indicated that the implementation was not the first time participating in large-sale innovation programs, M=3.73 indicating previous reform experience and that group practices coordinated at the District or campus level have also been in practice prior to CCSS, M=3.17.

Table 12.

*District B Individual - Context Questions related to reform efforts (pre & current)*

| Question | Mean | ID |
|---|---|---|
| I support the principles underlying the Common Core | 8.20 | IC |
| I enjoy working with others on common problems in group settings | 7.67 | IC |
| Prior to the small group work associated with the Common Core, I had worked on many "long-term" group projects in various topic areas | 6.05 | IC |
| My definition of a Professional Learning Community has evolved | 5.94 | IC |
| The implementation of the Common Core is my first time participating in a large-scale Innovation Program | 3.73 | IC |
| Prior to the Common Core my campus did not utilize small group work coordinated at the District or Campus level | 3.17 | IC |

ID KEY
IC = Individual Context
Strongly Agree =10, Agree =7, Disagree =3, Strongly Disagree =1
NA / Don't know = no scoring value

**District B Interviews**

Six District B representatives were interviewed to collect additional information about PLC dynamics, structure and organizational support (past and present). The individual synopsis is below followed by a summary.

*The Teacher on Special Assignment (TOSA)*

The Teacher on Special Assignment indicated that she is one of nine TOSAS each hired to support an area of specialization (e.g. Math, Science, Technology). TOSAS are housed at the district office and are available to individual campuses by request. Services include campus wide training, district training and technical assistance. All TOSAS are district teachers who have applied to support other teachers in a specialization area, they may serve in this capacity for two contract cycles of two years. TOSAS receive professional development and are charged with attending state and national training on CCSS topics

which must then be shared with district stakeholders as determined by the Assistant Superintendent of Curriculum and Assessment. TOSAS are largely autonomous scheduling their time as needed.

*The Elementary School Teacher 1 (EST1)*

Elementary School Teacher 1 previously taught a combination of 4th and 5th grade. Post CCSS she was granted a single grade level of 5th grade. She is a generalist who provides instruction for English Language Arts (ELA), Math, Science and the Arts. Her classroom currently has 34 students who demonstrate high levels of capability and academic readiness. She has one student with behavioral issues; however, she participates equally. She regularly meets with other Teachers to discuss their practice; however it is informal. When asked about the PLC, she stated that it is housed at the district level and that it is a mixed group with a once per trimester meeting schedule.

EST1 reported that CCSS has not been given a high level of intervention (e.g. attention, focus, importance) and that adaptation and integration of the standards is relatively an independent and self-directed activity. She participated as part of a group of teachers who recommended and requested adoption of Engage New York texts which has now been adopted post the one-year pilot. A TOSA has been to campus but the focus was on Technology; additionally the TOSA did not provide individualized support and she was not aware that there were 9 on staff at the district. When asked about district level support she stated that she receives a district newsletter that is 'low-level' with no defined frequency, that a 'twitter chat' has been made available, but she does not use Twitter, and that the new website that promised support including resources and video exemplars was not functioning. When asked about campus level support, she indicated that she has weekly staff meetings

however there are no teacher grouping opportunities and that CCSS is not an agenda item. She also indicated that the current Principal is 'hands off' whereas the previous Principal was very involved in CCSS and with general Teacher support topics.

*The Elementary School Teacher 2 (EST2)*

Elementary School Teacher 2 has taught kindergarten, third grade and sixth grade for the district, currently she is teaching fourth grade. She indicated that the school population at her campus was not high performing and required a lot of intervention particularly with literacy. She meets daily with a same grade level teacher and they plan all of their lessons together, this is not part of the PLC strategy however it is a personal choice. She stated that her campus does provide grade level teaming opportunities however participation is low and teachers generally show up to request materials created by others not to co-create them, she stated that this was very frustrating and that an analogy for her grade level team could be the "tale of the little red hen" indicating that they did not want to participate in the work but wanted to reap the rewards of the work.

When asked about campus supports she felt that in general her campus was very supportive and followed a student outcome focused model to create common assessments and discuss results. She stated that the district had purchased a pilot intervention program based on Teacher request. She added that the Principal should be the 'Curriculum Leader' and provide modeling for Teachers in the classroom. When asked about District Level support she stated that she participated in many district committees, often applying to participate. Regarding Professional Development, she stated that she was a self-directed learner and spent 'many nights' conducting her own research and creating activities.

*The Middle School Teacher 1*

Middle School Teacher 1 (MST1) joined the district last year as a sixth grade language arts and history teacher from a neighboring district. She stated that she was very impressed with her current campus as it relates to Teacher Support and colleagueship. She stated that other teachers, even outside of her discipline, were very helpful and willing to provide support. When asked about campus supports she stated that although there was 'no planned meeting time' she was able to share a prep period with another sixth grade teacher (MST2), considered a luxury, however, very critical to supporting incoming sixth graders with the transition from elementary school. She stated that she meets daily with the sixth grade Math and Science teacher who has the same students part of the day. Together they plan, discuss students, and identify common issues.

When asked about district support, she stated that there was an emphasis on Technology however it was very welcomed. She indicated that she would like to see more involvement from the TOSAS such as providing sample lesson plans, modeling activities and in general being more available. She indicated that her involvement with CCSS standards is largely self-directed.

*The Middle School Teacher 2*

Middle School Teacher 2 (MST2) serves as the sixth grade math and science teacher. She stated that her background is in Business and it has been very helpful in working with students. She meets regularly with the sixth grade English teacher who shares the same group of students. The plan together and discuss how students are doing.

As it relates to CCSS she stated that she has not had much support utilizing a math book that is 20 years old and does not include CCSS concepts. She echoed the English

teacher in that she would like to see sample lessons and exemplars from the district level. She is largely self-directed; however, has advocated for new textbooks which will be adopted next year, Big Ideas for Math. When asked about campus support she stated that her common prep period has been essential; however, she would like to have an opportunity to meet with the 7th grade Teachers to support students with their transition and learn about the standards they will encounter next year. When asked about District level support she echoed the Technology focus and was not very interested. She needs help to understand the standards in a simple way rather than reading through all of them.

*The Elementary School Principal*

The Elementary School Principal stated the he joined the campus from within the district, previously holding the position of Dean of Students. He has a great respect for Teachers and stated that he wants to honor their professionalism. He utilizes weekly staff meetings to check in with Teachers on emerging needs. He provided an example of how he recently overturned a district initiative to replace elementary libraries with maker spaces. This district initiative was a top-down decision executed from the Superintendent and to the dismay of Teachers (district-wide and from his campus). The Principal stated that it was an easy decision for him to make. As it relates to teacher supports at the administrative level, he stated that the new Dean of Students was on campus twice per week and previously held the position of TOSA for Math curriculum, adding that this would be very helpful to his Teachers with CCSS. When asked about other campus supports, he stated that TOSAS have a campus presence and regularly visit to provide workshops; these workshops have been primarily focused on Technology.

When asked about District level support he stated that the district has been very receptive and recently purchased a literacy intervention program that would be piloted at their site. When asked about Teacher qualifications and experience he stated that the professionalism aspect and buy-in to CCSS was essential and required for Teachers hoping to join the team.

