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Exploring the moral underground: self-organizing teachers in the complex adaptive system of a school

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EXPLORING THE MORAL UNDERGROUND: SELF-ORGANIZING TEACHERS

IN THE COMPLEX ADAPTIVE SYSTEM OF A SCHOOL

A dissertation submitted in partial satisfaction

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by

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ABSTRACT

This study explored how and why teachers self-organize to help students living in poverty. Schools have characteristics of complex adaptive systems, the primary one being a capacity to change and adapt to its environment through self-organizing. The main focus of the study was how teachers in urban elementary schools create and utilize self-organizing to meet the needs of their students. The research investigated the experiences of teachers who help students living in poverty. This study highlighted committed, caring teachers breaking rules and taking a stand for children caught up economic injustice. The teachers in this study are participants in a *moral underground* (Dodson, 2009), professionals who are taking extraordinary steps to help children challenged by poverty.

A Delphi process involving 9 teachers residing in either Long Beach, California or Philadelphia, Pennsylvania, was used to identify the individual, relational, and environmental factors that support self-organizing. Through 3 rounds of virtual correspondence during the first quarter of 2011, these self-organizing experts clarified the dynamics involved in trying to meet the needs of children.

The participants acknowledged that at the individual level, teachers self-organize to help the child for one or both of the following reasons: they have a strong sense that they can and or that they should help the child. At the social level, 3 factors significantly impacted participants' willingness to self-organize with others: a shared goal; relational trust; and a sense of urgency. Four types of environmental factors affected participants' self-organizing: societal; structural; administrative; and working conditions. The

individual and relational factors have a greater affect on participants' decisions to self-organize than any of the environmental factors.

The findings from this study highlight steps teachers can take to ensure the well-being of children, especially those living in poverty. Publicizing this work could sway public perception of the U.S. education system. The findings from this study provide information to instructors in teacher preparation programs about the behaviors needed by teachers who work in high-needs schools. Self-organizing can help children meet their basic needs and this research has shown that it is within our power to do so.

Chapter 1: Introduction

The term *moral underground* was coined by Dodson (2009) to describe the

extraordinary steps that teachers, health care workers, and managers take to help people

in poverty meet their needs. Dodson documented many stories of how professionals,

including teachers, broke rules and even laws in order to help people who were struggling

financially. These people felt that it was not right that the children and adults they

encountered suffered in a variety of ways because they were not able to earn a living

wage, despite working many hours and several jobs. The people in her study took

thoughtful actions to fight against perceived injustice. She characterized these gestures

as acts of economic disobedience. People took these steps because they refused to be

complicit with the economic unfairness that they encountered in their daily work lives.

The moral underground provides a context for the work that is explored in this study,

specifically how and why teachers who work in high-needs, public, urban schools are

coming together to help their students who are living in poverty.

Throughout history, human beings have self-organized (Kauffman, 1993). People

have come together for a shared purpose, such as creating a marketplace, a neighborhood,

an organization, or a city. Over the course of the 20th century, people have self-organized

for various reasons. Natural disasters, such as the San Francisco earthquake and fire of

1906 and Hurricane Katrina of 2005 have led people to self-organize (Solnit, 2009) in

order to take care of each other's needs. The requirements for efficiency in both for-

profit and non-profit organizations (McMillan, 2006) has helped to bring about self-

organization, as have various other efforts at working toward a common cause (Nesbitt,

2004). Self-organizing in social systems appears to occur in response to a pressing

problem or a serious need.

Teachers working in schools currently face the significant problem of figuring out

how to best support students who come to school with a myriad of needs. Students'

needs could include basic (food, clothing, shelter), behavioral (emotional and social), and

academic (cognitive and linguistic). All three of these areas contribute to a child's

overall well-being, and the teachers find themselves having to address each one, to

varying degrees, depending upon the students they serve. *As teachers work together to*

help students meet their needs, the teachers are taking action; they are self-organizing.

This action, which greatly increases the well-being of children in urban poverty, is the

focus of this research.

Self-organizing can be represented through Figure 1. Self-organizing occurs

when people in an organization come together and contributes to the achievement of a

common goal, such as what teachers do when they come together to help a child. Each

teacher brings an action or bit of information to colleagues with the goal of helping a

child meet his/her needs, similar to putting together a puzzle.

Figure 1. Self-organizing teachers.

The teachers in school communities inevitably collaborate when they respond to all of the different dimensions of a child's well-being in order to educate the child. The generally-accepted charge of the teachers is simply to teach the children, but the relationship between academics and the other areas of a child's well-being are often unclear and fluid. It is difficult, if not impossible, to teach a child who is asleep, consistently ill, or regularly hungry. There has been significant research regarding the link between well-being and school achievement (Dilley, 2009) that indicates the healthier a child is, the more she can learn and the better she can perform in school. Some of the factors found to be relevant to a child's health include amount of television watched each day, hours of sleep each night, breakfast consumption, and alcohol consumption. The challenge for the teachers in urban schools is to monitor and address these factors, promote the general well-being of the students, and thereby increase, or improve, the potential for student learning.

Some schools have used a programming approach to respond to children's needs, such as free breakfast programs (Kleinman et al., 2002) and school-based health clinics (Clark et al., 2004). Other schools rely on school staff (teachers, volunteers, security guards, secretaries, teacher assistants) to address students' needs. Such schools are drawing on the creativity and problem-solving abilities of their adult members to help the children they serve. The groups of caring teachers in these schools are helping the school adapt to the new situations or conditions that the students bring. These groups of teachers who collaboratively address students' needs are self-organizers. Schools where teachers are creatively coming together for the purpose of helping children meet their needs provide an ideal context for the examination of self-organizing in a social system.

Statement of Problem

Children living in poverty are suffering in many ways (Duncan & Brooks-Gunn, 2001). With the increased public and political attention on standardized testing, poor, urban school communities spend significant time preparing students for annual standardized tests (Zellmer, Frontier, & Pheifer, 2006). By focusing on academic skills that will help students perform on tests administered only once a year, school communities often lack the resources, time, and flexibility to help children meet their basic needs.

This overemphasis on academics is problematic because there is an increasing number of children in poverty coming to school (Land, 2010). According to Land, progress in American children's quality of life has fluctuated since 2002, and began a decline in 2009. The most recent projections indicate that conditions for children deteriorated through 2009, were projected to bottom out in 2010, and leave approximately 15.6 million children living in poverty in 2010. Land also projected that the percent of children living in food-insecure households will climb from 16.9% in 2007 to 17.7% in 2010, which is an increase of 750,000 additional children at risk over this time period. During this same time period, children's overall health was expected to decline due to obesity, while children's risky behavior and safety was expected to fare worse due to higher rates of violent crime where youths are both victims and perpetrators. It was projected that by 2010, there may be as many as 500,000 homeless children in the U.S. and 2 of 5 households will face cost burdens associated with housing in 2009-2011.

Schools were not designed to address the various needs that children in poverty have (Cuban, 2004). Because of this mismatch between schools and student needs,

teachers in high-needs schools are doing more than just teaching academics to support the well-being of the child. Teachers are engaging with other adults in the school community to help meet children's needs (Anonymous, 2007), and are participating in the moral underground (Dodson, 2009) to ensure the well-being of children. Someone needs to make sure children have a way to get to school in the morning or a bed to sleep in each night. Self-organizing groups may serve as a vehicle to help schools address these aspects of students' well-being while remaining focused on student achievement.

The issues examined in this study are how and why teachers self-organizing in high-needs, urban, public elementary schools – what it is that helps teachers do what they need to do in order to help students meet their needs. Self-organizing is the ability of a system to adapt and change to meet the needs of its environment when there is new information available. In this case, the new information is the needs of students living in poverty. Little is known about the existence of self-organizing in elementary schools serving high-needs students, about the members of these collaborative groups, or the conditions that promote people coming together to meet the needs of these children.

Currently, the ways that school communities respond to high-needs children are consistent with the concept of self-organizing. Examples include:

- Ms. Grace, a fifth grade teacher, collaborates with the parent organization at school to create a uniform bank, where children who need uniforms can come to get a new one every day;
- Ms. Frances, a first grade teacher, realizes that her students are often fighting during recess, and with colleagues' and parental permission, allows several

children to regularly stay after school, rotate to colleagues' classrooms to play in

the block corners in order to develop their social skills;

- Mr. Smailis, a school staff member, realizes that many of his students miss school

   when there is inclement weather, so he drives these students to school on snowy

   days.

These examples represent how teachers in high-needs, public, urban elementary schools

are doing whatever they can to help children who are living in the midst of poverty. Self-

organizing is a concept that can be used to capture this work.

Currently there is a lack of research regarding self-organizing in social systems,

particularly in elementary schools. It is a phenomenon that is not yet described, although

some research has found that self-organizing may exist in high-needs, urban, public

schools (Keshavaraz, Nutbeam, Rowling, & Khavarpour, 2010). It is important to know

more about this self-organizing, know the context in which it is happening, and how it is

helping schools to address children's needs because it may help us increase the learning

potential of other children in similar situations. This information is particularly relevant

when coming from schools that serve a significant number of children living in poverty

by virtue of the many obstacles the students face to learning (Duncan & Brooks-Gunn,

2001; Moore, Redd, Burkhauser, Mbwana, & Collins, 2009).

Statement of Purpose

The purpose of this study is to explore the self-organizing experiences of teachers

in a social system (specifically, a school) and to identify the factors that support their

efforts, with an eye to how it may help address the needs of students living in poverty.

The main focus of the study is how teachers in urban elementary schools create and

utilize self-organizing to meet the needs of their students. This is an early step in identifying the existence of these potential mechanisms for change. The importance of identifying which aspects of a school community can help teachers to self-organize in order to help children cannot be underestimated; the well-being of children in poverty is at stake in our nation's schools and it is our collective responsibility to do what we can to help students meet their needs as successfully as we can. This study is an initial attempt to find out why and how teachers self-organize to help students.

Research Questions

The research questions for this study focus on the dynamics of teacher self-organizing. The underlying assumptions of this research is that four factors – an individual's self-efficacy, relational trust, a common goal, and a shared sense of urgency – are core elements of self-organizing. It is important to identify the conditions that support teacher self-organizing because the knowledge gained from this study can inform researchers and teachers in high-needs schools. The information gained from this study can provide clarity regarding what practitioners can do to help children.

Several research questions guide this research.

1. How does an individual's self-efficacy evolve and affect one's ability to self-organize?

2. How does relational trust evolve and affect one's ability to self-organize?

3. How does having a shared sense of urgency evolve and affect one's ability to self-organize?

4. How does a common goal evolve and affect one's ability to self-organize?

5. What are the environmental variables (such as people, structures, or processes) that promote self-organizing?

6. What other variables shape or affect one's ability to self-organize?

The Delphi method is an appropriate tool to learn from individuals who are engaged in the process of self-organizing in high-needs, urban, public elementary schools because it allows experts who are geographically separate to engage in an ongoing conversation to gain consensus. Nine teacher participants, who were actively engaged in self-organizing groups, provide the individual, relational, and environmental factors that affect self-organizing in urban elementary schools. Multiple rounds of communication with participants occur over the course of 2 months.

Significance of Study

One of the most critical issues currently facing our society is how to help our children grow up into healthy, well functioning adults. As adults in this country, we have a moral obligation to do whatever can be done to help our children, especially since an increasingly large number of them are living in poverty. Dodson's (2009) work demonstrates that there are many professionals who are helping people, including children, suffering from economic injustice. Teachers are a group of adults who regularly help children meet their basic needs (Lake Research Partners, 2010). This research provides insights into how teachers work individually and collectively to help meet children's needs, and shows how members of school communities can collaborate to support and assist children living in poverty. The practical results of this study provide resource-strapped schools with creative ways to address the problems they encounter,

specifically when students come to school with many issues associated with poverty, such as hunger, lack of stable housing, and emotional insecurity.

In terms of philosophy and perspective, this research yields information that may refocus school communities on the overall well-being of children. The well-being of children, as determined by the Foundation for Child Development (Land, 2010), encompasses seven domains: family economic well-being, health, safe/risky behavior, educational attainment, community engagement, social relationships, and emotional/spiritual well-being. These areas provide a way for schools to analyze different aspects of the child, determine how well children are being cared for in U.S. society, and help school communities identify and respond to their children's needs. By considering all of these domains of a child's development, schools can become aware of how they are (or are not) supporting self-organizing in order to help children.

Thus, this study adds to the knowledge base on how people, specifically school personnel, can engage with children as individuals who have needs that are not being met. The information resulting from this study can bring a new way of conceptualizing how self-organizing can address poverty, which may create new needs for children or magnify previously existing needs.

In addition to providing practical information in regards to how schools can work differently to promote the overall well-being of children, this study is a step towards filling two current research gaps. There is a dearth of literature regarding the individual and relational dynamics of self-organizing in human systems (Parsons, 2007a, 2007b). Research on the application of complex adaptive system theory to human systems is rare. How people self-organize in an organization is an unknown phenomenon. The second

research gap is the lack of literature regarding how schools can potentially moderate the negative effects of poverty (Bradley & Corwyn, 2002). There has been research done on how the quality of instruction can increase student performance of students living at or below the poverty level, but there has not been research done on how an organizational mechanism, such as self-organizing, can enhance the well-being of such students.

Definition of Terms

Self-organizing in schools are composed of teachers who function in a larger system – the school itself. These teachers may have self-efficacy and a strong sense of urgency to address the needs of the children they serve. They share a common goal of meeting the children's needs. The following section defines the terms critical to the study.

System. "An interconnected set of elements that is coherently organized in a way that achieves something" (Meadows, 2008, p. 11).

Complex adaptive system. A system that "consists of a large and diverse number of agents that interact in nonlinear adaptive ways" (Parsons, 2007b, p. 406).

Self-organizing. "The ability of a system to structure itself, to create new structure, to learn, or diversify" (Meadows, 2008, p. 188).

High-needs school. A school where over 50% of the student body is at or below the poverty level (McREL, 2005), and thus eligible for free or reduced lunch.

Relational trust. According to Bryk and Schneider (2002), relational trust is comprised of four elements: respect, personal regard for others, competence in core role responsibilities, and personal integrity.

Self-efficacy. Defined as "people's self judgments of performance capabilities in particular domains of functioning" (Zimmerman & Schunk, 2003, p. 26).