*The Middle School Principal*

The Middle School Principal (MSP) is serving his first year as Principal and has served as Assistant Principal at this campus and within the same district at the other middle school campus. Although his background is in Counseling and he has not been a school teacher, this has not hindered his experience working as a principal. When asked about PLC structure and his perceptions of why they do not identify with a PLC model he stated that they are following teacher teaming processes; however, they are just not referring to them as PLC. He stated that all teachers have a prep period and there is time monthly for jobalike talks but that this is not due to his stance. Rather, it is due to logistics of finding time for Teachers to meet with common grades and/or disciplines. He stated that the District has been very supportive and currently had unanticipated funding available to support CCSS. When asked if teachers had a voice on how these funds would be utilized he stated that they did as a general stakeholder.

When asked about the teachers' readiness for CCSS implementation he stated that there was an initial panic but that they have all adapted well. When asked about qualifications and credential program readiness for teacher teaming he stated that this was an area that needed more work as it was evidenced by new teachers who did not know how to engage in teacher teaming efforts.

*Interview Summaries*

Teachers echoed sentiments of frustration with a lack of support for CCSS including a non-existent PLC model. When asked about the School District's website indicating that the district utilizes a PLC model for professional development and CCSS they indicated that was not the case. Teachers also echoed that Technology rather than CC standards were the focus from a training and TOSA support level. At the middle school level, they were very specific about their needs indicating a need for clear standards, activity and lesson examples and modeling.

Both administrators are in their first year of leadership at their respective campuses. They both follow a hands off approach to CCSS allowing teachers (and their work groups) the space, and having the expectation as expressed by ESP, that they know their craft and will ask for help if needed, representative of the Logic of Confidence (see Chapter 1). Both administrators stated that the district was very supportive and has provided additional support via TOSAS and funding.

Overall the district has been utilizing an informal teacher teaming model and teaming is largely an optional and a self-directed activity. CCSS is not considered a large-scale reform effort, as evidenced by the interviews, for example a EST2 indicated it was a simple change from 'fiction to non-fiction'. There is a large focus on Technology as evidenced by the purchase of software, equipment, the transition from library to makerspace and a dedicated technology TOSA.

**Qualitative Analysis**

*Table 13.*

*Interview Results*

| | Teacher | Teacher on Special Assignment (TOSA) | Principal | Assistant Superintendent |
|---|---|---|---|---|
| | | District A | | |
| | - | - | - | 1 |
| | | District B | | |
| | 4 | 1 | 2 | - |
| Totals | 4 | 1 | 2 | 1 |

Four themes emerged in the analysis of the District B interview data: 1. Expectation of Self-Directed Learning; 2. All convenings are Professional Learning Communities; 3. Resources and Support services are directed towards Technology; and 4. Large-Scale Reform Effort (CCS change effort) is downplayed. Each theme is detailed below.

*Theme: Expectation of Self-Directed Learning*

District B encourages a culture of Self-Directed Learning. Both Administrators, Principal 1 and 2; and Teachers 1, 2, 3, 4 mentioned perspectives or anecdotes related to an expectation of professionalism, *being* professionals and having opportunities for resources and support at the site level.

Districtwide trainings occur via pre-service and mid-year however Teachers reported that the quality and quantity were low, one Teacher referring to it as "drive by professional development".

*Theme: All convenings are Professional Learning Communities*

District B district and site-level administrative personnel identify PLCs as a purposeful strategy for professional development. District B Curriculum & Instruction website excerpt, *"as we begin transitioning to the Common Core State Standards in English and Math, professional development becomes even more critical for teachers and administrators. Staff engages in professional learning community through ongoing collaboration; both as school teams and as grade level teams. Responses to intervention models are in place at all sites to provide intervention for students when needed."* Teachers, in both the survey and interview, indicated that they do not have a clear definition or intentional PLC structure often referring to a variety of convening such as impromptu check-ins, combined planning/prep time, staff meetings and occasional district level meetings where grade-level and subject teachers are able to meet. These meetings do not follow the PLC intentional framework as they not scheduled regularly (or have time allocated regularly) and lack a focus on improving practice or solving a common problem.

*Theme: Resources and Support Services are directed towards Technology*

District B utilizes a Teacher on Special Assignment (TOSA) model to provide teacher support. TOSAs are housed at the District and each are designated specialization (e.g. ELA, Math, Technology). Both Teacher and Administrator interviews identified the support structure as including site visits (by request), site training and district wide raining. Additionally, a district wide focus on Technology was identified dating back to the introduction of chrome books for Smarter Balance Testing. Teachers stated the transition took three-years, which included a District goal of transitioning Libraries to Maker Spaces, eliminating the Librarian and moving towards textbooks as e-books via Chromebooks. A Math/Science Teacher stated that she currently utilizes the Chromebooks for blended

teaching strategies where additional learning activities take place utilizing online applications, she stated "it's going well".

*Theme: Large-Scale Reform Effort (CCSS change effort) is downplayed*

District B's demographics include high teacher retention, highly qualified Teachers (education and experience, see Table 8), and high performing students. Both subsets of interviews, administrators and teachers, downplayed the CCSS large-scale reform effort. Teacher 2 stated, "CCSS for English Language Arts (ELA) is seen as a shift to non-fiction".

Evidence supporting the lack of attention to the large scale reform effort is demonstrated in the teacher pre-service and professional development efforts with the majority of training focused on Technology. Additionally, evidence suggests that the term PLC is loosely applied to all teacher teaming efforts with the lack of an intentional use of PLC strategy (directed teacher teaming time) to learn the standards, adapt practice for CCSS and discuss common assessment. Interviews revealed a consistent message that new materials that match and/or are based on CCSS standards are forthcoming 3 years into implementation. Teacher 3 expressed, "we recently adopted Big Ideas text, we hope to implement next Fall. Math is next".

*Independent Variable*

Perceived organizational support related to group work was the degree to which teachers responded that their district (as an organization or the leadership in particular), valued their professional development and supported a large scale reform effort from the district level (centralized organizational change).

The District B survey measures perceived organizational support, leadership, group dynamics, group outcomes, and overall small group effectiveness. Participants indicated the

extent to which they agreed with the 86 statements based on a six-point Likert scale (*Strongly Agree*, *Agree*, *Disagree*, *Strongly Disagree*, *N/A*, *I don't know*).

Overall a persistent theme arose; expectation of Self-Directed Learning at District B. It was iterated by administrators that teachers were professionals and take a self-directed approach to learn the standards independently, engage with colleagues during prep time, and site and district level group meetings to discuss topics relevant to CCSS implementation. The absence of a formal PLC indicates and supports this theme. By merely providing opportunities to meet in small groups (i.e. two or more people) indicates that a true PLC model is not present and that the Administration believes all group convenings are PLCs. This approach was viewed as acceptable by Teachers given their levels of satisfaction with the Principal and their groups (rated independently). Interviewed teachers asked for a more robust support role from the TOSA, which supports the low level satisfaction with TOSA support reflected in the survey. Additionally, Teachers at District B are highly qualified, have high retention rates and work with students who are academically capable. On one hand, these factors *may* indicate that a comprehensive PLC approach is not necessary; on the other hand a loosely defined small group approach in a high achieving setting may result in even more improvements and professional commitment (Hackman, 1985).

*Dependent Variable*

The effectiveness of small groups on CCSS implementation, in which effectiveness means 'it's working' was measured by a survey in District B. The District survey included questions related to recommendations for use of small groups in schools from the Wells and Feun (2012) study, Hackman's (1983) design of work teams, PLC literature, and other small group research in which participants indicated the extent to which they agreed with the 86

statements based on six-point Likert scale (*Strongly Agree*, *Agree*, *Disagree*, *Strongly Disagree*, *N/A*, *I don't know*).

Overall, it is concluded that the district and each individual site did not function or utilize formal PLC structures. Regular meeting times, as expected in a PLC model, are not scheduled by grade level or discipline with consistency. Therefore, the meetings cannot be compared to Hackman's 1983 Work Team design principles. What best fits the District B model are the COP described by Wenger (2007) where Teachers meet in a grassroots fashion to work on a given problem. Membership is optional and fluid. Teachers meet at the campus level during prep time, lunch, staff and district meetings. At times Teachers will work with one another on a consistent basis however this is not mandatory nor is it coordinated intentionally by the administration (see Interview Synopsis for Teachers).

**Summary of Findings**

District B Teachers generally felt good about small group work, evidenced by agreement rankings on the survey, particularly the teacher teaming opportunities they were able to access. It was reported by the District that PLCs are a strategy to support the large-scale implementation of the CCSS however the evidence, teacher and administrative anecdotes do not support that this is the case. The teacher perceptions of organizational support for the implementation of CCSS using small groups (PLCs) [Independent Variable] and the impact on the success of CCSS implementation is moot [Dependent Variable]. The teacher survey revealed that they are not satisfied with CCSS implementation but use small groups as what may be more closely described as a Community of Practice (COP). Anecdotes reveal that this is due to the lack of adoption of materials that include CCSS standards. Below are summative results of this exploration.

*Summative Results*

1. The change process itself is a change problem not just a declaration.
2. Research does not delineate or differentiate between organizational structures for elementary, middle school or high school
3. Professional Learning Communities is a term loosely used for teacher teaming and teacher work teams but do not adhere to the definition in the literature for supporting pedagogy and student learning outcomes
4. The impact of teacher retention and student demographics is highly underplayed
5. The teacher preparation period is insufficient for Teaming
6. The CCSS Reform was implemented before classroom and curriculum resources (e.g. textbooks and other support resources) were available

# CHAPTER 5: SUMMARY AND DISCUSSION

This final chapter summarizes how the results relate to similar research (e.g. organizational readiness for change, use of small groups for policy implementation); how case study observations differed from expectations; implications of this case study for practice; and recommendations for further research.

## Discussion of Results

Currently, 43 of 50 states are implementing the CCSS (May, 2016). The implementation of CCSS comes at time as part of a longitudinal reform wave placing education at the center of economic and socio economic success of the country. Although both districts, in this case, operated from a centralized, district-led approach (recommendation of Wells & Feun 2009); what was observed at District A and District B was various group model processes. District A focused on building an infrastructure to support PLC work; while District B took a laissez-faire approach to the large scale organizational change placing emphasis on a self-directed learning.

This study explores the organizational change phenomenon after 50 years of educational reform policy dating back to 1965 with ESSA. Further, the findings, help to understand how the use of small group work in public schools supports or hinders policy implementation at the local level, specifically, implementation of the CCSS. The results support the research objective not by contrasting sources, District A versus District B, but by triangulating all the information; and utilizing the two subjects as organizers for concepts related to large scale innovation (reform policy) implementation.

**Organizational Readiness for Change**

Of the two districts examined, District B, exerts a high level of readiness for change based on Weiner's (2009) factors of organizational readiness for change and evidence of change-related effort. District A, carefully and critically examined organizational readiness indicators however did not exert high levels or steady indicators of change commitment by organizational members. Factors outlined below focus on District B unless otherwise stated.

**Change Commitment.** The CCSS initiative (and associated pro-implementation political pressure) created motivation (by Teachers) for the change. Observed patterns in which participants perceived the change was necessary existed where literature suggested they would exist; the policy itself created motivation for the change (the 'buy in'). High agreement with CCSS initiative and low satisfaction with the implementation further demonstrated that the Teachers were willing to implement the policy despite the lack of tools and organizational support to do so (Weiner 2009; Fowler 2012).

Alternatively, change commitment can be hindered and negatively impacted by local negative political pressure as observed in District A; not garnering enough support for the new policy (Fowler 2012). Despite district-wide low achievement demographics, the organizational changes proposed by Administrators (and approved by the School Board) were opposed by the implementers (Teachers). Implementers were further supported by the constituents (parents) of high achieving students attending low achieving school sites. In this example it is not a question of whether the change is possible but a 'buy-in' issue of whether the implementers *believed* the change was necessary (Weiner 2009).

**Change Efficacy.** Weiner (2009) includes an emphasis on efficacy, meaning 'buy-in' and confidence from organizational membership that the change is possible (two constructs).

'Change efficacy is higher when people share a sense of confidence that collectively they can implement a complex organizational change' (Weiner, 2009, p. 2). In Hackman's (1983) terms, it relates to synergy (group members working cohesively and in harmony towards task completion), however the collective group of Teachers is unable to execute their task (implementation of CCSS standards) because the manager (district/site) has not allocated sufficient resources (e.g. time, funding, human capital) to execute the task effectively (Hackman 1983; Fowler 2012); in this case, it is not a 'buy in' issue that will hinder effectiveness of the group it is lack of resources and support on behalf of the district. This may result in low confidence (efficacy) that the change is possible.

**Persistence.** A district wide culture of self-directed learner expectations masked the organizational failure to implement the necessary organizational change. This was evidenced by the continuation of adhoc (informal) groupings facilitated by teachers despite the consistent messaging by Administrators that PLCs were in practice, "even though they do not identify as a PLC they are in a PLC" (Principal 2). When teachers reported not having enough time to focus on CCSS the implementation effort is assumed to be stagnant or laissez-faire as teacher teaming needs were not intentionally addressed via the use of PLCs as presumed.

Alternatively, persistence for the change at the Administrator level can lead to low morale and resistance from the implementers. This creates a negative context for a perceived positive change (support of perceived good reform policy), two different organizational changes perceived as negative by implementers (Teachers) were observed: 1. district-wide implementation of the maker-spaces which lead to the closure of campus libraries (District B); and 2. restructuring the organization to support PLC work (District A). In both instances

the implementer's negative perspective and dismay with the changes were ignored. It leads to decreased morale and low change commitment; both factors impact implementer commitment and as a result effectiveness of the change which can lead to unsuccessful policy implementation.

**Cooperative Behavior.** Organizational change is based on behavior of a collective group and problems arise when commitment to the change varies (some committed and not others). Per Weiner (2009), 'organizational readiness for change is situational; not a general state of affairs' (p.3). Research has shown that organizational members will commit to implementing an organizational change for three reasons: 1. value the change; 2. have to; and 3. feel obligated. Even when resources are allocated (e.g. adoption or purchase of materials), 'want to' motives on behalf of the organizational members reflects the highest level of commitment to implementing the organizational change (Weiner 2009).

In the case of District B, Implementers have been cooperative (see change commitment above); alternatively, in District A, the organization faced opposition vertically and horizontally (implementers and non-implementers). In a case such as with District A, an individualized intervention and implementation plan is necessary to support non committed members to commit to the change as outlined above. The laissez-faire approach by District B is typically frowned upon; however given the context and socio-economic status (SES)[3]/demographics of the district (e.g. educated parents, high income neighborhoods) it did not hinder success by self-directed implementers who were committed to the policy

[3] Socioeconomic status is commonly conceptualized as the social standing or class of an individual or group. Often measured as a combination of education, income and occupation. Examinations of socioeconomic status often reveal inequities in access to resources, plus issues related to privilege, power and control (American Psychological Association, 2016).

implementation. In both cases[4] consistent leadership messages for the change were observed however past change efforts, may have negatively discouraged member perceptions (Weiner, 2009).