Group of teachers who self-organize. Within a school, these groups could be composed of teachers, teaching assistants, security guards, volunteers, parents, cafeteria workers, custodians, secretaries, or administrators. For the purpose of this study, the self-organizers are the teachers, as they are the participants in the research study.

Theoretical Basis

Self-organizing is a way in which the members of an organization adapt to changes in their environment. Thus, it is an ideal framework to use to explore how teachers in schools are responding to the diverse challenges that students living in poverty may bring with them to school. Self-organizing in social systems and the factors that support its development have not yet been studied in depth, but social psychology, educational psychology, and organizational change theory have provided several constructs that may potentially act as facilitating elements. These constructs include self-efficacy (Bandura, 1977), relational trust (Bryk & Schneider, 2002), goal setting theory (Locke & Latham, 2006), and urgency (Kotter, 2008). Together, these concepts take into account the factors that shape self-organizing at the individual, group, and organizational levels.

There are several theories that identify the potential factors and conditions that prompt, support, and challenge self-organizing among people in schools, which this researcher conceptualized as a complex adaptive system. Complexity theory is the field that has yielded the most research on complex adaptive systems, yet many questions

remain regarding the specific elements that promote self-organizing in complex adaptive systems (Eoyang, 2009; McMillan, 2006; Stacey, 1996).

According to several theorists, a school can be a social complex adaptive system (Keshavaraz et al., 2010; Meadows, 2008; Weick, 1976). Eoyang (2009) proposes that there are at least seven characteristics of a complex adaptive system: butterfly effects, boundaries, transforming feedback, fractals, attractors, self-organization, and coupling. Self-organization, a key element of a complex adaptive system, is the focus of this study. Schools exhibit several of these characteristics.

Self-organizing is an adaptive mechanism of a complex system (Eoyang, 2009). It is "the ability of a system to structure itself, to create new structure, to learn, or diversify" (Meadows, 2008, p. 188). As a school community adapts to address the needs of its student population, it is self-organizing. The school staff or volunteers may begin to do things that they have never done before in order to support student well-being, such as taking turns picking up students to bring them to school each day, or eliciting community contributions in order to purchase snowsuits for preschool children whose families cannot afford them. Self-organizing is "dynamic, not static, something that is constantly regenerated through interaction" (Houston, 1999, p. 132). Therefore, groups of teachers in high-needs schools may come together to identify a need, address the need, and then move on to the next situation. Self-organizing groups in high-needs schools may come together, disband, and then reform – it is yet unknown.

One major individual factor that may contribute to self-organizing is self-efficacy. The literature regarding individual efficacy (Bandura, 1982) provides a foundation for examining how teachers engage in the process of self-organizing. Self-efficacy is one

potential factor that facilitates teachers coming together to change their behavior, of their own will, in order to help students. Self-efficacy could be a key factor in understanding the phenomenon of self-organizing. A goal of this study is to uncover the contributing individual factors that affect self-organizing, one of which may be self-efficacy.

Another factor that may contribute to self-organizing is relational trust. Examining the relational elements of self-organizing provides a clearer picture of how teachers rely on each other during the process of self-organizing, as well as the factors that sustain the collaboration that is required by self-organizing. This information can provide insights into the presence (or absence) of relational trust in a group that self-organizes. Because relationships are often multi-dimensional, relational trust may prove to be only one of several factors that contribute to teachers self-organizing. Such factors may include a common goal among the organizers and a shared sense of urgency.

Identifying the environmental factors that support self-organizing can help clarify how dependent self-organizing is on societal, structural, administrative support and working conditions.

Study Delimitations and Assumptions

There are several limitations of this study. The findings of this study are limited to the experiences and knowledge of the 9 participants. Therefore, the generalizability of the factors affecting self-organizing may be somewhat limited. The participants of the study are self-identified. Therefore, they are already aware, to some degree, of how they are taking unusual steps to help students. Potential participants who do not have regular Internet access from the study were excluded since email was the vehicle for communicating with the participants. Additionally, the participants in the study were

teachers comfortable expressing themselves in writing, which is not the case with all teachers.

This study is based on several assumptions. It is assumed that the concept of self-organizing is a way to describe the type of work that the participants are engaged in to meet students' needs. Another assumption is that self-organizing to meet students' needs is more prevalent in high-needs, urban, public elementary schools than in any other type of school. The idea that self-organizing can be beneficial to children in helping them meet their needs is another assumption. Also, it is assumed that the participants of the study have had the experience of self-organizing that they have reported.

Summary

This research explores how teachers self-organize to help meet children's needs in high-needs, urban, public elementary schools. The workings of self-organizing groups, the members of these groups, and the factors supporting self-organizing were unknown before this research. This study is a step toward addressing this research gap because it identifies and clarifies the individual, relational, and environmental factors that support self-organizing. Self-organizing to address students' needs is particularly relevant now, given Land's (2010) data regarding the increasing number of students living in poverty who are coming to school with significant needs. Schools must find a way to meet these needs in order to help children learn and thrive, and self-organizing can help accomplish this. Uncovering information about the process of self-organizing can help schools moderate the deleterious effects of poverty on young children. By using the Delphi process to help define the supporting factors of self-organizing, this qualitative study clarifies the influences that impact self-organizing.

Chapter 2 presents an overview of the literature related to self-organizing. The research on children, poverty, and schooling, as well as the popular perception of school is presented. Next, the complex adaptive systems literature is reviewed in the context of schooling. This body of literature provides the context for understanding self-organizing. Additionally, the researcher explores the teacher as self-organizer and the theories related to the individual, relational, and environmental factors that support self-organizing.

Chapter 3 is a detailed description of the Delphi method and an explanation of how it is an appropriate method for this study. It outlines the process used to engage teachers in collaboratively identifying the supportive factors of self-organizing. It is an overview of the process used to collect and analyze data.

Chapter 4 is a summary of the results gathered from the three rounds of data collection. The analysis of the data is chronological, corresponding to each round of questionnaires given to participants.

Chapter 5 provides a discussion of the results of the data collection surveys, with implications for theory and practice. The strengths and weaknesses of the study are also elaborated upon. Future research suggestions are also included in this section.

Chapter 2: Review of the Literature

Introduction

The purpose of this literature review is to explore research and writing that is relevant to teacher experiences of self-organizing in a social system, specifically a school. This literature review first addresses the problematic intersection of children, poverty, and schooling. Explicating this problem that confronts teachers in high-needs, public, urban schools is necessary in order to understand how teachers are addressing this problem. Then, an overview of the popular perspective of schooling is presented which allows the aforementioned problem to be contextualized. Next, an outline of the complex adaptive systems (CAS) theory is provided to set the stage for a new way of thinking about schools – schools as complex adaptive systems. This new frame provides a way to conceptualize the ways that teachers help children living in poverty as normal functions of a complex adaptive system – self-organizing. The examination of the school as a CAS opens the door to investigating the self-organizing tendency of a CAS.

Self-organizing in high needs, public, urban elementary schools is a new way of conceptualizing the work that many teachers do during their regular work day, and often outside of it as well. The term *self-organizing* is situated in the complex adaptive systems literature since self-organizing is a function of systems. Examining how an aspect of complex adaptive systems theory, such as self-organizing, applies to a human system is crucial if schools are to better serve students with numerous needs.

Next, a method for understanding teachers as self-organizers is presented. Illuminating the individual, relational, and environmental factors that support teachers who self-organize to meet students' needs is crucial information. First, it is important,

relevant information for professors of education who prepare teachers. If universities are to prepare teachers who can be effective in high-needs schools, they need to know what type of behaviors will enable future teachers to be successful in supporting student well-being. Secondly, this information can help teachers and principals to better understand what they can do to stand up and fight for young victims' economic injustice.

Children, Poverty, and Schooling

The "Great Recession" (Land, 2010) that the United States is currently experiencing has been projected to create significant challenges for an increasing number of children (these are the most current statistics as of the writing of this paper):

> The numbers of all children living in situations with incomes at deep poverty levels will show an increase of 1.88 million children from 5.53 million in 2006 to a projected 7.41 million in 2010, an increase of about 34 percent. (Land, 2010, p. 18)

Children living in poverty face many obstacles to learning (Duncan & Brooks-Gunn, 2001) and the number of children living in poverty is increasing over time – 42% of the nation's children live in low-income families (Wight, Chau, & Aratani, 2011). When these children come to school, they bring with them many of the problems of poverty. The way poverty manifests in the classroom is primarily through three ways (Moore et al., 2009):

Poor health outcomes – low birth weight, food insecurity, chronic health problems, experiencing accidents.

Negative academic outcomes – dropping out of high school, lower reading scores, lower achievement scores.

Being at a greater risk of displaying behavior and emotional problems – disobedience, impulsiveness, difficulty getting along with peers.

Overall, the healthier the child is, the better she can learn (Dilley, 2009), with healthier being defined as not having low birth weight, having food security, not having chronic health problems, rarely experiencing accidents, not being obese. Children living in poverty are at greater risk of not being healthy and having to grapple with issues that interfere with their learning (Moore et al., 2009).

Unfortunately for children though, according to Wilhelm (2008), schools frequently use standardized educational exams as the sole measure of child well-being. This severely limits the ways schools support healthy child development and their charge of educating children. Land (2010) asserts that school personnel are at risk of developing a limited perspective of the factors that impact children's educational attainment by focusing on just one aspect of the Foundation for Child Development's Child Well-Being Index. In turn, this limited perspective results in limited success with student performance on standardized exams.

Opposing the prevailing societal focus on standardized testing are the voices of educators and policymakers who are calling for schools to treat students as complex, intelligent, social, and emotional people (Anonymous, 2007; Penrose, 2001; Wilhelm, 2008) and to address the needs that students bring with them to school. By engaging with children as people with needs, school personnel are humanizing education. There has been little research done on *humanization* (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) in schools. The new conceptualization of schools presented in this literature review provides school personnel with a way to humanize their interactions with children of poverty.

The Current, Popular Perspective of Schooling

Cuban (2004) and Johnson (2006) present a popular conception of schools that equates them with factories. This view pervades education and American society in general. The factory model attempts to reduce the elements of schooling to standardized policies and procedures, as well as highly-scripted teaching practices. Based on the work of Max Weber and Fredrick Taylor, schools have been designed and developed as places where students and student achievement are perceived as products (Katz, 1971). This school-as-factory perspective of schooling has been unsuccessful as a way of conceptualizing schools since its inception (Cuban, 2004).

Several researchers have found that in the United States, current federal funding of schools is significantly tied to students' academic performance through the *No Child Left Behind Act* (Azzam, Perkins-Gough, & Thiers, 2006; Cawelti, 2006). There is also new federal funding that ties teacher salaries directly to student achievement (Soderlund, 2009). This results-oriented focus is problematic for urban schools that serve students living in poverty because there are many factors that can impact the success of these students. By narrowly focusing on the academic performance of these students, schools often neglect the social, emotional, and physical issues that impact students' abilities to learn.

Programs and approaches that claim to address the complexity of educating children simply fail to mention students' emotional, social, and physical needs. The U.S. Department of Education database of recommended practices for schools, entitled "What Works" is one example. Their website is focused on identifying curricula that has 'produced' measurable, increased student performance outcomes. Ways of working with

children that are not measured do not appear on this website. This website is emblematic of the school-as-factory perspective. It is an input-output approach. From this perspective, teachers must teach students the requisite facts and skills; students must make progress towards the acquisition of these skills; and if students do not demonstrate increased performance, then teachers are not doing their jobs. This popular perspective of schools as factories inevitably shapes how teachers, parents, administrators, school staff, district staff, and the public judge schools. Student performance on standardized tests is an incredibly limited tool used to evaluate a school's effectiveness, yet it is also the most appealing tool to the public because of its deceptive simplicity. Standardized test scores offer a single snapshot of student performance that is blind to the daily (and often overwhelming) challenges facing students living in poverty. If our schools are going to help children, we must do considerably more than prepare them to take standardized tests.

Dweck and Leggett (1988) describe an orientation to performance that operates in schools that supports the school-as-factory perspective. The performance orientation (Dweck & Leggett, 1988) does not take into account the actions that teachers frequently undertake to ensure the overall well-being of students. For example, in a school, several teachers and counselors in a school may come together to discuss ways they can keep a student from dropping out. These professionals self-organize for the well-being of the child, even though their actions do not directly relate to the instruction that the teachers provide. This self-organizing is not a research-based program, and it may not boost the school's standardized test scores, but it is helping address the student's well-being. Working together to prevent a student from dropping out is an example that illustrates a

human systems approach to change that has not yet been researched. This type of self-organizing around students' needs require further investigation and is the focus of this research. Complex adaptive systems literature provides a lens through which one can examine such teachers' actions that support the overall well-being of students.

Complex Adaptive Systems

A complex adaptive system is a framework for thinking about a human system, such as a school. It is offered as an alternative to the school-as-factory perspective. There is no generally accepted definition of a CAS (Wallis, 2008), although it is grounded in complexity theory. A CAS is more easily understood as a framework than a specific theory, in this case for thinking about organizations. Since the very nature of a CAS is fluid, any attempt to apply a static, linear definition runs contrary to what it is.

According to Morrison (2002, p. 9), there are 10 characteristic behaviors that can be used to describe a system. In a system, such as a school:

1. Small changes can produce huge effects.

2. Effects are not straightforward functions or causes.

3. Similar initial conditions produce dissimilar outcomes.

4. Uncertainty and openness prevail.

5. The universe is irregular, diverse, uncontrollable and unpredictable.

6. Systems are indeterministic, nonlinear and unstable.

7. Systems evolve, emerge and are infinite.

8. Local, situationally-specific theories account for phenomena.

9. A system can only be understood holistically, by examining its relationship to its environments (however defined).

10. Change is irreversible – there is a unidirectional arrow or time.

Summarizing some of the frequently cited elements is helpful in advancing the description of a CAS, although Wallis (2008) admits that this approach is still wanting. The characteristics of a CAS, as cited in the related literature, include: nonlinearity of the interactions among its agents (Zimmerman, Lindberg, & Plsek, 2001); constant information flow and feedback (Eoyang, 1997); uncentralized control (Cleveland, 2002); being nested in other systems (Zimmerman et al., 2001); continuously adapting and self-organizing in response to changes in its environment (Eoyang, 1997; Waldrop, 1992); diversity among its agents (Zimmerman et al., 2001); and unpredictability (Keshavaraz et al., 2010). Describing a CAS, rather than defining it, allows for significant variation within each of the elements. This is a helpful approach, especially when considering the complex variability of schools.