*Creating a Vehicle for Change*

In Weiner's (2009) terms District A Administrators realized gaps in readiness via an 'informational assessment' which includes examination of the task demands, resource perceptions and situational factors. When large districts have multiple sites with varying SES/demographics, high teacher turnover and students with challenging issues (e.g. english language learners, special needs, behavior) the district can benefit from critically reviewing the landscape and identify the opportunities and challenges to support planning for the change.

**Task Demands.** PLCs provide the structure for professional learning between colleagues; dialogue about curriculum (in this case CCSS), student outcomes (based on assessment) and planned intervention. Effective PLCs demand a consistent meeting schedule with colleagues (e.g. grade level, subject matter). In order for District A to implement CCSS via a large scale reform effort [organizational change], district leaders realized that they needed to first address the organizational structure and 'create the vehicle' for the change to occur.

District A lacked the structure for Teacher collaboration via PLCs for the focus on student outcomes via CCSS standards and assessment. This scenario is consistent with the constructs for organizational readiness for change however a lack of a tactical approach as it

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[4] District A reported messaging via Superintendent interviews and review of artifacts and planning and implementation timeline

relates to working with the implementers impacts future implementation constructs related to member commitment to the change (see cooperative behavior). This complex approach would need to create the situational context and conditions to support the small group phenomenon and construct of 'punctuated equilibrium' (Chang 2003). This behavior dependent strategy occurs when implementers who were stagnant in their groups suddenly move towards *revolutionary quantum change* towards task completion; or in this case policy implementation via organizational change efforts.

**Resource Perceptions.** In order for change leaders to plan for the resources to support the change at school sites (and via TOSA liaisons) an understanding of the current and collective resource budget is necessary (Estrada 2013). For District A, a district who lacked a liaison model, that meant a new strategy utilizing 'Teachers on Special Assignment' (TOSA) to serve as extensions to the district support and liaison to the campus. In addition to this new position and role, there was a need to create a culture of collaboration, on-going self-directed and group professional development via placing student outcomes at the center of their work. This called for a preliminary goal of utilizing the PLC model as a resource for implementing group work by grade level and discipline. The TOSA (liaison model) serves as a secondary resource to support and facilitate the initial organizational investment in a PLC model at the campus level.

**Situational Factors.** When a district adopts a process, that was not in existence prior to the policy change (CCSS in this case); a structural and relationship change between districts and campuses is the organizational change. This case, District A, highlights the need to 'create the vehicle' in which a campus can become a PLC rather than to utilize the PLC (this idea, focus on becoming a PLC versus utilizing a PLC, is discouraged in Wells &

Feun 2009). Although this may have the outer appearance of a substantial (and possibly unnecessary) delay in practice the organization needed to address this structural concern first rather than rush into CCSS implementation (Fowler 2002; Weiner 2009).

Rushing organizational change and an authoritative approach to policy implementation may amplify a pessimistic attitude towards the change by implementers; even when the change is deemed necessary by change leaders. In this case, District A observed an atypical campus structure for eleventh grade English courses at one particular high school in their district (three courses: AP English, College Prep and Honors). Administrators viewed this structure as unnecessary as it would not align with the two remaining high schools in the new organizational structure for PLC work. Their perceived top-down authoritative move to eliminate the additional English course drove a divide amongst stakeholders including parents, teachers and the district. Addressing the structural concerns at one high school campus involved additional time, effort and energy that deterred the District however ultimately aligned all campuses to support the larger organizational goal. The administrative task will be to repair (or attempt to) any mistrust and help implementers understand why the change, and the authoritative approach, was necessary.

Organizational change literature emphasizes the need for strong leadership and 'buy in' from the organizational membership (implementers) (Smylie et al. 2002; Weiner 2009; Fowler 2012). Strong external leadership is needed to set the direction and to coordinate teamwork at the school level (Smylie et al. 2002, p. 181). With a state-led reform policy initiative local school districts require the support (and participation) of implementers and stakeholders vertically (administration to teachers) and horizontally (across schools). Hence the Administrator, change leader, benefits by factoring in the organizational culture, member

behaviors and the multi-dimensional, inter and intra dependencies of a large-scale change beginning with a review of the available and collective resource budget (Estrada, 2013).

This case study highlights the complexities of context (situational factors) and the implications of an infrastructure overhaul that resulted from 'creating a vehicle for change' in a setting that reflects minimal change, in the area of educational organizational readiness for change after 50 years of educational reform policy.

**Small Groups and Large Scale Reform efforts**

At the onset of this investigation the use of the term PLC inferred formal group processes as posed in the small group literature[5] (see Chapter 2 for a full description). The concluding result is that PLCs in their true form were and are not being practiced at District B, nor was it ever an organizational change goal to do so. A stark example is the infrastructure building and detail behind District's A plan to build an infrastructure (referred to 'vehicle for change' above) that supports comprehensive PLC work. The Superintendent constantly referred to infrastructure and progress towards PLC implementation whereas District B constantly referred to self-directed learning and district support (TOSAS and training) as a means for CCSS implementation.

As observed by this case study, teacher teaming can occur as an informal practice by self-directed Teachers either as intentional collaborative professional work or as a means 'just to survive' (survey respondent) a situation or organizational change. Administrators in

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[5] "educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that the key to improve learning for students is continuous, job-embedded learning for educators" (DuFour et.al 2006)

the case of District B believed that by merely providing standard preparation and planning periods Teachers would know when and how to meet in groups.

One major problem with the informal teacher teaming small group model is District B's (and its administrative delegates) identification of them as formal PLC structures. This label was applied arbitrarily and unbeknownst to them the word play has implications on anticipated group work outcomes. The PLC model offers regular meeting space for professional development and a focus on student work; which informal structures do not. This loose definition phenomenon can lead to false expectations and continued misuse of groups for policy implementation heavily emphasized by Hackman (1983; 1987; 1998).

Implementing PLCs is not typically viewed as an organizational readiness issue (organizational structurally ready for this strategy) rather than an argument for need for Administrator intervention (teachers require additional time and space to focus on student outcomes collaboratively). This case demonstrates that student population demographics (high achieving students), high levels of teacher satisfaction and retention (September 2015) has the potential to mask teacher concerns about effective policy implementation when student outcomes (e.g. grades and test scores) are at 'achievement levels'. Areas that are vulnerable to being overlooked and impede PLC initiation are: insufficient time to convene in teacher teams to learn the standards; the need to purchase new materials that include the new standards; and intentional assistance with curriculum (via TOSAS) to review lessons based on the new standards.

The best fitting definition for the small group work taking place at District B is Community of Practice (COP), an organic form of professional development driven by its membership as a means for focusing on improving practice (see Chapter 2 for a full

definition and the following section for a proposed framework). With regard to small group work and task-oriented group work, COP do little for moving a project or task along, therefore, COP do not constitute the need for a manager. The management team's role in facilitating these groups is limited to release time.

**Current Study and Previous Research**

In this case, District A and District B, both indicated that PLCs were the strategy for CCSS (educational reform policy) implementation. The District-led model supports a construct described as 'loose coupling' as a construct that can be applied to relationships among structural units such as work groups or departments where there may be an appearance of high interrelated or coordinated efforts but in reality there is only a slight connection (Scott & Davis, 2003). For example, an organizational chart can convey the impression that units are highly interrelated or closely coordinated however observation of their behavior may reveal they are only slightly or occasionally connected. This relates to the experiences of Teachers at District B. The district and campus administrators stated that PLCs are a strategy being utilized for professional development and CCSS implementation; however, the evidence suggests *teacher teaming* is a construct that is at best loosely connected to a PLC model (Scott & Davis 2003, p. 84).

The consequence of loose-coupling was a site level implementation that did not accurately reflect the District's model. This loose-coupling was successful as it did not impede student outcomes and achievement (educational policy reform goal), a tight coupling approach (forceful and intentional PLC implementation) may not have made a difference as the campuses were at achievement levels prior to the reform.

The demographics of District B reflect highly qualified and retained teachers working with high achieving students. In this setting there may be benefits from loose-coupling, when the District provides overarching goals and support services that are separate from school site activities. Teachers thus operate in a self-directed manner addressing local needs and conducting self-assessment of their readiness for CCSS; they may or may not participate in District training opportunities or individual consultation with a District TOSA, however.

**Implications for Practice**

The results of this study affirm the challenges with organizational change efforts as stated by Weiner (2009). The added dimension of *readiness for change* involved in the implementation of PLC components at public schools allowed for the exploration of the perceived change goal and implementers commitment to it.

It became clear that both districts in this study considered organizational change success differently; one creating an environment where student outcomes were at the center and the other maintaining the environment at status quo. Weiner (2009) suggests that testing his theory of "organizational readiness for change" based on the elements of context, collective efficacy and value for the change would require a multi-organization research design in which a set of organizations are implementing a common or comparable complex change.

This research condition supports this study's finding of complexity of organizational change readiness in two separate public school settings. The operation structure of two California public school districts (from the same region) reflects varying degrees of need for a change, perceived readiness, value for the change (e.g. departments, divisions, distinct units with autonomy in change implementation) where one district determined a tight

coupling model was the organizational change and where the second operated under a loose coupling model and the organizational change determined unnecessary. Teacher team's readiness was not evaluated as the teams were not yet composed or not operating as true teams. Critically important is the value placed on the policy change, collective perception that CCSS was good policy.

The scope of this research did not measure or report district or campus level student achievement. Further research involving organizational change and PLCs is needed. Merely utilizing PLC with the expectation of higher student achievement will not capture the story of the uniqueness of each district and their respective campuses. As in the case of District B we need to understand how an individual campus achieving at a level 8 API[6] (Academic Performance Index) can benefit from PLC work that results in gains leading up to level 10.

*A Small Group Framework for Schools*

Unlike existing literature, this case highlights the difficulty in supporting all teachers at the middle school and high school level who wish or would benefit from a common prep (preparation) period (beyond the PLC model). Logistically it is not easy to support all teachers to have a common prep period based on grade level or subject area, given that student schedules are priority. In contrast, at the elementary school level where students remain with the same teacher for the entire school day, Administrators benefit from the easy of implementing weekly early closure and enrichment periods such as PE or band where

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[6] The California's Public Schools Accountability Act of 1999; measures the academic performance and growth of schools on a variety of academic measures. On March 13, 2014, the State Board of Education (SBE) approved not to calculate the API for local educational agencies (LEAs) and schools 2014-2016. They are in the process of developing a new accountability system to replace the API (California Department of Education, June 2016).

children are facilitated by another adult freeing Teachers to meet in formal structures (PLC-like) or informal small groups.

This organizational issue then leads to a dependence on informal teacher teaming. Therefore, the structure that would support an organizational influence on what occurs in previous informal groups is the Community of Practice (COP) Model. The COP allows for flexibility in membership (grade level or discipline), flexibility to break out into smaller groups and to meet more or less frequently based on the problem or task.

In practice, the TOSA (or other district delegate) continues to support the COP with meeting logistics such as: when and where the teachers will meet, scheduling spaces, drafting agendas and minutes and other infrastructure items such as recruiting and orientating new members, and overseeing the group budget. This liaison role is critical in removing the barrier and burden of clerical tasks typically carried by the chair or group lead. Teachers are then able to focus on the task for the meeting. Wenger et al. (2007) provides seven principles to aid schools in conceptualizing the practice.

**Limitations and Recommendations**

This study of two local public school districts in California resulted in more data collected at one site (District B) than another (District A). Future studies might provide an exploration of teacher and administrator views in more than one site yielding a comparison of approaches to PLC work.

Research studies suggest that a teaching team's use of small groups can lead to the development of effective practices (and ultimately, increased student gains). However, issues concerning the availability of student achievement data for analysis and comparison among school district site populations which intentionally utilizing a small group strategy to

implement a large-scale reform effort, such as the use of PLCs for implementation of the CCSS, leaves a number of questions unanswered. This reflects the need to investigate student achievement rates in public school utilizing a deeper small group strategy. There are 1,028 school districts in the State of California (CDE, 2015) thus, it would require several years of investigation to gain an understanding of the difference in achievement rates between sites with a traditional professional development strategy and sites utilizing a structured small group strategy.

The New Every Student Succeeds Act (ESSA) allows for more authority at the state and local level, as opposed to the top-down, one-size-fits-all approach of No Child Left Behind (NCLB). Specifically, assessment, accountability, and measuring student performance are now state and school district responsibilities – and cannot be based solely on standardized tests.

ESSA has been promoted as new policy focused on providing implementers (Teachers) the lead in driving teaching and learning decisions while involving stakeholders such as parents and community members to advocate for what students really need (Feldman, 2016). Further research is recommended to investigate organizational readiness for change (particularly large-scale reform policy) in educational settings via mixed method case studies to fully understand the complex issues that support or impede successful implementation over time (e.g. student SES, teacher retention and job satisfaction, teacher qualifications, professional development opportunities and administrator development). Additionally, teacher preparation (credentialing) programs should be examined to determine how coursework, student teaching and apprenticeship can support large scale innovation at the administrative and teacher level. This scientific knowledge will help aid in

implementation issues where teachers and administrators are reacting to inexperience rather than proactively preparing for education policy and large scale reform efforts.

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# Appendix

# A. Human Subjects Approval

UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO • SANTA BARBARA • SANTA CRUZ

SANTA BARBARA

Office of Research
Human Subjects Committee
Santa Barbara, CA 93106-2050

Web: http://www.research.ucsb.edu

1/6/2015

VERIFICATION OF ACTION BY THE UCSB HUMAN SUBJECTS COMMITTEE

RE: HUMAN SUBJECTS PROTOCOL SUBMISSION ID 14-0951

TYPE: New

TITLE(S):
MEG SMALL GROUPS DISSERTATION

PROJECT #: 88

INVESTIGATOR(S):
Michael Gerber
Maricela Estrada

The UCSB Human Subjects Committee (HSC) conducts review of human subjects research under FederalWide Assurance #FWA00006361 and in compliance with applicable regulations as described therein.

The above identified research project has undergone review and approval by the USCB HSC and may commence on 1/6/2015. It was approved by Expedited review.

Date of expiration of HSC approval: 1/6/2016

RENEWAL OF PROTOCOLS

If you wish to continue your research beyond the above expiration date, your protocol must be renewed before it expires. To ensure that your research can continue uninterrupted, the following schedule should be followed:

Full Board Review: Submit 5 weeks before expiration date.
Expedited Review: Submit 3 weeks before expiration date.
Exemption Review: Does not expire. Resubmit only if changes are made.

All research must cease under this protocol on its expiration date unless you have received notice of renewal from the HSC.