Schools as Complex Adaptive Systems

Keshavaraz et al., (2010) is the first researcher who has conceptualized a school as a CAS. Thinking about the school as a CAS allows for teachers and researchers to acknowledge that schooling is a human endeavor with infinite variation, and the members of the school community are responsible for the overall well-being of the child, not just their academic achievement. When a community conceptualizes a school as a CAS that addresses the needs of its students, rather than just producing smart children, the behaviors of school community members may hold more meaning and purpose. In a CAS, the relationships among the people who are part of the system are seen as the building blocks of the system (Zimmerman et al., 2001). Agents are no longer expected

to "produce" students who perform well, but are seen as human beings helping other human beings by addressing students' academic, emotional, social, and physical needs.

A school as a CAS can be visually represented as a spider web (see Figure 2). The threads represent the connections between the teachers and other adults in the school community. The intersections where the threads meet is where self-organizing and adapting can occur to accommodate changes in the environment, which in this case are the social, emotional, and physical needs of children living in poverty.
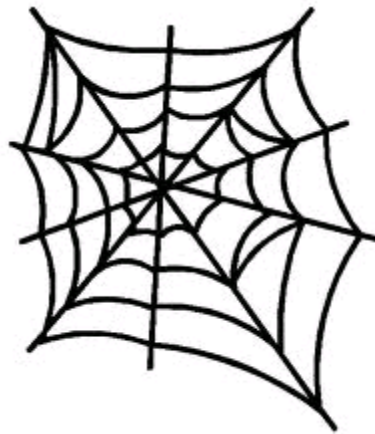
Figure 2. Complex adaptive system.

The work presented by Cuban (2004) and Johnson (2006) highlights how the school-as-factory perspective is woefully inadequate, especially when today's students are facing the consequences of "The Great Recession" (Land, 2010) and are increasingly coming to school with more than just academic needs. In order for children to thrive, someone has to be concerned for their well-being. Since parents are facing increasingly high levels of food and housing insecurity (Land, 2010), their ability to provide for the well-being of the whole child will most likely worsen.

Osberg, Biesta, and Cilliers (2008) suggest that "In modern, Western societies the purpose of schooling is to ensure that school-goers acquire knowledge of pre-existing practices, events, entities and so on" (p. 213). The idea of school being a place that can help address students' social, emotional, and physical needs runs counter to the explicit purpose of most schooling. Schooling has historically been seen to be solely focused on increasing students' academic achievement (Cuban, 2004).

School as a CAS (Keshavaraz et al., 2010) is a relatively new construct, yet there is some precedent. The School Development Program (SDP) is a comprehensive approach to school reform that helps schools refocus their work on the well-being of the whole child (Emmons & Comer, 2009). Emmons and Comer (2009) contend that the theory of change that guides their work is the school as a system. Begun in 1968 by Dr. James Comer, the SDP is a reconceptualization of schools based on the premise that schools are responsible for supporting the healthy development of children, which involves ensuring that their social, emotional, physical, and cognitive needs are met. In the prevailing mechanistic climate of schooling (Katz, 1971; Miskel, Fevurly, & Stewart, 1979), the SDP approach is not included in the Department of Education's "What Works" database of outcome-based programs.

Table 1 juxtaposes the school-as-factory perspective described earlier, with the "school as complex adaptive system" perspective, in order to highlight the differences between them

In *Complexity Theory and Education*, Morrison (2008) opined that:

Schools exhibit many features of CAS, being dynamical and unpredictable, non-linear organizations operating in unpredictable and changing external environments. Indeed schools both shape and adapt to macro- and micro-societal

Table 1

Differing Conceptualizations of a School

School as a Factory	School as a Complex Adaptive System
The principal directs the teachers to do their jobs.	They require organization and have distinguishing structures and features that change over time (Morrison, 2002).
The principal gives directives.	There is nonlinearity of the interactions among its agents (Zimmerman et al., 2001).
Information flows from the principal to the rest of the school community.	There is constant multi-directional information flow and feedback (Eoyang, 1997) within the system.
Control rests with the principal.	There is uncentralized control (Cleveland, 2002) throughout the system – everyone in the system is responsible.
Healthy adult-adult, adult-child, and child-child relationships are not a necessity.	Relationships are highly important in their work (Morrison, 2002).
The school operates as an independent entity within a district.	The school is nested in other systems (Zimmerman et al., 2001).
Everyone follows set policies, procedures, and curricula, with little to no deviation allowed.	The school is continuously adapting and self-organizing in response to changes in its environment (Eoyang, 1997; Waldrop, 1992).
School community members share similar beliefs and practices.	There is significant diversity among its agents (Zimmerman et al., 2001) in terms of their perspectives and who they are.
School community members do what they are told to do.	The conditions and members of a school generate a degree of unpredictability (Keshavaraz et al., 2010) as to how the system behaves.
Schools must continue to focus on student achievement and performance.	They have a proclivity to instability and operate at the edge of chaos (Morrison, 2002, p. 26).

> change, organizing themselves, responding to, and shaping their communities and society (i.e. all parties co-evolve). (p. 19)

Keshavaraz et al., (2010) develops this idea, presenting the school as a system perspective. The *school as CAS* is a vibrant entity that is constantly shifting in response to its environment and its members, while retaining its structure. The complexity of relationships within a school is taken into account when conceptualizing a school as a system. Parents, teachers, volunteers, staff, and administrators have relationships of varying depths, transmitting information related to schooling on an ongoing basis. Information flows in many directions, not just up (Keshavaraz et al., 2010) and control exists in many areas – even though a hierarchical structure exists in terms of formal authority and supervision. The teacher exercises control in her classroom; the parent exercises control over the conditions in which the child lives at home and how the child is sent to school; and the volunteer exercises control over how he interacts with small groups of students.

A school is constantly adapting to its environment through the actions of the teachers and other adults who serve children: parents, counselors, social workers, administrators, cafeteria and buildings and ground staff. Teachers constantly modify what and how they teach, as well as how they support different children, depending on the needs the students bring with them to school. A school community, especially one in a big city, is extremely diverse. It encompasses many different kinds of people, with different roles, perspectives, values, cultures, and even languages. Urban schools are also unpredictable. They are open to all children, and all of the needs, issues, and potential interactions they bring.

Dilley (2009) has researched the link between well-being and school achievement, indicating that the healthier children are, the more they can learn and the

higher they can perform in school. Some of the factors found to be relevant to a child's health include amount of television watched each day, amount of sleep each night, breakfast consumption, and alcohol consumption. The challenge then is for schools to develop ways of addressing the individual needs that contribute to the well-being of millions of different students who arrive at public schools every day in the United States. Schools must respond to all of the different dimensions of a child's well-being in order to provide an education.

Kleinman et al., (2002) and Clark et al., (2004) have presented evidence that some schools have used a programming approach, such as free breakfast programs and school-based health clinics, to respond to children's needs. Schools that use a programming approach rely solely on federal or district funding to meet the needs of their students. Using federally or state funded programs, such as the ones mentioned above, may not be the best way to address student needs because funding for these programs can be cut at any time. A programming approach is a step towards addressing the needs of children, however, thoughtful teachers who work directly with students may be in a better position to help children on a day-to-day basis.

Schools that are not using a programming approach may rely on its staff to address students' needs and to help them adapt to new situations and conditions. It is these schools that have what may be described as self-organizing groups, and are drawing on the creativity and problem-solving abilities of its members to help children. These high-needs schools, with staff who go above and beyond, may provide a context in which self-organizing occurs and has not yet been studied.

Schools that rely on members of the school community to meet student needs are potential sites for self-organizing because they are complex systems (Meadows, 2008) facing a significant problem – how to best support students who come to school with a myriad of needs that are unanticipated by the structure of the school – and they adapt to address this problem. Students may have needs that are basic (food, clothing, shelter), behavioral (emotional and social), and academic (cognitive and linguistic). All three of these areas contribute to a child's overall well-being, and schools may find themselves having to address each one to varying degrees, depending upon the needs of the students they serve.

In a school-as-factory view, self-organizing to help meet children's needs may be seen as" going above and beyond." It could also open schools up to a variety of troublesome issues. Such issues include teacher disobedience, putting school community members at risk of lawsuits, and or getting too personally involved. Alternatively, when using a CAS framework to conceptualize a school, this "going above and beyond" is an adaptive and self-regulating process that occurs in order to support healthy school functioning. When members of a school community conceptualize their school as a CAS, self-organizing is legitimized because it is integral to how community members address the well-being of the whole child.

Self-Organizing as an Adaptive Mechanism of a School

Wallis (2008) acknowledges that self-organizing is common to complex adaptive system, in this case a school. There are two definitions of self-organizing that clarify this connection: Self-organizing is a regulative mechanism of a system (Laszlo, 1971), and "self-organisation is a process in which the components of a system in effect

spontaneously communicate with each other and abruptly cooperate in coordinated and concerted common behavior" (Stacey, 1996, p. 330). This is precisely what teachers do when they self-organize – they are regulating the system for their students who have many social, emotional, and physical needs and they are coordinating with one another to address these needs. The process of self-organizing is a necessary element of a complex adaptive system. Meadows (2008) defines self-organization as "the ability of a system to structure itself, to create new structure, to learn, or diversify" (p. 188).

Zimmerman et al., (2001) suggests that self-organizing most probably occurs when there is a confluence of two elements: new information emerges to members of the community and certain members of the community have strong connections with one another. The "new information" in the context of schooling are the issues and challenges that students living in poverty bring with them to school. Additionally, these strong connections need to be described and identified, which has not yet happened in the research. Such clarification is a goal of this study.

Self-organization produces events or structures that are new to the organization and could never have been predicted (Meadows, 2008). Such is the case when members of a school community come together to help a child – until the child's need arises, it is difficult to predict how the community will address said need.

Morrison (2002) suggests that self-organizing is how the CAS adapts to the needs of the members of the system and its environment. It is responsive, spontaneous, and unregulated (Stacey, 1996). Since it is responsive, the role of urgency or timing may play a role in how and when self-organizing occurs. Self-organizing is tied to the participants' overall goals for the school (Morrison, 2002), which may relate to self-organizers sharing

a common goal. The self-organizing groups are temporary and informal. The members

cooperate in a self-organizing group and they may not have reason/cause to cooperate in

any other aspect of their work (Morrison, 2002). The self-organizing group coalesces

around a specific issue and then disbands once actions are taken to meet a student's

needs. The self-organizing group reshapes the organization (Stacey, 1996). It makes the

system more complex because the agents are doing more than just teaching academics to

a group of students. It is comprised of people who may have slightly different

perspectives of the child and there may be slightly different power differentials among

the group, depending upon the formal roles of the group members.

Eoyang (1997) purports that self-organizing happens when there is disequilibrium

between how the members of the school typically function and some new

information/stimulus. Members of a school community may find themselves self-

organizing around a child's social, emotional, and or physical needs because their school

is primarily focused on academic achievement. In addition, there may not be an existing

organizational process to address a child's social, emotional, or physical needs that a

member could access to help a child. Such a process may fall outside of the typical

boundaries of the school community.

"…Self-organisation is the spontaneous formation of interest groups and

coalitions around specific issues, communication about those issues, cooperation and the

formation of consensus on and commitment to a response to those issues" (Stacey, 1996,

p. 333). Whenever a school community mobilizes to address the physical, social, and

emotional needs of its student population, it is self-organizing. The school staff or

volunteers may begin to work with others in ways they have never done before in order to support student well-being. Whenever they do this, they are self-organizing.

The self-organizing that occurs in schools may be different from other types of self-organizing because there could be a level of urgency that may not be present in other settings. This urgency is especially relevant to schools that serve a significant number of children living in poverty because of the many obstacles to learning that they face (Duncan & Brooks-Gunn, 2001; Moore et al., 2009).

Teachers as Self-Organizers

Duncan and Brooks-Gunn (2001) cite the many challenges that students living in poverty face, and teachers are in a unique position to help these children. The teacher is in the position of knowing (or being able to find out) about the child's distressing situation and is potentially able to do something to make the situation better for the child.

Albert Bandura's (1977) social learning theory is a helpful tool in understanding how self-organizing functions with teachers . There are three elements in Bandura's social learning theory: the individual, the individual's behavior, and the environment. Bandura's premise is that each of these three elements has reciprocal, bi-directional relationships (see Figure 3).

Each of these three elements impacts the other. The teacher's sense of self shapes her behavior in an environment, which then provides feedback to her. The environment may demand specific behavior from the teacher that is new. The behavior the teacher exhibits generates feedback from the environment and impacts the teacher's sense of self or thinking. An example of these three elements at work, in the context of self-

Behavior

Personal
Factors

Environmental
Factors
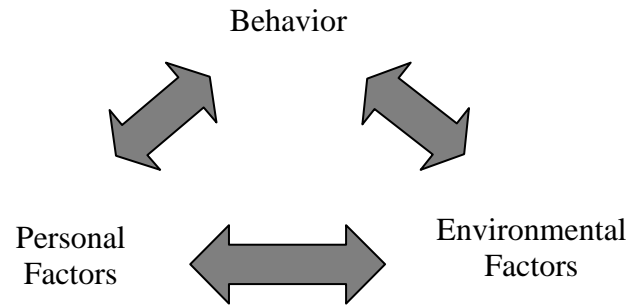
Figure 3. Bandura's social learning theory.

organizing in a school, is as follows: Sallie, a teacher (the individual), who believes in

helping others (the individual's belief), is working in a school (the environment) serving

many students in poverty (the behavior). Sallie realizes that there are several students

coming to school in uniforms that are too small or unwashed (feedback from the

environment). She then identifies an opportunity with colleagues and parents to start a

uniform exchange in the main office, so that families can drop off uniforms that no longer

fit and take ones that do because she thinks that all children deserve clean uniforms that

fit properly (individual's belief). Sallie does so (the behavior) and ends up collaborating

with colleagues and parents to provide uniforms to students who were previously coming

to school in too small or unwashed uniforms (the environment).