AMENDMENTS/MODIFICATIONS/CHANGES:

Any change in the design, conduct, or key personnel of this research must be approved by the HSC prior to implementation.

UNANTICIPATED PROBLEMS/ADVERSE EVENTS:

If any study subject experiences an unanticipated problem involving risk to subjects or others, and/or a serious adverse event, the HSC must be informed promptly. An e-mail or phone call must be received within 7 days of reporting to the Investigator(s). Further reporting requirements will be determined by the HSC at that time.

If you have any questions about the information provided above, please contact the, Human Subjects Committee Coordinator at:

805-893-3807
(805) 893-2611 (fax)
hsc@research.ucsb.edu

For more details on this protocol, go to the ORahs website: https://orahs.research.ucsb.edu/

For more information about human subjects research, go to http://www.research.ucsb.edu/compliance/human-subjects/.

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Santa Barbara, CA 93106-2050

Web: http://www.research.ucsb.edu

1/22/2016

VERIFICATION OF ACTION BY THE UCSB HUMAN SUBJECTS COMMITTEE

RE: HUMAN SUBJECTS PROTOCOL SUBMISSION ID 16-0053

TYPE: Renewal with Mods

TITLE(S):
MEG SMALL GROUPS DISSERTATION

PROJECT #: 88

INVESTIGATOR(S):
Michael Gerber
Maricela Estrada

The UCSB Human Subjects Committee (HSC) conducts review of human subjects research under FederalWide Assurance #FWA00006361 and in compliance with applicable regulations as described therein.

The above identified research project has undergone review and approval by the USCB HSC and may commence on 1/22/2016. It was approved by Expedited review.

Date of expiration of HSC approval: 1/21/2017

RENEWAL OF PROTOCOLS

If you wish to continue your research beyond the above expiration date, your protocol must be renewed before it expires. To ensure that your research can continue uninterrupted, the following schedule should be followed:

Full Board Review: Submit 5 weeks before expiration date.
Expedited Review: Submit 3 weeks before expiration date.
Exemption Review: Does not expire. Resubmit only if changes are made.

All research must cease under this protocol on its expiration date unless you have received notice of renewal from the HSC.

AMENDMENTS/MODIFICATIONS/CHANGES:

Any change in the design, conduct, or key personnel of this research must be approved by the HSC prior to implementation.

UNANTICIPATED PROBLEMS/ADVERSE EVENTS:

If any study subject experiences an unanticipated problem involving risk to subjects or others, and/or a serious adverse event, the HSC must be informed promptly. An e-mail or phone call must be received within 7 days of reporting to the Investigator(s). Further reporting requirements will be determined by the HSC at that time.

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For more information about human subjects research, go to http://www.research.ucsb.edu/compliance/human-subjects/.

## B. Informed Consent Form – Interviews: District A & Follow-ups at District B

15-0954

**PURPOSE:**
You are being asked to participate in a research study. The purpose of the study is to learn about the use of small groups, particularly professional learning communities, in public schools.

**PROCEDURES:**
If you decide to participate, you will be asked to complete a one-time online questionnaire. The questionnaire will ask you a series of questions regarding your experience with professional learning communities at your school site. Additionally you will be asked for background and demographic information such as your name, age, gender and education/experience. If you decide to participate the questionnaire will take 15-20 minutes. It is anticipated that 30 participants will take part in this study.

**ALTERNATIVES:**

**RISKS:**
There are no known or foreseeable risks to answering completing the questionnaire.

**BENEFITS:**
The results of this study maybe be used to improve the use of small groups in public schools.

**CONFIDENTIALITY:**
Results from this study will be published. Your individual responses will be used in reports via a pseudonym such as Teacher Blue. Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena.

**COSTS/PAYMENT:**

**EMERGENCY CARE AND TREATMENT FOR INJURY:**

**RIGHT TO REFUSE OR WITHDRAW:**
You may refuse to participate and still receive any benefits you would receive if you were not in the study. You may change your mind about being in the study and quit after the study has started.

**PRINCIPAL INVESTIGATORS DISCLOSURE OF PERSONAL AND FINANCIAL INTERESTS IN THE RESEARCH AND STUDY SPONSOR:**

**QUESTIONS:**
If you have any questions about this research project or if you think you may have been injured as a result of your participation, please contact:

Mari Estrada, mariestrada@education.ucsb.edu

If you have any questions regarding your rights and participation as a research subject, please contact the Human Subjects Committee at (805) 893-3807 or hsc@research.ucsb.edu. Or write to the University of California, Human Subjects Committee, Office of Research, Santa Barbara, CA 93106-2050

## C. Informed Consent Form – Teacher Survey for District B

15-0954

**PURPOSE:**
You are being asked to participate in a research study. The purpose of the study is to learn about the use of small groups, particularly professional learning communities, in public schools.

**PROCEDURES:**
If you decide to participate, you will be asked to complete a one-time online questionnaire. The questionnaire will ask you a series of questions regarding your experience with professional learning communities at your school site. Additionally you will be asked for background and demographic information such as your name, age, gender and education/experience. If you decide to participate the questionnaire will take 15-20 minutes. It is anticipated that 30 participants will take part in this study.

**ALTERNATIVES:**

**RISKS:**
There are no known or foreseeable risks to answering completing the questionnaire.

**BENEFITS:**
The results of this study maybe be used to improve the use of small groups in public schools.

**CONFIDENTIALITY:**
Results from this study will be published. Your individual responses will be used in reports via a pseudonym such as Teacher Blue. Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena.

**COSTS/PAYMENT:**

**EMERGENCY CARE AND TREATMENT FOR INJURY:**

**RIGHT TO REFUSE OR WITHDRAW:**
You may refuse to participate and still receive any benefits you would receive if you were not in the study. You may change your mind about being in the study and quit after the study has started.

**PRINCIPAL INVESTIGATORS DISCLOSURE OF PERSONAL AND FINANCIAL INTERESTS IN THE RESEARCH AND STUDY SPONSOR:**

**QUESTIONS:**
If you have any questions about this research project or if you think you may have been injured as a result of your participation, please contact:

Mari Estrada, mariestrada@education.ucsb.edu

If you have any questions regarding your rights and participation as a research subject, please contact the Human Subjects Committee at (805) 893-3807 or hsc@research.ucsb.edu. Or write to the University of California, Human Subjects Committee, Office of Research, Santa Barbara, CA 93106-2050

## D. Teacher Survey

UCSB_Small Groups_Teachers - PVSD

Q1 Thank you for your participation in this study on the use of Small Groups in Public Schools. No identifiable data provided will be shared outside of the research team; the final report will be aggregated (reported as a group). The questions are designed to be a concise as possible as to move you through very quickly. If you believe the question can be interpreted various ways, please provide a note to clarify.Before we begin please complete the Informed Consent below.