These three elements, the individual, the behavior, and the environment are

constantly interacting as the individual exists in any context. As Bandura (1986)

describes the triad that serves as the foundation of social learning theory, he states that

"reciprocal determinism, behavior, other personal factors and environmental factors all

operate as interlocking determinants of each other" (Bandura, 1986, pp. 9-10). Thus, the

environment impacts how and what teachers think and how the teacher behaves, the

teacher impacts the environment and her behavior, and the teacher's behavior impacts the environment and her own perceptions.

Bandura's (1986) triadic theory of social learning becomes a useful tool for understanding the phenomenon of self-organizing in high-needs, urban, public elementary schools. The three elements – the individual, the behavior, and the environment – can be used to understand exactly what is occurring when members of a school community self-organize.

The school environment is consistently providing new information to its members. Dwyer, Osher, and Warger (1998) argue that every individual who interacts with children is responsible for looking out for unusual needs that the children may have. If this is the case, and all teachers who work with children in a school community are alert to unique challenges or needs that students have, it makes one wonder what specifically causes some teachers to self-organize to help a child get her needs addressed, while others do not get involved. To address this question, it is helpful to examine the possible individual, relational, and environmental/structural factors that support self-organizing in high-needs, urban, public elementary schools.

Selecting several factors that fall under the individual, relational, and environmental levels provides a starting point for exploring how self-organizing occurs. The individual, relational, and environmental levels are a way to discern the different forces at work when the individual decides to self-organize. Based on the idea of the individual functioning in nested systems (Bronfenbrenner & Ceci, 1994), the individual, relational, and environmental levels are helpful lenses to examine what is occurring during the complex process of self-organizing.
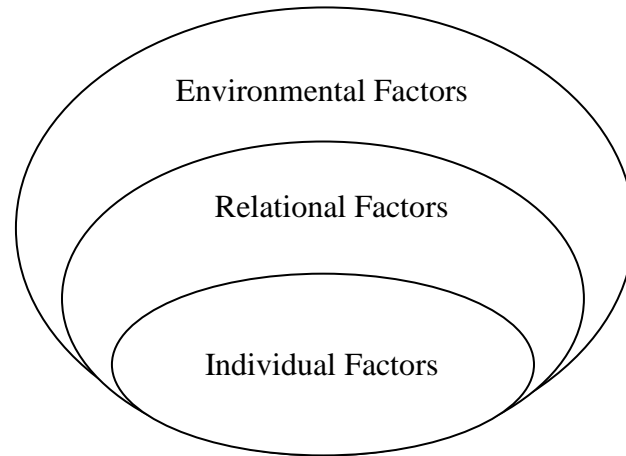
Figure 4. Levels of self-organizing.

It is proposed that there are factors at each of these levels that support self-organizing. At the individual level, a potential factor that could support self-organizing is the teacher's self-efficacy. Three relational factors of self-organizing are suggested: (a) relational trust (which includes respect, personal regard for others, integrity, and role competence); (b) a shared goal; and (c) urgency. Environmental factors that may support self-organizing are also proposed, including societal, structural and administrative support, as well as working conditions. The factors proposed in this literature review are extracted from Bandura's (1977) work on social learning, Bryk and Schnieder's (2002) work on relational trust; Locke and Latham's (2006) research on goal setting theory; and Kotter's (2008) work on urgency.

These proposed factors are the starting points for developing an understanding of self-organizing in high-needs, urban, public elementary schools. Since there has not been research into the factors that support self-organizing at these three levels, there is no way to know if the aforementioned factors support self-organizing. The purpose of this study

is to explore the self-organizing experiences of teachers in a social system (specifically, a school) and to identify the factors that support their efforts.

Individual Factors Supporting Self-Organizing

There are a multitude of beliefs, traits, and characteristics that contribute to an individual's decision to engage in the process of self-organizing in a school. The primary individual factor of concern in this study is an individual's sense of self-efficacy, and its role in self-organizing. The identification of self-efficacy as a contributing factor in self-organizing is based on the assumption that a school community member must believe that she could potentially address a child's needs, such as in the earlier example regarding the uniform exchange that the volunteer initiated.

Self-efficacy. Self-efficacy is a psychological construct of the individual that shapes how one interacts with and perceives the environment (Bandura, 1986).

> Perceived self-efficacy is defined as people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances. It is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses. (Bandura, 1986, p. 391)

Self-efficacy is determined by oneself, after gathering significant information. According to Bandura (1986), one's sense of self-efficacy is based on four sources of information: (a) performance attainments the individual has completed, (b) vicarious experiences of completing a task by observing the performances of others, (c) the verbal persuasion one is subjected to by allies, and (d) one's physiological states.

There are several reasons why self-efficacy pertains to the individual's ability to self-organize: (a) self-efficacy is a constantly growing and changing construct that is dependent upon the task in front of the individual (meaning some school community members may self-organize around one child's need but not another because they do not

believe that they would be efficacious in helping to resolve the issue), (b) self-efficacy is

the foundation of problem-solving behavior (Bandura, 1997), and (c) self-efficacy shapes

people's goals (Bandura, 1982).

Self-efficacy is a way to describe that the member of the school community

perceives herself as being able to do what needs to be done, with others, to address the

child's needs through self-organizing. If an individual does not have a sense of self-

efficacy, then one may not engage in the process of self-organizing with others to try to

help the child. According to Bandura (1977), people want to be successful in their

endeavors and shy away from tasks and situations that exceed their abilities. Therefore,

people will only self-organize if they believe that they can effectively help the child.

Self-efficacy is a concept of self that directly relates to the action one takes.

Because self-organizing is about taking some type of action to address a child's needs,

self-efficacy is a viable construct to consider when examining the individual factors in

self-organizing.

> Among the mechanisms of human agency, none is more central or
> pervasive than belief of personal efficacy (Bandura, 1997). This core
> belief is the foundation of human agency. Unless people believe they can
> produce desired effects by their actions, they have little incentive to act, or
> to persevere in the face of difficulties. Whatever other factors serve as
> guides and motivators, they are rooted in the core belief that one has the
> power to effect changes by one's actions. (Bandura, 1982, p.170)

It is a community member's sense of self-efficacy that determines whether she believes

she can address children's needs through her actions. People who have self-efficacy are

more likely to take an active role in their futures than those who do not (Bandura, 1986).

One's sense of self-efficacy shapes one's goals as well as one's perseverance with a task

(Bandura, 1982). Thus, an individual's sense of self-efficacy significantly shapes how one behaves.

An individual's beliefs affect the individual's behavior in the environment, as mentioned earlier in the discussion of social learning theory (Bandura, 1982). Self-efficacy is one such belief that may play a prominent role in how and why teachers self-organize in schools. Another reason why self-efficacy may be an important factor in self-organizing is that a group's effectiveness is significantly influenced by each of the teachers' perceived self-efficacy (Bandura, 1986). Undoubtedly, there are a multitude of other individual factors that support self-organizing, such as motivation, personality, and sense of morality. This study helps clarify factors that support self-organizing.

Relational Factors Supporting Self-Organizing

Zimmerman et al., (2001) and Morrison (2002) recognize that there are strong connections among self-organizers, but the nature of those connections is unclear. Identifying the relational factors that support self-organizing in schools can clarify how members of a school community work together to address the needs of a child. Relational trust, a shared goal, and a sense of urgency are all social factors that may exist among the members of a self-organizing group and contribute to self-organizing. This section describes and analyzes these factors. What follows first is a summary of relational trust and its four components—respect, personal regard for others, role competence, and integrity—and how relational trust supports self-organizing. Following, a definition of a shared goal is offered in order to show how shared goals supports self-organizing. Lastly, an overview of urgency is provided in order to show how this relational factor contributes to self-organizing.

Relational trust. Relational trust (Bryk & Schneider, 2002), a construct from education research, is a helpful framework with which to analyze how self-organizing occurs among teachers because it incorporates the dynamics of social relationships. Relational trust is comprised of four interconnected elements: respect, personal regard for others, role competence, and integrity. It is possible that the members of a self-organizing group need to have positive perceptions of one another in order to help meet a student's needs. In other words, relational trust is an integral element in the interactions among the members of a self-organizing group. Trust is frequently described as the glue or lubricant of a group (Bryk & Schneider, 2002; Davies & Rennie, 1999; Day & Hadfield, 2004) and this may very well be the case in self-organizing, since a school member would probably only collaborate with others she trusted.

Relational trust component: Respect. A fundamental ingredient of relational trust is respect.

> In the context of schooling, respect involves recognition of the important role each person plays in a child's education and the mutual dependencies that exist among various parties involved in this activity. Key in this regard is how conversation takes place within a school community. A genuine sense of listening to what each person has to say marks the basis for meaningful social interaction. (Bryk & Schneider, 2002, p. 23)

When members of a school community demonstrate respect for one another, they listen to what others say. The assumption underlying self-organizing, in terms of respect, is that all members of the system are dependent on each other for sharing ideas, listening to, and learning from one another.

Relational trust component: Personal regard for others. In a self-organizing group, school community members demonstrate personal regard for others by being kind to one another and assuming positive intent. Every person's contributions are seen as

integral to the school, as is each person. "Positive personal regard combines how we treat and speak to one another, how we appreciate the contributions made…" (Fernandez, 2007, p. 321). Personal regard can be described as the ways in which teachers interact that promote positive relationships.

Relational trust component: Role competence. Competence is unclearly defined in schools, yet members of school communities frequently make decisions about the competence of others based on their own ideas of what a good teacher, principal, or parent does (Bryk & Schneider, 2002). Epstein and Hundert (2002) defined competence in a way that is applicable to teachers, although their definition was originally designed for physicians:

> Professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served. (Epstein & Hundert, 2002, p. 226)

Epstein and Hundert's (2002) definition can be used to define the competence of school community members because there is no clear definition of a competent teacher, principal, volunteer, or parent within education research. Judging the competence of school members is a difficult, yet not impossible, proposition. Bryk and Schneider (2002) have found that despite the ambiguity of what competence is, people within a school community still judge whether or not a person is competent in his/her role.

In terms of a self-organizing group, members must perceive their fellow school members as having a certain degree of competence in order for there to be a high degree of relational trust within the group. Teachers who self-organize are judiciously using their knowledge and values in their work to address students' needs, as Epstein and Hundert suggest that is what competent professionals do.

Relational trust component: Integrity. Mayer, Davis and Schoorman (1995) found that "The relationship between integrity and trust involves the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable" (p. 719). One of the challenges of defining integrity is that it is an element of a person that is perceived by others – it does not exist in a vacuum. One person may think that a person has integrity while another person disagrees. In the case of schooling, the underlying assumption of integrity is that a member of the school community is always acting in the best interest of the child (Bryk & Schneider, 2002). In self-organizing groups, members will probably be more likely to have relational trust with one another when the best interest of the child is the basis of their collaboration.

Relational trust provides members of a school community with a way to connect with one another. Relational trust among self-organizers creates a connection among the members that supports their work. Self-organizing may require teachers to take some new, creative actions that they have never before engaged in. Taking steps to self-organize for the sake of children may be risky, yet "…if professional community in fact promotes educational change, it does so by creating an environment that supports teacher learning through innovation and experimentation" (Bryk, Camburn, & Louis, 1999, p. 771). Members of a school community who share relational trust may be more likely to innovate and experiment on behalf of a child when support is provided through relational trust.

Shared goal. Locke, Shaw, Saari, and Latham (1981) define a goal as "what an individual is trying to accomplish; it is the object or aim of an action" (p.126). Thus, there is the individual goal as well as a shared goal to consider in self-organizing.

Ideally, the goal of the individual member and the shared goal of the self-organizing group would be the same – to address the student's needs. In order for a group to accomplish their shared goal, a high level of interdependence among group members is necessary (Bratman, 1999).

"Goal setting involves establishing a standard or objective as the aim of one's actions" (Schunk, 2001, p. 1). Locke and Latham (2006) suggest that the goals that people set for themselves shape their actions. Goals allow one to conceptualize what self-organizing groups can accomplish in schools. If self-organizing members are focused on meeting students' needs, then that will be their goal, and their actions will align with this goal. A shared goal is a relational factor supporting self-organizing in schools. When a group has a shared goal, it focuses the members' energies on accomplishing something together.

The length of time the group takes (or sets) to reach a goal significantly shapes whether or not the goal is reached, and or how successfully the goal is reached (Schunk, 2001). Time is relevant to self-organizing groups because the goals that the group sets are probably proximal. If a child needs a way to get to school each day, self-organizing teachers are more likely to do something quickly that will facilitate school attendance. Schunk (2001) discusses the importance of proximal (immediate) goals versus distal (long-term) goals, and this theory ties directly into Kotter's (2008) work on urgency and the role that urgency plays in self-organizing.

Sense of urgency. "A real sense of urgency is a highly positive and focused force" (Kotter, 2008, p. 8). The relational supports of self-organizing in schools addressed thus far, relational trust and a shared goal, are complemented by the addition of

a third relational support – a sense of urgency. When members of a school community

self-organize, they come together to address a need that seems urgent. For example, not

having enough food or sleep is an urgent problem, especially for a young child who is

expected to engage in learning all day. Urgency felt by the members of the self-

organizing group contributes to their work together.

Elster (2009) defines urgency as "…a preference for earlier action over later

action…" (p.399). When self-organizing occurs in schools, since the shared goal the

teachers have is urgent, after the goal is met, there is no need for the group to continue.

Thus, once the goal is achieved by the self-organizing group, the group will probably

disband.

According to Kotter (2008), "When people have a true sense of urgency, they

think that action on critical issues is needed *now*, not eventually, not when it fits easily

into a schedule" (p. 7). Because of the nature of student needs in high-poverty schools,

including lack of food, housing, and physical safety, teacher self-organizing tends to

occur as soon as the teacher knows the need. If a child is hungry, for example, the

teacher would not first convene a school-based team to decide what should be done about

the situation – she would ask a colleague for a granola bar for the child. The team may

be convened later, but after the immediacy of the problem had been resolved.

This section of the literature review is a step towards clarifying the relationships

among the self-organizers cited by Zimmerman et al., (2001) and Morrison (2002).

Relational trust, a shared goal, and a sense of urgency are factors that could facilitate the

process of self-organizing among teachers. Relational trust is a foundation which may

need to be present in order for a shared goal and a sense of urgency to have an impact on

self-organizing. These three factors provide the connection among teachers to support their actions that address the emotional, social, or physical needs of a child.

Environmental Factors Supporting Self-Organizing

The following quotes by Deci and Ryan (1985) depict the nested nature of the school in other systems. Elements of the school environment include: (a) society (the federal government and the general public), (b) the organizational structure of the school, (c) the administrative support within a school, and (d) the general working conditions of the school.

> Schools exist within the larger society. As public institutions they are affected directly by public policy, and they are also affected indirectly by the cultural milieu. (Deci & Ryan, 1985, p. 268)

> Teachers work within a system. They report to a principal and to a central administration. The people who occupy those roles, and the policies of the system, all have an impact on these teachers. When the administrators are oriented toward control, when they are demanding and unreasonable, they may negatively affect the motivation and self-esteem of the teachers just as controlling teachers may negatively affect their children. When administrators impose restrictions and allow little space for self-determination, they are likely to undermine the teachers' intrinsic motivation just as the teachers' imposing restrictions undermines the children's intrinsic motivation. (Deci & Ryan, 1985, p. 266)

Society and culture contain subtle (or at times, not-so-subtle) pressures and suggestions of how school community members engage (Deci & Ryan, 1985), and these pressures may impact self-organizing. Additionally, global issues such as immigration, the economy, and religion are just a few of the worldwide influences that affect education today. The impact of these systems on schools is not easily determined because of the incredibly complex nature of such systems and it is beyond the scope of this study. For the purpose of this study, the societal impact of schooling is limited to public perceptions of schooling (Bushaw & Lopez, 2010).

The organizational structure of a school and individual administrators in a school community are parts of the school environment that may affect self-organizing. The hierarchical nature of a school does not readily allow for adaptations to the environment, specifically self-organizing (Katz, 1971). Administrators are expected to hold a basic view of the nature of the bureaucracy they are charged with managing (Katz, 1971), which involves giving directives and following rules.

Finally, general working conditions may support or detract from self-organizing. Kohn and Schooler (1973) present 12 dimensions of working conditions that may impact self-organizing. Examining each of these elements of the school environment illuminates how the environment supports self-organizing to address students' needs.

Society. Bushaw & Lopez (2010) found that societal perceptions of schooling, in general, are negative. These attitudes towards education can act as either a constraint or a support for self-organizing. Currently, the societal climate of education is acting as a constraint. The conceptualization of schools held by the public, federal government, and policy makers is the school-as-factory perspective. This concept of schooling constrains because learning is viewed in a linear fashion where teachers are viewed as workers who must fill the minds of students with mandated knowledge and skills. Thus, when self-organizing groups focus on addressing students' emotional, social, and physical needs as they emerge, the actions of self-organizing teachers may be seen as aberrations rather than an integral behavior of a school. Conversely, in the school as CAS, teachers are obliged to respond and adapt to the school's environment.

Organizational structure. Katz (1971) describes how the organizational structure of current schooling has not changed much since the early 1900s. It is still

based on the model of a factory – a hierarchical system that is differentiated for functions. The differentiation of these functions allows for some variation, yet schools are typically structured in a hierarchy, with the superintendent supervising the work of the principal, who supervises the work of the teachers. There may be some teams of professionals within a school who provide a specific function.

Some schools have multi-disciplinary teams in place to provide systemic support to meet children's needs, as is the case in schools using the School Development Program (Emmons & Comer, 2009). Teams comprised of teachers, counselors, administrators, and social workers may serve their important purposes, but these are not self-organizing groups. This organizational structure of teams may not support self-organizing to address students' needs because it is unnecessary - the school has already institutionalized and formalized this process. On the other hand, if the aforementioned institutionalized school team is not perceived to be effective by members of the school community, this structure may inadvertently provide a support for school staff to self-organize in order to help students' needs be met. Teachers will take it upon themselves to meet students' needs because the team that is supposed to perform that function is unable to do so.

Administration. Katz (1971) described the role of school administrators as upholding the tenets of bureaucracy. Principals are charged with maintaining processes and structures that facilitate the management of large numbers of children. According to Katz (1971), "An elaborate and hierarchical structure and an explicit chain of command were necessary to keep each member working at his particular task in a responsible and coordinated fashion" (p. 69). Principals, by virtue of their role, are expected to carry out tasks that support the bureaucracy of the school. In the world of the typical principal,

there is little room for teachers going outside the clearly defined lines of teaching

children.

> Bureaucracy places a premium on acquiescent, rule-following behavior.
> In this type of organization, the individualist, the aggressively ambitious,
> is not only uncomfortable but unacceptable. The instruments that
> educational bureaucrats had for regulating behaviors were uniform rules
> and prescribed patterns of action…coupled with the sanctions of
> colleagueship and promotion obtainable only for faithful service and quiet
> good behavior. (Katz, 1971, p. 71)

Principals in high-needs, public, urban elementary schools are charged with the task of

running "their" schools efficiently and following proscribed policies and procedures. In

turn, they expect the same of "their" teachers. Thus, teachers taking actions that do not

fall within the clear boundaries of their job descriptions are considered outliers and are

not necessarily looked upon favorably, regardless of the fact that they may be helping

children. It is also possible though, that there are administrators who do not subscribe to

the traditional expectations of their role and are more willing to support teachers who

take extraordinary steps to help meet children's needs.

Working conditions. General working conditions, as described by Kohn and

Schooler's 1973 study, "identify a man's organizational locus, his opportunities for self-

direction, the principal job pressures to which he is subject, and the principal

uncertainties built into his job" (p. 102). The conditions in which teachers work are

another environmental factor that must be considered when examining the external

supports that affect self-organizing. The 12 working conditions examined in Kohn and

Schooler's study include: ownership, bureaucratization, position in hierarchy, closeness

of supervision, routinization of work, substantive complexity, time pressure, heaviness of

the work, dirtiness of the work, likelihood of "dramatic change" (p. 102), frequency of

being held responsible for things outside of one's control, and the risk of loss of job or business. These 12 elements helped Kohn and Schooler define the general construct of working conditions. In sum, working conditions are a way to describe the "structural imperatives of the job" (Kohn & Schooler, 1973, p. 102).

It is proposed that the structure of the work of teaching affects self-organizing. Some working conditions may promote self-efficacy, which in turn, promote self-organizing (Gecas, 1989, p. 304). Examples of such conditions that may be supportive of self-organizing include low levels of bureaucracy and infrequently being held responsible for things outside of one's control. If there are specific working conditions that support self-efficacy, as Gecas (1989) suggests, and self-efficacy potentially supports self-organizing, then there may potentially be working conditions that directly support self-organizing. Kohn and Schooler's (1973) study of people's occupational experiences provides a window into how environments can promote certain ways of thinking and acting in teachers.

Teachers' perceptions of working conditions in schools vary widely, even within a school (Johnson & Landman, 2000). Because Kohn and Schooler's (1973) definition of working conditions includes many factors, and each member of a school community will have her own opinion regarding each factor, it does not seem feasible to make a summative judgment that working conditions either are or are not supportive of self-organizing. The best way to understand the role of working conditions in self-organizing is to gather more information regarding members' perceptions to see if patterns emerge.

Societal, structural, administrative, and working conditions are environmental supports for self-organizing are highly context-specific because every teacher and school

community member will likely have unique experiences and opinions regarding environmental support for self-organizing. The constructs of societal, structural, administrative supports and working conditions are broad conceptualizations of the environmental factors that affect teachers' work-lives. Individuals, both teachers and administrators, are unique in how they interpret their roles and responsibilities, as well as their working conditions. Thus making absolutist statements regarding teachers' perceptions about these environmental factors would be inaccurate.

Because of the work of Bushaw and Lopez (2010), Katz (1971), and Kohn and Schooler (1973), it is clear that the environment may have a profound impact on teachers' self-organizing. Each school is unique, each teacher is unique, and each child's situation is unique. These three variables though, make it difficult to ascertain, with any degree of certainty, the specific role of environmental factors in self-organizing.

In alignment with Bandura's (1977) social learning theory, members of self-organizing groups inevitably find that the individual, their behavior, and the environment are inextricably connected.

> Situational constraints, the roles people occupy, and many other factors partly determine what one can or cannot do in response to others. Moreover, it is precisely because influences are altered by their reciprocal effects that unidirectional control rarely exists. Rather counterinfluences undergo reciprocal adjustments in ongoing sequences of interaction. (Bandura, 1986, p. 199)

It is difficult to distinguish the individual's actions and beliefs from the environment in order to ascertain the environmental factors that affect self-organizing.

Summary

As previously stated, the purpose of this study is to explore the experiences of self-organizing teachers in high-needs, urban, public elementary schools. CAS is a

framework borrowed from organizational theory because this framework has relevance in this context. Schools have many characteristics of CASs. A primary characteristic of a CAS is having a capacity to change and adapt to its environment. In the literature, this ability to adapt is defined as self-organizing. A school that self-organizes adapts to new information in its environment. For the purposes of this study, this new information is students' emotional, social, and physical needs. Teachers in schools that serve students living in poverty may take extraordinary steps that are outside the specific parameters of their job descriptions in order to address these needs. They are adapting their work to respond to the new information.

As defined in the literature, the phenomenon of self-organizing can be supported at the individual, relational, and environmental level in high-needs, urban, public elementary schools. An individual support is described as self-efficacy. At the same time, relational supports are identified as relational trust, a shared goal, and a sense of urgency. Environmental features that support self-organizing are societal, structural, administrative, and or general working conditions.

The individual, relational, and environmental factors that support self-organizing in a school are identified in this literature review. Understanding what these supporting factors are can help members of school communities self-organize in order to address the devastating effects of poverty that children are increasingly experiencing (Land, 2010).

Chapter 3 describes the qualitative research method proposed for this exploratory study, specifically how the Delphi method is used to study teacher experiences of self-organizing in high-needs, urban, public elementary schools. First, an overview of the Delphi method is provided. Next, the process for selecting the participants of the Delphi

panel is outlined. Finally, the researcher provides the reader with a description of how

she engaged participants in the data collection process. By engaging self-organizers in

the process of describing the individual, relational, and environmental factors that support

self-organizing in high-needs, urban, public elementary schools, what schools can do to

address student's needs will become evident. Chapter 3 concludes with a discussion of

how the data was analyzed.

Chapter 3: Research Methods

Purpose of the Study

The purpose of this study is to examine teacher experiences of self-organizing in high-needs, urban, public elementary schools. This exploration provided greater insight into the individual, relational, and environmental factors that support self-organizing. This study examined the following research questions:

1. How does an individual's self-efficacy evolve and affect one's ability to self-organize?

2. How does relational trust evolve and affect one's ability to self-organize?

3. How does having a shared sense of urgency evolve and affect one's ability to self-organize?

4. How does a common goal evolve and affect one's ability to self-organize?

5. What are the environmental variables (such as people, structures, or processes) that promote self-organizing?

6. What other variables shape or affect one's ability to self-organize?

This study investigated some of the specific factors, within teachers, that might facilitate self-organizing. This study also examined how the interactions between teachers may contribute to self-organizing. Additionally, this study examined the supportive environmental conditions in which self-organizers operate.

Description of the Research Method

The Delphi method is a research methodology used to gather expert opinions for a variety of purposes: to gain conceptual clarification around an idea; to solve problems; or to predict future scenarios (Skulmoski, Hartman, & Krahn, 2007). The Delphi method

engages experts in building consensus around an idea. The participants for this Delphi study, specifically teachers, developed a shared construct of the individual, relational, and environmental elements that support self-organizing by engaging in a collaborative conversation.

Developed in the 1950s at the Rand Corporation, the method originally handled opinions rather than objective facts (Dalkey & Helmer, 1963). There is precedent for using Delphi in education-related research, specifically about curriculum development (Hartman, 1981), leadership (Hanson, 2007), and teacher-student interactions (Stimpson, 2010). This study used the Delphi method to build a shared description of how individual, relational, and environmental factors support self-organizing in high-needs, urban, public, elementary schools.

Linstone and Turoff (2002) suggest that there are four phases to the method, after the identification of the expert panel. For the first phase, the panel participants receive several written questions. These questions are usually a "general exploration of the subject under discussion, wherein each individual contributes additional information he feels is pertinent to the issue" (Linstone & Turoff, 2002, p. 5). The researcher then analyzes the participants' responses, looking for patterns and organizing themes. In the second phase, the researcher sends out another round of questions, accompanied by the analysis, with the intent of furthering the panel's understanding of the initial concept. The participants then reply to the researcher's query in writing, and again, the researcher analyzes the responses for themes and patterns. The third phase could involve several cycles with the intent of gaining clarification and consensus around a concept. At the fourth phase, there is usually a final round of data collection to confirm consensus.

Traditionally, Delphi researchers have used paper and pencil questionnaires mailed to panel members (Hatcher & Colton, 2007). With the advent of the Internet, however, researchers are exploring how to engage experts through this electronic medium, ranging from web sites that are created for a panel (Hatcher & Colton, 2007), to questionnaires that are sent electronically (Snyder-Halpern, Thompson, & Schaffer, 2000). In this study, email correspondence enabled the engagement of the participants in the Delphi process.

Strengths and limitations of the Delphi method. The Delphi method has multiple strengths as a research methodology. One strength of the Delphi method is that it allows for experts living in different places to share ideas. Funding and time constraints make Delphi an ideal method of gathering opinions in a finite amount of time. The Delphi method supports the interaction of a greater number of individuals than can "effectively interact in a face-to-face exchange" (Linstone & Turoff, 1975, p. 4).

Another strength of the Delphi method is that it allows for interaction among these experts throughout the data collection and analysis. The experts are building shared understanding based on the sharing of ideas and information through the rounds of data collection (Linstone & Turoff, 1975). This collaborative construction of a concept provides a detailed picture of the factors that support self-organizing.

The Delphi method encourages "debate and exploratory thought without the face-to-face pressures of direct confrontation which may inhibit the consideration of novel ideas" (Clayton, 1997, p. 381), which is a significant strength. The participants do not have to argue with each other to make certain that others hear their opinions, because they submit their responses directly to the researcher. The Delphi method is essentially a

"quiet, thoughtful conversation" (Hartman, 1981, p. 497) with no voices, where everyone

listens.

In addition to the aforementioned strengths, the Delphi method also presents some

unique challenges. One difficulty in using this method is that there is no one sample size

shown to be more or less ideal than others (Linstone, 1978). The number of participants

in Delphi dissertation studies has ranged from 4 to 56 (Skulmoski et al., 2007).