Q2 14-0951 Approved by the UCSB Human Subjects Committee for use thru: 1/6/2016. PURPOSE: You are being asked to participate in a research study. The purpose of the study is to learn about the use of small groups, particularly professional learning communities, in public schools. PROCEDURES: If you decide to participate, you will be asked to complete a one-time online questionnaire. The questionnaire will ask you a series of questions regarding your experience with professional learning communities at your school site. Additionally you will be asked for background and demographic information such as your name, age, gender and education/experience. If you decide to participate the questionnaire will take 15-20 minutes. It is anticipated that 30 participants will take part in this study. RISKS:There are no known or foreseeable risks to answering completing the questionnaire. BENEFITS:The results of this study maybe be used to improve the use of small groups in public schools.
CONFIDENTIALITY: Results from this study will be published. Your individual responses will be used in reports via a pseudonym such as Teacher Blue. Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena. EMERGENCY CARE AND TREATMENT FOR INJURY: RIGHT TO REFUSE OR WITHDRAW: You may refuse to participate and still receive any benefits you would receive if you were not in the study. You may change your mind about being in the study and quit after the study has started. QUESTIONS: If you have any questions about this research project or if you think you may have been injured as a result of your participation, please contact: Mari Estrada, mariestrada@education.ucsb.edu If you have any questions regarding your rights and participation as a research subject, please contact the Human Subjects Committee at (805) 893-3807 or hsc@research.ucsb.edu. Or write to the University of California, Human Subjects Committee, Office of Research, Santa Barbara, CA 93106-2050 PARTICIPATION IN RESEARCH IS VOLUNTARY. YOUR SIGNATURE BELOW WILL INDICATE THAT YOU HAVE DECIDED TO PARTICIPATE AS A RESEARCH SUBJECT IN THE STUDY DESCRIBED ABOVE. YOU WILL BE GIVEN A SIGNED AND DATED COPY OF THIS FORM TO KEEP.

- ❍ I Consent (1)
- ❍ I Do Not Consent (2)

If I Do Not Consent Is Selected, Then Skip To End of Survey

Q3 First and Last Name

Q21 Email Address

Q4 If you are open to a follow up conversation about your experience please provide best way to contact you Summer 2015 and that information (Example: June 1 to Aug 30, mariestrada@education.ucsb.edu / 805.268.7121).

Q5 Gender
- ❍ Male (1)
- ❍ Female (2)

Q6 Age
- ❍ 18-20 (1)
- ❍ 20-29 (2)
- ❍ 30-39 (3)
- ❍ 40-49 (4)
- ❍ 50-59 (5)
- ❍ 60-69 (6)
- ❍ 69-70 (7)
- ❍ Over 70 (8)

Q7 Please indicate your Job Title(s), Campus Roles:_____

Q8 Work Site
- ❑ School (1)
- ❑ School (2)
- ❑ School (3)
- ❑ School (4)
- ❑ Middle School (5)
- ❑ School (6)
- ❑ School (7)
- ❑ Middle School (8)
- ❑ School (9)
- ❑ School (10)
- ❑ School (11)
- ❑ Pre-School Program (12)

Q9 Grade Level(s) you are teaching (If your course is non-grade specific, such as Math, select all grades represented in your course(s).)

- ❑ Preschool (1)
- ❑ TK (10)
- ❑ K (11)
- ❑ 1st Grade (2)
- ❑ 2nd Grade (3)
- ❑ 3rd Grade (4)
- ❑ 4th Grade (5)
- ❑ 5th Grade (6)
- ❑ 6th Grade (7)
- ❑ 7th Grade (8)
- ❑ 8th Grade (9)

Q10 Subject Area(s) Teaching

- ❑ English / Language Arts (1)
- ❑ Math (2)
- ❑ Other (3)

Q11 Total # of years in a Teaching Capacity

Q12 Education Level and Credentials Held (please select all that apply)

| | Where applicable, please enter the Discipline / Subject Area(s) Below (1) |
|---|---|
| Bachelor's Degree (1) | |
| Master's Degree (2) | |
| Teaching Credential (3) | |
| Administrative Credential (4) | |
| Doctorate Degree (5) | |
| Other (6) | |

Q13 How many "work groups" are you a part of at your school site? Please list them here. Note: Work groups include 2 or more members who meet over a period of time to complete a task or set of tasks. _____

Q14 Comments:_____

Q15 To help understand your perception of the use of small groups, particularly Professional Learning Communities (PLCs), as a strategy for large-scale innovation programs in school districts please complete this survey by responding to each individual statement with Strongly Agree, Agree, Disagree or Strongly Disagree. The questions are designed to be a concise as possible as to move you through very quickly. If you believe the question can be interpreted various ways, please provide a note and the bottom of that section to clarify.

| | Strongly Agree (1) | Agree (2) | Disagree (3) | Strongly Disagree (4) | Does not Apply (5) | I Don't Know (6) |
|---|---|---|---|---|---|---|
| The implementation of the Common Core is my first time participating in a large-scale Innovation Program (1) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I support the principles underlying the Common Core (2) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Before the introduction of the Common Core I felt "something" had to be done on a large-scale (3) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I consider the implementation" of the Common Core as successful (4) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I enjoy working with others on common problems in group settings (5) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My campus utilizes small group work as a strategy for implementing | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
|---|---|---|---|---|---|---|
| the common core (6) | | | | | | |
| Prior to the small group work associated with the Common Core, I had worked on many "long-term" group projects in various topic areas (7) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Small groups focused on Academic topics are successful when membership is carefully considered and planned by leadership (8) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My campus utilizes small groups known as Professional Learning Communities (9) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My campus's definition of a Professional Learning Community is a type of small group for addressing a common goal (10) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I know the role of the PLC as a strategy for implementing large-scale innovation programs (11) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
|---|---|---|---|---|---|---|
| The goal of my campus is to become a PLC vs utilizing a PLC as a strategy (12) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My definition of a Professional Learning Community has evolved (13) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My campus provided an initial orientation to utilizing Professional Learning Communities for the implementation of the Common Core (14) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Prior to the Common Core my campus did not utilize small group work coordinated at the District or Campus level (15) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the role of the Principal in the PLC process (16) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the role of the Vice / Assistant Principal in the PLC processprocess (17) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the role of the TOSA | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
|---|---|---|---|---|---|---|
| within the PLC as part of the campus team (18) | | | | | | |
| I am satisfied with the participation of my PLC member's in the group process (19) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with my short-term progress my PLC has made (20) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the anticipated long-term progress my PLC will make (21) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Q16 Small Groups Survey (continued)

| | Strongly Disagree (1) | Disagree (2) | Agree (3) | Strongly Agree (4) | Does Not Apply (5) | I Don't Know (6) |
|---|---|---|---|---|---|---|
| I know the Common Core Curriculum Standards relevant to my work because of my participation in my PLC (1) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with the use of PLCs at my campus (2) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My campus is an exemplar for others doing PLC work (3) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with my PLC structure (4) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I know my role within my PLC (5) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with my role in the PLC (6) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The roles my group members and I play are all the same within my PLC (7) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the Common Core Curriculum Implementation Plan and associated activities we have produced as a group (8) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
|---|---|---|---|---|---|---|
| I am satisfied with the acceptance of my contributions to the Common Core Curriculum Implementation Plan we have created (9) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with my opportunities for time off, planning time, and professional development time to work with my PLC. (10) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with the PLC (Small Group) as strategy for increased teacher engagement (11) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My PLC meetings start and end on time (12) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My PLC meetings are constructive (13) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The overall goal of the PLC is known / shared and always at the forefront of our meetings (14) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| We do not accomplish | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

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| much at the PLC meeting (15) | | | | | | |
| My PLC is an exemplar for others doing PLC work (16) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the number of PLC days that I / my team receives. (17) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with my PLC group composition (18) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Pre – PLC implementation I worked with the members of my PLC anyway (19) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| If it were up to me I would change my PLC composition (20) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| PLCs have positively impacted the use of my planning days that I receive (21) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with my planning days (22) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The PLCs have improved my working conditions (23) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Prior to the PLC work I had | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
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| more autonomy and discretion in working towards student learning outcomes (24) | | | | | | |
| I meet with Teachers who Teach the same Course / Grade (within my PLC) (25) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I meet with Teachers who Teach the same Course / Grade who are not in my PLC but on my campus (26) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I meet with Teachers who Teach the same Course / Grade who are not in my PLC and not on my campus (27) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My PLC utilizes PLC time to determine most essential outcomes for courses (28) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My PLC develops common assessments for their courses within a PLC structure (29) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My PLC examines and compares student learning results | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

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| (30) | | | | | | |
| My PLC discusses and creates plans of assistance for students (31) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| We discuss instructional methods and strategies (32) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I personally have learned something useful from other members (33) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I have supported a fellow member in developing an identified growth area within a PLC structure (34) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| PLCs on my campus are viewed as a time to learn new teaching/testing methods (35) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| PLCs on my campus are viewed as a time for reflecting (36) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Q17 Small Groups Survey (continued)

| | Strongly Disagree (1) | Disagree (2) | Agree (3) | Strongly Agree (4) | Does Not Apply (5) | I Don't Know (6) |
|---|---|---|---|---|---|---|
| I am satisfied with my continuing education and training opportunities post PLC implementation. (1) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I personally have grown as a teacher as a consequence of my participation in a PLC (2) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I have observed growth in others as a consequence of their participation in a PLC (3) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with the additional benefits my PLC provides (4) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| It is my ethical duty to provide due diligence in the PLC process (5) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I believe PLCs are the best strategy for implementing large-scale innovation projects (6) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I believe PLCs are the best strategy for | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
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| implementing the common core curriculum (7) | | | | | | |
| Based on my experience in this implementation process, I would recommend PLCs to another school district (8) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Based on my experience in this implementation process, I can lead a PLC implementation project (9) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with my district's efforts in implementing the Common Core (10) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with my campus's efforts in implementing the Common Core (11) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Overall, I am satisfied with my PLC group's efforts in implementing the Common Core (12) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with my district's "initial" orientation to PLC (Small | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
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| Group) practices (13) | | | | | | |
| I am satisfied with the role of the TOSA within the PLC as part of the overall PLC structure (14) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the role of the District in the PLC process overall (15) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the role of the District in the PLC process at my campus (16) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am satisfied with the large group meetings my district has provided / delivered throughout this process (17) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am confident in the district process for the implementation of the common core (18) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am confident in my TOSAs ability to facilitate my / other PLC (Small Group) work (19) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am confident in the district personnel's ability to facilitate the use of PLCs in | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
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| the long-term (20) | | | | | | |
| The way my PLC is structured now will lead to long-term sustainability (21) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| My district is an exemplar for others doing PLC work (22) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I feel my Credentialing Program prepared me to work with other faculty (23) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I feel my Credentialing Program supplied the opportunities to build the competencies necessary for collaborative work (24) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I feel my Credentialing Program supplied the opportunities to build the competencies necessary to utliize a strategy like a PLC to focus on student gains (25) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I have gained Knowledge, Skills and Expertise from others in my PLC that has | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | |
|---|---|---|---|---|---|---|
| improved my teaching (26) | | | | | | |
| Credentialing Programs should incorporate Small Group work or PLCs into the curriculum (27) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| It is helpful to know about the last 50 years of Educational Reform Policy in implementing the Common Core Standards (28) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I believe the Common Core Standards will be replaced in the next decade (29) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Q18 Thank you for your participation. As a reminder no identifiable data provided will be shared outside of the research team; the final report will be aggregated (reported as a group).The questions are designed to be a concise as possible as to move you through very quickly. If you believe your responses to the questions you answered above can be interpreted various ways, please provide a note to clarify. You may also provide additional information via email: mariestrada@education.ucsb.edu

Q19 Respondent notes to the Researcher:_____

## E. Teacher Survey Open-Ended Responses

Context #1: Comments after Demographics - (6 comments)

Since I am the only T-K teacher...I often meet with the Kindergarten Teachers so that I have an idea of the similar areas (themes) of the month.

I am mentor teacher/XXXX Support Provider for one teacher but I don't think that's what you mean.

Lesson collaboration

We worked as a grade level for Project Based Learning and also met with other grade levels, XXXX taining took place off campus but we met and planned a unit as a grade level, XXXX was off campus but met as a team to plan how best to use and check results

I meet periodically with the district reding specialist , and meet with grade level teams, including. the Principal, several times throughout the yea r for the purposes of tracking student progress and evaluating student need; in addition, I also give reading assessments and confer with the Principal regarding results, and meet, whenever necessary to discuss/clarify ELD strategies and/or test results with individual teachers as the need arises.

Though I have served as a grade level leader and a Math team member in the past, this year I was not on any official District teams. I do work closely with my grade level partner to create curriculum as needed. Over this summer, I have agreed to partner-write a novel study curriculum for our 5th grade District teachers.

Context #2: Comments after PLC structure Questions - (5 comments)

I don't even know what PLC is. I work with the other 4th and 5th grade teachers just to survive. We do not have a Language Arts program aligned with Common Core and had to come up with something on our own. Every school is doing something different. We were given the new XXXXXX XX math. While I like it, we weren't given any training, or even any answers to the problems and had to learn it on our own. The new writing program was piloting by several teachers who ALL recommended to the board NOT to purchase it. It was purchased anyway because it is the "only" common core aligned writing program out there. We had 2 lousy training days with most teachers balking as the outcomes and expectations are unrealistic. We've had a couple of grade level meetings this year, but it was mostly about district benchmark tests.

I am not sure about the TOSA and PLC questions. I have had grade level meetings where they have been there to facilitate, but not on our campus.

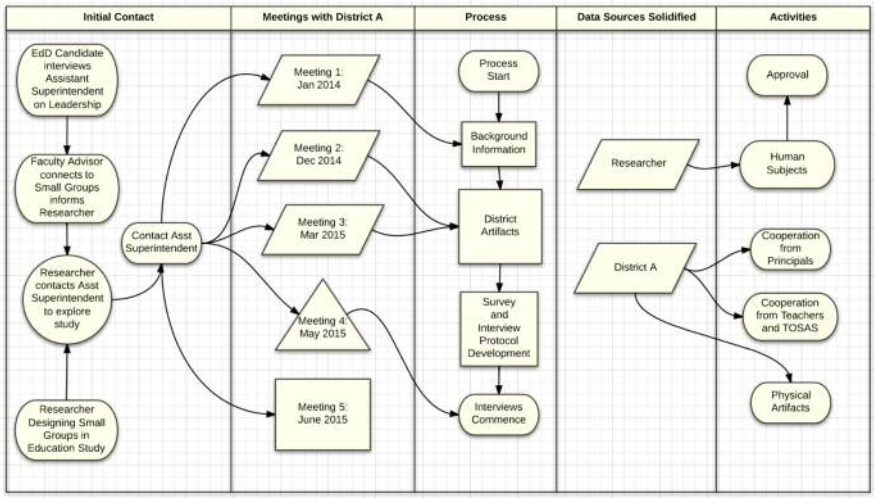
PLCs are just the newest fad. In general I think they work, but teachers are not given the time needed to plan and implement them.

I am unaware of any PLC's on my campus or within my district. I know that I have not been assigned to any type of PLC. During district wide grade level staff meeting, there has been time where they discussed common core and passed out information from the TOSAs. They are not informative meetings for me.

PLC is a very open ended concept. I both have groups I meet with at my school site and would consider my community on Twitter to be a PLC

F. Data Collection Procedures

District A




District B