Another challenge of the Delphi method lies in selecting a panel of participants.

As with other survey methods, the challenge is to find an appropriate and willing sample

(Keeney, Hasson, & McKenna, 2006). Sometimes, researchers using Delphi will go

through a nomination process in order to identify participants, where panelists are

nominated to sit on the panel by professional peers. In this study, informal professional

networks, recruitment flyers, and screening meetings with the researcher helped to

identify panel participants.

Use of the Delphi method can also be challenging in that divergent thinking can

be overlooked, since the researcher is looking to gain consensus from the experts

(Keeney et al., 2006). One way of mitigating this effect is to use open-ended questions

and note all themes, including the frequency with which they appear, and to report all of

this information back to the participants after each round of data collection.

Some of the challenges of Delphi method result from its flexible nature. Each

researcher modifies the Delphi method for each study, depending on the researcher's

questions and purposes. Thus, there are few standard elements in the method. Despite

the inconsistency across Delphi studies (Skulmoski et al., 2007), there are four elements

that are part of all Delphi studies: "anonymity, iteration, controlled feedback, and the statistical aggregation of group response" (Rowe & Wright, 1999, p. 354).

Rationale for selection of method. There are several reasons for using the Delphi method in this study, and they are specifically related to the strengths of the methodology. The Delphi method facilitates the capturing of experts' ideas, even when the participants are geographically dispersed. Since this study targeted experts in two different U.S. cities, the Delphi method allowed for efficient data collection.

In this study, expert participants from different urban areas created a degree of desirable heterogeneity. By examining the experiences and perspectives of self-organizers from different sites, this method increases the level of generalizability of the findings (Miles & Huberman, 1994). By helping experts (each with their own individual, specific contexts) form a shared perspective, the Delphi has created the potential for a new understanding of self-organizing to be applied to a broader range of situations.

Delphi allows individual experts to describe individual, relational, and situational factors that facilitate self-organizing. Since there is a dearth of research on the topic of self-organizing, it makes sense to create an initial construct of self-organizing from the reports of people who have experienced it firsthand. Use of the Delphi method allowed investigation into how self-organizing emerges in several different schools. According to Miles and Huberman (1994), "Multiple cases not only pin down the specific conditions under which a finding will occur but also helps us form the more general categories of how those conditions may be related" (p. 173). The information gleaned from this study can be useful in helping school staff know how they can support self-organizing to meet children's needs.

Design of the Study

As with any Delphi process, multiple rounds of data-gathering occurred. Three rounds of data collection were undertaken, and each had specific goals. Round 1 elicited participants' initial thinking about self-organizing, and Rounds 2 and 3 were designed to address the previous round's data. A Delphi study requires a degree of emergent design, which occurred with this study.

Panel participant selection. The target sample for this study was 9 teachers. The participants were teachers in high-needs, urban, public, elementary schools at the time of data collection. There were 4 participants teaching in Philadelphia, Pennsylvania and 5 participants teaching in Long Beach, California. In 2010, the School District of Philadelphia served 163,064 students in grades K-12, 58% of whom qualified for free or reduced lunch (School District of Philadelphia, 2010a, 2010b). The public schools of Long Beach, California, served 87,509 students in 2010, 68.3% of whom qualified for free or reduced lunch (California Department of Education, 2010). Because these cities represent large and medium urban districts with a significant number of children living in poverty, they were ideal sites for this study. At least 50% of the students in each district received free or reduced lunch, which is an indicator of poverty.

Table 2

School District Data in 2010

City	Number of Students Served Grades K-12	Percent of Students who Receive Free or Reduced Lunch
Philadelphia, PA	163,064	58%
Long Beach, CA	83,772	68.2%

The criteria for the teacher participants in this study allowed for homogeneity, as well as some degree of heterogeneity. Each participant has engaged in self-organizing, as described in the Recruitment Flyer (Appendix A). That is, they have collaborated with colleagues or school volunteers to help a student with an academic or non-academic issue. Each participant was a full- or part-time teacher in a public elementary school where at least 60% of students fall below the Federal Poverty Line. Each participant had been involved with a school for 5 or more years. For the purposes of communication, each participant was comfortable writing and had well-functioning, regular, personal e-mail access on a personal computer.

Recruitment of Participants

The researcher recruited the 9 participants of the study through professional networks. The researcher sent the Recruitment Flyer (Appendix A) to friends and colleagues who teach, live, and or work in Long Beach and Philadelphia. The researcher asked these people to forward the Recruitment Flyer to anyone who they thought would be interested in participating. Eleven teachers sent an email to the researcher indicating their interest after reading the Recruitment Flyer. All of these respondents were then sent an invitation to meet and discuss the possibility of participating in the study. Nine of the 11 teachers who initially made contact were interested in having an initial meeting to find out more about the study. All 9 of these teachers agreed to participate – 5 teaching in Long Beach, CA and 4 teaching in Philadelphia, PA.

After the initial contact via email, the researcher arranged individual meetings with the participants. In order to meet them and raise enthusiasm, the researcher visited Long Beach and Philadelphia to meet face to face with the potential participants. This

helped the participants see the significant role they were playing in the research process and probably helped retain the participants for all three rounds of data collection. Research has shown that attrition is lower throughout the Delphi process (McKenna, 1994) with active participation by the researcher.

The researcher and participants met before the rounds of data collection in order to stimulate the participants' interest in the process and garner their enthusiasm by using points from the script found in Initial Meeting Guidelines for Researcher (Appendix B). Keeney et al. (2006) suggest that it is paramount that participants see and feel themselves as part of the research. Participants seemed as equally intrigued in the content as the researcher. Engaging with participants face-to-face can do much to promote individual relationships and commitment to the process (McKenna, 1994).

The Initial Meeting Guidelines provided a blueprint for the initial interaction with participants that the researcher used to structure the one-on-one meetings with the potential participants. No data was gathered from participants at the initial meetings. The purpose of these meetings was to clarify the study for the participants, answer any questions they might have had, and to establish rapport. Once it became clear that the individual met the criteria based on the guidelines, the researcher gave each participant the following: an overview of the purpose and scope of the study; an explanation of the participant's expected involvement; and a description of the potential benefits to participating in the study. After answering questions posed by the participant, the researcher gave the participant the Informed Consent Form (Appendix C) to read and sign. All of the 9 participants with whom the researcher met chose to enroll in the study.

Several days after the initial meetings, the Confirmation of Participation Email was mailed to each participant (Appendix D).

Human subjects considerations. This study used the Delphi method to engage participants in exploring their self-organizing experiences in a social system (specifically, a school) and identifying the factors that support their efforts, with an eye to how it may help address the needs of students living in poverty. The gender and identity of participants in the study is known only to the researcher. The researcher made personal contact via email or phone with each participant before engaging in the study, and met with each participant for approximately 30 minutes. The schools in which each of the participants work remains confidential.

The information gathered throughout this study has been anonymously presented to the other participants, ensuring participants' anonymity. There is no identifying information regarding any of the participants in the feedback and analysis presented in the rounds of data collection. The structure of the Delphi provides anonymity to panel members from each other, "to avoid undesirable psychological effects" (Linstone & Turoff, 1975, p. 22), but not to the researcher, who tracked responses and sent reminder emails to those panel members who did not respond to each round of questions within the timeline. The researcher sent each of the Delphi emails to individual participants. This way, the panel members did not know the identity of the other participants.

The responses of the participants were summarized, analyzed, and fed back to the participants to develop the concept of self-organizing in schools. The researcher is the only individual able to associate responses to specific participants. The participants'

responses are kept electronically on the researcher's laptop computer and backup hard drive, in a password-protected file.

The information gathered from participants was narrow in scope and focused specifically on their perceptions of the factors supporting self-organizing. If any of the participants' responses were publicized in any way, the information would not damage their financial standing or future employment, nor would it make a participant criminal or civilly liable, or create embarrassment or mental anguish.

Since the study posed minimal risks to subjects, the researcher filed an application for the claim of exemption to the Pepperdine IRB, which was approved (Appendix E). All participants received the Informed Consent Form (Appendix C) containing: (a) the purpose of the study, (b) the methodology, (c) the benefits of the study, (d) expected time frame of the study, (e) expected time commitment from participants, (f) a statement indicating voluntary participation in the study, and (g) a statement that the identity of the participants would remain confidential.

Though they worked for various school districts, the participation of the experts within this study was separate from any employee activities during the normal workday. Participants agreed to complete the questionnaires on their personal time, on their personal computers. Thus, no permission from the districts was necessary.

As acknowledgement and appreciation for participating in the study, participants were given a gift card at the conclusion of the third round of data collection. The participants may also receive a bound copy of the dissertation upon request.

Process for Gathering Data

Other than the initial meetings, all communication with the participants occurred electronically. Participants had 7-10 days to respond to the questions for each round. The researcher sent out the questions for Rounds 2 and 3 approximately 7-10 days after receiving the participants' responses. Each participant received a confirmation email upon receipt of her response. The table found in Appendix F was used to track participation of participants. To ensure that no data was lost, all correspondence between the researcher and the participants was backed up on an external hard drive.

Round 1. The goal of Round 1was to discover what participants thought were the individual, relational, and environmental factors that support self-organizing. According to Schmidt (1997), the instruments used to gather data in the Delphi method facilitate "the unearthing of the most important issues" (p. 768) that may not be readily apparent to any of the individual panel members. It is for this reason that the first questionnaire distributed to participants was open-ended. While it is important to allow participants to explore the concept, it is equally as important that the researcher limit the breadth of factors that individual participants suggest (Keeney et al., 2006). Therefore, in the first round of data collection, the researcher created questions that simultaneously allowed for exploration, and kept data to a reasonable amount. This strategy limited the scope of the content used for the next rounds of data collection.

The researcher tied the first round of participant questions to the research questions, asking participants for stories regarding their individual, relational, and environmental efforts to self-organize. The initial questionnaire did not ask participants about self-efficacy, a shared goal, relational trust, a sense of urgency, or environmental

factors because the researcher did not want to influence the participants to use these terms (see Appendix G). By asking them to tell their stories first, the researcher would be able to get a broad view of self-organizing and the factors that support it. The prompts for the first round were:

- Please describe a time when you initiated a project/event where you collaborated with other adults at your school to help a child's physical or social/emotional needs be met.

- Please describe a time when other adults at your school asked you to informally collaborate on a project/event to help a child's physical or social/emotional needs be met.

- Please describe a time when you worked with a formal team (such as a leadership team, a grade level team, or a student study team) at your school to help a child's physical or social/emotional needs be met.

The questions posed in subsequent rounds were more focused, and based on the content from the previous round of data collection. When creating the questions for each round, the researcher took particular care in constructing questions that were based on both the responses provided by the participants, as well as the research questions guiding the study.

Round 2. The goal of Round 2 was to help the participants' share their thinking with each other, and to identify areas of agreement and disagreement. In order to accomplish this goal, the researcher informed participants of the key themes and concepts that arose from Round 1 of data collection in brief summaries about the individual, relational, and environmental aspects of self-organizing. There was a summary about

each of the findings from the Round 1 Questionnaire in the corresponding parts of the

Round 2 Questionnaire. In the next part of the questionnaire, participants responded to

these findings. The questionnaire asked participants to identify the factors they believed

were central to self-organizing in high-needs, urban, public elementary schools at the

individual, group/social, and environmental level. Appendix H contains the Round 2

Questionnaire.

       Round 3. The goal of Round 3 was to develop consensus among the participants.

The questionnaire asked participants to come to agreement on the key individual,

relational, and environmental factors that support self-organizing, after reading a brief

summary of the Round 2 Questionnaire. The Round 3 Questionnaire then asked

participants to explain their thinking about the evolution of the relational factors as well.

The Round 3 Questionnaire is found in Appendix J.

Process for Analyzing Data

       Managing the panel's responses while interpreting and analyzing the results of

each round of data collection was crucial. To ensure accuracy and interpretation of

textual analysis through all three rounds of data collection, a second researcher reviewed

the data and verified that topics and themes were accurately described. Since the

participants reviewed content from each previous round, their participation in the Delphi

process itself also contributed to the internal validity of the study.

       Round 1. Round 1 data underwent both topical and thematic analysis in Nvivo, a

software that helps to organize and anlyze qualitative data. All of the responses were

entered in Nvivo. Text searches of frequently mentioned terms and words were then

done on the participants' stories with the software. The researcher then analyzed the results of the searches.

The participants' responses were organized according to the prompts in the questionnaire – the first prompt asked teachers to write about a time when they initiated an event to help meet the needs of a child; the second prompt asked teachers to write about a time when they collaborated with a colleague to help meet the needs of a child; and the third prompt asked teachers to write about a time when they used a school structure to help meet the needs of a child. Since the responses were organized into these three levels, the topics found as the researcher reviewed the data were put into these same levels – individual, social, and environmental factors.

After the coding phase, data was examined using a cross-case analysis approach (Miles & Huberman, 1994). In the first questionnaire, each of the participants was asked to describe three examples of their involvement in self-organizing for student's needs. These examples comprised the individual cases examined.

The first case-based analysis determined the different members of the community that were involved with the teachers' self-organizing, as well as what this involvement entailed. Participants' stories were analyzed to determine the people participating in self-organizing. The researcher also performed frequency searches to develop a summary of how often participants mentioned these different members. This analysis provided a picture of who exactly was involved with self-organizing to help meet a child's needs. The second case-based analysis was deductive. Participants' stories were searched for terms that addressed how and why the teachers decided to self-organize. This search

resulted in an initial list of individual, relational, and environmental factors that supported self-organizing.

A thematic framework was then applied to participants' stories. The researcher examined the data for themes that occurred across the examples. These themes revealed the same topics from the case-based framework analysis, as well as additional topics not previously identified.

Another thematic analysis of the data was done to determine what each of the participants' stories had in common. This was an analysis of how each of the stories occurred, an examination of the elements of each of the participants' stories – what the problem was, the solution, who was involved, their responsibilities, when people got involved, and where in the child's community the adults were situated.

The analysis of common themes was important for the Round 2 questions, because it was imperative to include topics that were common to participants, as well as topics that were unique to some participants. To ensure that divergent thinking was accounted for in this analysis, themes that occurred in individual cases were also highlighted.

The next phase of analysis involved examining the data for language related to the proposed supporting factors (self-efficacy, relational trust, common goal, urgency, societal supports, structural supports, administrative supports, and working conditions). With the help of Nvivo, the researcher then conducted more textual analyses to determine the frequency of the appearance of these factors in each participant's story. This round of coding and analysis was a process of continually refining the topics based on the responses. The researcher repeatedly reviewed and revised the search terms in order to

ensure that they were an accurate reflection of the responses, and kept track of questions

that arose throughout the analysis. These questions, as well as the specific factors that

were identified, provided the basis for the Round 2 Questionnaire.

Round 2. Participants received a summary of the topics and themes from Round

1, with instructions for the next round of data gathering. Participants were asked, as part

of Round 2, to respond to the summary and analysis, and identify the areas of agreement

and disagreement. The Round 2 Questionnaire asked participants to clarify their

reasoning and elaborate on how these factors supported self-organizing, specifically

regarding the results of Round 1 data.

As was the case in Round 1, data was coded using Nvivo software. Additionally,

the data was compiled into a Word document that provided a picture of the primary

factors that shaped participants' decisions to self-organize.

Participants' selections of the most influential individual factors were then

compared with their explanation of their selections. If participants chose not to complete

one of the two sections for each level (individual, social, environmental), then the section

that they did complete was analyzed.

Once the data was coded, areas of agreement and divergent thinking were

identified. Special attention was paid to the participants' responses that were unique and

or may produce disagreement for the next round of data collection, and these concepts

were then incorporated into the Round 3 Questionnaire.

Round 3. During this final round, participants received the summary and analysis

of the data from Round 2. The Round 3 Questionnaire asked participants to agree or

disagree with each of the factors they had identified as factors that support self-

organizing in high-needs, urban, public elementary schools. It also asked participants to explain how the factors at each level (individual, relational, and environmental) evolve and co-exist.

Summary

For this study, 9 self-organizers described the individual, relational, and environmental factors that support self-organizing. These self-organizers, or participants, worked in high-needs, urban, public elementary schools in either Philadelphia, PA or Long Beach, CA at the time of data collection. The researcher met with all of the participants before emailing the first round of questions in February. Participants were asked to respond to each questionnaire within 7-10 days. After receiving the first round of responses, the researcher analyzed this data according to the specific topics identified in Chapter 2: the individual, relational, and environmental factors. Unique themes were also identified in this data. For Round 2, the analysis and summary of the data from Round 1 was sent to participants, and they were asked to respond to this information by identifying the ideas with which they agreed and disagreed, and to explain their rationales. For Round 3, participants received the summary and analysis from Round 2 and were asked to confirm what they believed to be the most significant contributing factors to self-organizing. Participants were also asked to imagine the evolution of the factors at the individual, relational, and environmental level.

Chapter 4 contains the results from the study. The data was collected and analyzed in three phases because of the nature of the Delphi method.

Chapter 4: Results

Three rounds of data were gathered between February and March 2011 from the panel. The 9 Delphi participants and their roles and relationships with others are described first, followed by the results of each round. These results are organized by a discussion of the findings grouped into three levels: individual, social, and environmental. Finally, a description of the third round data analysis provides a summation of the overall findings of this Delphi process.

The People Involved in Self-Organizing

Nine teachers, the participants of this study, were asked to share their stories of self-organizing for the first round of the Delphi process. Through their stories, each individual emerged as an important participant of the study, who shared specific incidents of self-organizing (see Table 3).

The analysis of this information reveals that teachers rely on one another more than they rely on any other members of the school community to self-organize for students' needs. In order to address students' social, emotional, or physical needs, participants rely most frequently on colleagues, then community members (non-teaching staff, therapists from the community, doctors from hospitals, etc.), then parents, and then finally administrators. The following sections include responses provided by participants via questionnaires during the data collection period from February 8, 2011 through March 25, 2011.

Table 3

Study Participants' Shared Experiences with Others

Participant	Teachers	Community Member	Parents	Administrators
1	X	X	X	X
2	X		X	X
3	X	X	X	X
4	X	X	X	
5	X	X	X	X
6	X	X		
7	X	X	X	
8	X	X	X	X
9	X	X		

Participant 6 has worked with a team of colleagues who are committed to supporting their students in a variety of ways and helping each other in whatever way is necessary:

> I have the most supportive team of people at my school who have worked together for five years. There are three of us and we used to teach 4th and 5th grade as a team. We were the science teacher, the math teacher and the literacy teacher…Each team member chose different students to watch over but collaborated when necessary. One year the math teacher, also a woman decided that there were too many girls who didn't speak up in school and started a group called "Divas" which met after to school to talk about anything they wanted, including sexuality, in a safe environment. I helped her set this up but she was the leader, being an African American woman and coming from the very neighborhood that they [the students] did. I didn't go to meetings but was always around to talk. I am the oldest member of our trio, being the age of a grandmother. Ms. L., the math teacher, is the same age as my own daughter. (Participant 6, Round 1)

Participant 5 reported that her colleague involved her in helping some students with whom she had a strong connection:

> Natalie and Anita had a terrible argument. They were both extremely upset and were participating in a mediation. This was such a stressful experience for both of them that the school counselor was attempting the mediation. Neither one of them would participate until the counselor asked me to sit in on the meeting. (Participant 5, Round 1)

Community members are the next most frequently mentioned group of people with whom teachers collaborated. Community members played various roles in their collaboration with teachers. They acted as supporters of teachers' initiatives, co-planners, and collaborators. They could be doctors, therapists, or volunteers. Participant 1 recounts the story of how Faith, a student from a private, suburban school, came to do some volunteer work at her high-needs school for one day and ended up helping students develop their social and emotional skills over an extended period of time through a Big Sister type of club:

> For two years Faith and her girls shuttled the 4 miles in between our schools. Every Thursday they showed up to the squeals of delight from my girls. A few of my girls emerged with a plan and were carefully planning their choice of middle and high school. Faith's girls got to know the power of learning about a population they never might have known. They did learn something. (Participant 1, Round 1)

A community member is sometimes a member of an informal collaboration that a self-organizing teacher engages in to help a student. In the case of Participant 4's story, the community worker was a private therapist who spent several months working with the child, the teacher and her colleague, as well as the child's family, to get the child the help he needed:

> Ansel's therapist is the one responsible for finally getting Ansel's aunt to take him [Ansel] to the doctor. His therapist worked with the entire family and stressed to Ansel's aunt the importance of getting him seen by a

doctor and the fact that he might need medication. When we returned after vacation Suzanna and I worked together with Ansel establishing behavior standards and consequences. When he needed a cooling off period he would go to Suzanna's office. By the end of February, everything changed. I am not a huge fan of medication but Ansel's behavior and attitude changed dramatically when he started taking medication. He felt so much better. He would tell me, "I took my pill today." His interactions with his peers improved greatly and the students saw a kind helpful side of Ansel. It took almost three months to get Ansel the help he needed. (Participant 2, Round 1)

Teachers frequently mentioned parents as another group with whom they collaborated to help meet students' needs. In many of the participants' stories, parents of the students helped by the teacher were usually involved in helping the child as well, sometimes actively helping the child, as was the case with Ansel's aunt mentioned above. Other times, parents helped the child by not standing in the way of the child receiving help from a teacher, as was the case with the story Participant 1 recounted:

When there is a need that isn't met through the clothing cupboard (at school), staff often helps out. For example, a family recently returned from Pakistan. Their children did not have winter coats. Coats for the pre-school aged boys were found in the clothing cupboard. There was nothing for the 1st and 2nd grade aged girls. I purchased winter clothing for the girls. In addition to the physical need, I thought the girls should have something to help them fit in to American culture without overriding their traditional Muslim dress. The girls have hooded jackets that fit over their traditional garb and under their winter coats. Their father approved of the items and they do not know who purchased them. Their family is proud and I would not want them to feel any sort of shame in having received donated items from someone they know. (Participant 1, Round 1)

Participant 4 talked with the parent of the child she was concerned about prior to offering any kind of help. Then, after this initial engagement, she enlisted parent permission prior to providing help to a student, involving the parent in a relatively benign form of collaboration:

I spoke with her dad and soon realized that he was overwhelmed with grief, working the night shift and trying to be a dad to his four children.

Next, I went to Allison's 1st and 2nd grade teachers. I shared my concerns with them. Kira, her 1st grade teacher and I decided that she needed some "mother" like attention. With permission, we took her for a "girl's day out." We got her a haircut, bought her some new girlish clothes, and undergarments- as she was quickly developing into a young woman. Then we ended it with a lunch and some great conversation. That Monday at school, she wore her pink jacket and a smile. (Participant 4, Round 1)

Participant 2 recounted a story of self-organizing where she and a colleague collaborated to help a student develop her social and emotional well-being and the student's family members were supportive of the teachers' efforts:

When it was time for Shana to go to first grade I worked with the counselor to get Shana placed in the first grade classroom next to my room. Shana's first grade teacher was my good friend Marguerite. It was Marguerite who asked me informally to get involved in helping Shana outside of the school setting. Shana would stay after school and help both of us. As a reward or more like a thank you for all of her help Marguerite suggested that we take Shana some place that her grandmother might not be able to take her. During her first grade year and for the next few years we took Shana on a number of outings. We took her to the Orange County Fair, Disneyland (for her birthday), and to a fundraiser for one of the students who had survived cancer as an infant. The fundraiser was a mini walk down by the marina and a little carnival. Several other students were also at the walk and this opportunity allowed Shana to interact on a social level with some of her classmates. Shana and her grandmother were both so thankful and deeply appreciated the support. (Participant 2, Round 1)

There were a few notable exceptions of parent help, or lack thereof. When the parents of the student helped by Participant 7 actually caused the problem for the child by selling the child's shoes to buy drugs, Participant 7 writes:

Quinn's parents were drug addicts/dealers and had taken his $150 sneakers, sold them for, perhaps, a quick fix. The school community worker found Quinn at his dilapidated home that day by himself. He did not know where his parents were or when he could get shoes in order to get back to school. It took another 24 hours before I got Quinn sneakers and the school community worker delivered them to Quinn. Quinn

returned to school. The school reported Quinn's parents to the appropriate state agency for neglect. (Participant 7, Round 1)

The role of administrators in the self-organizing of teachers depended on the situations of the children in need of help. Participant 3 had some degree of administrative support, yet left the teacher feeling that somehow, the administration of the school did not firmly stand behind the teacher's initiative:

> The attendance awards were not motivated by our schools administration, but the administration has recognized our efforts. They have made positive comments about our bulletin board (of student attendance awards). Unfortunately, they have not offered to come to an (attendance award) assembly or participate in anyway. I think if they did come it would help motivate our students. (Participant 3, Round 1)

Participant 8 had an altogether different, more positive experience with administrative support. Her principal collaborated with the teacher and parent as soon as the parent agreed to the help:

> I [Participant 8] asked her [Marco's mom] if I could come to the hospital to visit (Marco, my student). She said of course. When I arrived at the hospital and began to have a conversation with his mother, it was clear to me that she did not understand what was going on. I didn't know what I had the right to do for her…so I called my principal from the hospital. I explained the situation and informed her that I thought his mother needed someone to be with and advocate for her (and her son) when she talked to the doctors. She immediately said she would come to the hospital if it was what his mother wanted. I confirmed with his mother. My principal came right way and his mother gave the doctor permission to discuss Marco's medical condition and prognosis. (Participant 8, Round 1)

In sum, the different members of the school community who collaborated with teachers to help children were: other teachers; parents/guardians of the students they were helping; community members; and or school administrators. These collaborators

took on roles that depended upon the actions of the teachers, the needs of the students, and the resources the collaborator could provide.

Round 1 Results

The goal of this round was to identify the specific factors that affect self-organizing at the individual, relational, and environmental levels. Participants were asked to tell stories regarding when they initiated self-organizing, when they were asked by others to self-organize, and when they used a structural resource to self-organize. All 9 participants responded to the three prompts in the Round 1 Questionnaire (see Appendix G). The stories were analyzed and results grouped into three types of factors: those that were considered to represent individual factors; those that were considered social, and those that were considered environmental (see Table 4).

Individual factors. Table 5 shows how each participant's story about her decision to initiate self-organizing was coded with individual factors. Self-efficacy and a high awareness of the student's situation were the individual factors that most frequently supported a teacher's initiative to self-organize. While these two issues were the most common, other factors also played a role in some of the participants' decisions to self-organize.

Most participants had caring relationships with students, and empathized with the students because of the challenges they were experiencing. With the Delphi method, the opinions of all are accounted for, regardless of the frequency with which they appear in participants' responses. Even though five factors were considered relevant to only one

Table 4

Summary of the Round 1 Analysis for Individual, Social, and Environmental Factors

Type of Factor	Analysis Outcomes
Individual Factors	1. having self-efficacy 2. having a high awareness of the student's situation/context 3. caring deeply about the child 4. empathizing with the child 5. having a role model who went above and beyond 6. having strong religious beliefs 7. seeing herself in a child, propelling her to help 8. feeling morally obligated to help the child 9. gaining a sense of satisfaction from helping the child
Social Factors	1. having relational trust 2. having a common goal – helping the child 3. sharing a caring relationship with child 4. sharing similar values 5. sharing a sense of urgency 6. sharing similar religious/spiritual beliefs
Environmental Factors	1. a team 2. administrative support 3. district support 4. information distributed to teachers about programs and resources for children

participant, they are still important factors that support self-organizing. Because

divergent thinking is an integral element of Delphi, even topics mentioned infrequently in

responses were incorporated into the data summary and presented to participants in the

Round 2 Questionnaire.

All of the participants exhibited a high degree of self-efficacy when self-

organizing. They saw themselves as being able to take action to help address the

student's needs, and they did so. Some actions involved engaging others (Participant 8

called the principal to

Table 5

Individual Factors Supporting Self-Organizing

Individual Factor	P1	P2	P3	P4	P5	P6	P7	P8	P9
Having a self-efficacy	X	X	X	X	X	X	X	X	X
Having a high awareness of the student's situation/context	X	X	X	X	X		X	X	X
Caring deeply about the child			X	X	X	X	X	X	
Empathizing with the child	X		X		X			X	
Having a role model who went above and beyond	X								
Having strong religious beliefs	X								
Seeing herself in the child, propelling her to help						X			
Feeling morally obligated to help the student						X			
Gaining a sense of satisfaction from helping the child					X				

the hospital to help advocate for her student), and some were individual (Participant 1

purchased coats for children who had none). Whether or not the participant engaged

others in self-organizing, it is evident that all participants judged themselves as capable of

ameliorating the student's situation, which aligns with Bandura's (1986) description of

self-efficacy.

Some participants were highly aware of how their self-efficacy played a role in their decision to self-organize:

> I could…bring in a few t-shirts, a pair of pants, a sweater here and there, but I didn't think it would make the dent needed to keep our kids clothed, warm, or with the dignity of having clean/well fitting clothing. I admired Nurse Ann's determination to do what was needed for our children and thought I might have a way to help. (Participant 1, Round 1)

> I have worked with a child abuse prevention organization (volunteer) for over three decades. I have trained people and worked on the child abuse hotline that had been an important resource (for thousands of citizens). Many of my colleagues had been aware of my community involvement. Consequently, I was often requested by my colleagues to use resources that I could easily access, to help a child at risk. There was a child, Rashawn, in Mrs. Smith's 6th grade homeroom that was in foster care, after being abused by her biological mother, and being abused by her foster care parent. The teacher informed the counselor and she placed the report with DHS (Dept. of Human Services). Days passed and still it appeared that nothing was being done for this child. I was requested by the counselor to use any resources I had available to me to intervene, to expedite the case, as the child was fearful of going home each day. Now Rashawn experienced being physically abused by her foster mother. Fortunately I was able to contact a supervisor at DHS who reviewed the case & immediate action, the removal of the child from the foster care home, took place. That was an amazing collaboration of a handful of adults. How pleased I was to collaborate with the caring teacher, persistent counselor, and the concerned DHS supervisor, to help make a difference in the life of this one 6th grade child. (Participant 7, Round 1)

> Jillian [a teacher] asked me to keep my eye on her [Lindsey, a student from another class]. I pulled Lindsey aside and had several one on one talks with her. Initially, it was to develop a trust. Then I wanted to address the issues of being a girl and how a girl her age should act. I really didn't have any expertise in this area but wanted Lindsey to know that there were adults out there looking out for her. Whenever I saw her at recess, lunch, or in the hall I made it a point to speak with her and check in. I knew many boys in my own class were hanging out with her, so I made a deliberate attempt to watch their interactions and notice their conversations about her. (Participant 9, Round 1)

Most participants rated "Having a high awareness of the student's situation" as a necessary element of self-organizing (Table 4). The one participant who did not have

direct knowledge of specific students' needs still supported a colleague's self-organizing, even though her awareness was general. The participants with detailed knowledge of their students' difficulties gleaned this information from conversations with parents or other teachers who knew the students better. This awareness contributed to the participants' decisions to act. Their sense of self-efficacy developed from an awareness of their students' needs, and an awareness of their own ability to address them. Perhaps they had previously helped a student in a similar situation and believed that they could take effective action when faced with similar conditions. This interconnectedness of awareness of context and the participants' self- efficacy led to the structure of the Round 2 Questionnaire, specifically regarding individually supporting factors. This questionnaire asked participants to describe how all of these factors affected their decision to self-organize to help students.

There were other individual factors that participants felt affected their decisions to self-organize, in addition to self-efficacy and an awareness of the child's situation. These other factors included: caring deeply about the child; empathizing with the child; having a role model who went above and beyond; having strong religious beliefs; seeing herself in the child, propelling her to help; feeling morally obligated to help the student; and gaining a sense of satisfaction from helping the child. These factors played a role in participants' self-organizing.

Several participants indicated that caring for the child led them to self-organize.

> I also spent some time getting to know her. I worked to put her at ease
> and discussed ways in which to make her feel successful. She still had

many walls up but at least she was talking and sharing how she felt. Together we made a plan for her reading where she would feel successful. (Participant 3, Round 1)

All this background is to let you know that I feel very loving towards them. Natalie still comes by to visit but Anita hid in the car the last time her aunt came in to confer with another teacher. The aunt said she knew I'd be upset at how Anita is throwing her life away…she is truly brilliant and well-spoken with a great future but doesn't seem to know how to reach her goals. (Participant 5, Round 1)

The first day in September that we worked together with the same students years ago, we sat down to debrief. I don't even remember who said, "We got this." We then sat down every day after school to talk and we informally chose students who needed extra loving care. (Participant 6, Round 1)

Empathizing with the child's distress and seeing oneself in the child spurred other participants to self-organize.

Their family is proud and I would not want them to feel any sort of shame in having received donated items from someone they know. (Participant 1, Round 1)

Or, I chose girls whose voices were not heard in class. (It later became clear to me that I was one of those girls.) (Participant 6, Round 1)

Having a role model who self-organized and went above and beyond for children motivated one participant to do the same.

I admired Nurse Ann's determination to do what was needed for our children and thought I might have a way to help. (Participant 1, Round 1)

Initially, religious beliefs played a role in just one participant's decision to self-organize.

I am a member of a liberal-minded suburban parish whose members are committed to community outreach. (Participant 1, Round 1)

Two participants acknowledged that they gained a sense of satisfaction from knowing

that they helped children when they self-organized, and it was perhaps this need for

satisfaction that supported their decision to self-organize.

> The greatest thrill, besides working for a very good cause, was seeing the
> generosity of so many students. (Participant 5, Round 1)

> How pleased I was to collaborate with the caring teacher, persistent
> counselor, and the concerned DHS supervisor, to help make a difference
> in the life of this one 6th grade child. (Participant 7, Round 1)

Clarifying the important factors in participants' decisions to self-organize became a focus

for the Round 2 Questionnaire.

Social factors. The second analysis completed on the Round 1 stories focused on

the *social factors* that support self-organizing. Table 6 indicates the factors that were

present in participants' stories about collaborating with a colleague to help meet a

student's social, emotional, or physical needs. Relational trust and a common goal (with

the adults involved) were the factors that were present in most of the relationships among

self-organizers.

Relational trust, defined as: respect for one another; a sense of the other's

competence; a sense of personal regard for the other; and integrity (Bryk & Schneider,

2002) was more implied than overtly stated in participants' responses. These elements

were evident, based on the participants' descriptions of their actions. Participant 4's

comments exemplify what was found in several responses – that a teacher believes her

collaborator is competent and has respect for her – but more clarification was needed to

determine if all of the elements of relational trust are present between self-organizers:

Table 6

Social Factors Supporting Self-Organizing

Social Factors	P1	P2	P3	P4	P5	P6	P7	P8	P9
Having relational trust	X	X	X	X	X	X	X	X	X
Having a common goal – helping the child	X		X	X		X	X	X	X
Sharing a caring relationship with child		X	X	X	X				
Sharing similar values		X				X	X	X	
Sharing sense of urgency				X	X	X			
Sharing similar religious/spiritual beliefs	X					X			

> Carin has given me incredible insight on what she believes Lucy needs in order to support her emotional and social development. After hours of digging, we came to the conclusion that Lucy does not have an understanding of the hidden social cues and natural cues that develop in our early years. (Participant 4, Round 1)

Based on the above, it was determined that further clarification about relational trust was needed from the Delphi Panel because participants mentioned only two of the four constructs that make up relational trust. To determine whether or not relational trust was necessary for self-organizing, participants had to agree that the four elements of relational trust were integral to their relationships with their colleagues.

All of the collaboration that occurred between self-organizers (with colleagues, community members, administrators, and parents) was focused on a common goal – helping children meet their social, emotional, or physical needs so that the child could learn. Having a common goal was a factor that supported self-organizing between

teachers and their collaborators. Participant 3 worked in collaboration with colleagues

around a goal they all shared, which was to help their students' social development:

> At my school, most of the third grade classes are in one hallway. This
> year my colleagues and I wanted to create ways in which our students
> would feel that they were part of a community and that they had seven
> teachers not just one who cared about them. (Participant 3, Round 1)

Participant 9 shared the goal of helping students' social and emotional development

through explicit instruction with her colleagues. They worked together to prepare and

implement instruction that students in all of the classrooms could benefit from:

> Once again, the team was planning out a social studies unit for the
> beginning of the year. We wanted to incorporate the social studies criteria
> along with our own views of what kinds of behavior students should have.
> We have realized that many of our students do not have great social skills-
> --truth telling, hard work, integrity, perseverance, etc. We feel that these
> qualities are not emphasized in every home. So we wanted to build
> something around those traits. So we made and implemented a unit of
> study on character education. We have nine teachers and each teacher
> chose a trait to focus on. (Participant 9, Round 1)

Participant 1 relayed her story of collaborating with school staff who shared the goal of

keeping a child with significant health issues safe throughout the school day, every day:

> The leadership team, headed by the principal, met to make arrangements
> for Lisa's safety plan. The special education liaison, the school nurse, the
> school police officer, my closest teaching neighbor and I worked out ways
> to accommodate this little girl. Formal job descriptions aside, we worked
> together to ensure this child's safety. No cries of "that's not my job!" Just
> the opposite as folks did what they could to make a child's life more
> pleasant. There wasn't much pity, just practicality and pitching in to get
> the job done. (Participant 1, Round 1)

Participant 3 learned about a student's situation from her colleague, and realized they

shared the goal of helping a student become a better reader by addressing her emotional

issues:

> Joanna found out that Allie was being transferred from another school to
> ours because she could not handle being at her previous school because

she had been retained. At this school, she was not putting in any effort into her learning and she was very defiant. The transfer was made because the principal felt a change of location would benefit Allie.

At this point Joanna asked for help in working with Allie. Joanna and I team-teach for reading and I would be working with Allie in her reading. At first, I thought that working in a small group would not be a situation where Allie would feel threatened, as all the students in her reading group would be working at the same level. Allie as it turned out did not feel comfortable reading in front of the others and she became very defiant and hostile when asked to read. She would shut down and not want to do anything. After a few weeks of dealing with her behaviors in reading, Joanna and I collaborated on a new plan for reading group. I spent some time with Allie one on one while the rest of my class was in the library. I did some individualized diagnostic tests to determine Allie's reading needs. At this time, I also spent some time getting to know her. I worked to put her at ease and discussed ways in which to make her feel successful. She still had many walls up but at least she was talking and sharing how she felt. Together we made a plan for her reading where she would feel successful. (Participant 3, Round 1)

Although a specific common goal does not seem to be an absolute necessity for self-organizing, it does seem that self-organizers share broad, related goals. It may be more accurate to describe the goals that self-organizers share as related rather than common. Alternatively, it may be that self-organizers both share the common goal of helping children. This illustrates what Participant 1 found in her collaboration with a community member: "I wanted role models for my girls; Eva wanted awareness for her girls" (Participant 1, Round 1). Both adults wanted their girls to benefit from a new relationship (a shared, broad goal), yet they each had unique, specific goals that fell under this broader objective.

Many teachers who self-organize do so with colleagues who are "like minded" about children. Teachers spent non-work time providing their students with different social experiences, purchasing items for their students, gathering resources for their students, and building relationships with community organizations to help their students.

The teachers in this study who self-organized spend a lot of their own time and money on helping meet their students' needs. It is not clear that these teachers do a cost-benefit analysis to determine if the effort they expend outweighs the benefits that the students experience – they simply identify a student need and do whatever they can to help the student.

The role of the other four social factors in participants' stories was complex. The Round 2 Questionnaire to the Delphi panel attempted to clarify how each of these factors affected teachers' decisions to self-organize to help students.

Environmental factors. The third analysis on Round 1 responses involved determining the *environmental supports* that teachers used to assist them in self-organizing to help children. Teachers mentioned using pre-existing teams only when necessary because they did not believe the teams to be helpful. Table 7 indicates the environmental factors that were present in participants' stories in meeting a student's social, emotional, or physical needs.

In the questionnaire, teachers mentioned that they rarely accessed multi-disciplinary teams, yet they thought that if functional teams did exist at their schools they would use them. Thus for Round 2, it was important to determine what environmental supports teachers would access if they did exist and were helpful.

Summary of Round 1 results. Based on the results, it is clear that the individual had certain experiences or beliefs that supported her self-organizing to meet students' needs. These elements were: (a) the teacher having self-efficacy, (b) the

Table 7

Environmental Factors Supporting Self-Organizing

Environmental Factors	P1	P2	P3	P4	P5	P6	P7	P8	P9
A team	X	X		X	X	X	X	X	
Administrative support	X	X	X		X			X	X
District support					X		X		
Information distributed to teachers about programs and resources for children								X	

teacher having a high awareness of the student's situation/context, (c) the teacher caring deeply about the child, (d) the teacher empathizing with the child, (e) the teacher admiring a colleague who had previously self-organized, (f) the teacher seeing herself in a child and that recognition motivating her to help the child, (g) the teacher having strong religious beliefs, (h) the teacher feeling morally obligated and or responsible to help the child, and (i) the teacher helping the child and feeling a sense of satisfaction.

Likewise, there were several elements of a relationship between teachers and collaborators that support self-organizing: (a) having relational trust with a colleague, (b) sharing a caring relationship with the child, (c) having a common goal, (d) sharing values with a colleague, (e) having a sense of shared urgency, and (f) sharing religious and spiritual beliefs.

Additionally, there were a few environmental factors identified that played a minor role in teachers self-organizing: (a) a pre-existing team, (b) administrative support, (c) district support, and (d) information distributed to teachers about programs and

resources for children. Based on the stories in Round 1, the role of environmental factors was much less relevant to teachers' self-organizing than the individual and relational factors mentioned in the previous sentence. Most successful self-organizing occurred when teachers tackled an issue independently or with a colleague – a colleague with whom they shared a unique relationship.

To ensure a degree of reliability of the topical analysis, two colleagues reviewed the data from the Round 1 Questionnaire. One colleague reviewed the participants' responses and identified two new factors for consideration for the individual level. Following this addition, another colleague reviewed the coded data, including the two new individual factors, and concurred with the final topical analysis results. These results were compiled into the questionnaire for Round 2, asking the Delphi panel to indicate how much of an impact each factor had on their decisions to self-organize, and to describe what that impact was.

Round 2 Results

The Round 2 Questionnaire was organized according to the same three sections: individual, social, and environmental. Participants responded to the Round 2 Questionnaire within 11 days of receiving the questionnaire as an email attachment (Appendix H).

Round 2 provided the Delphi panelists the opportunity to review what others had written about the individual, relational, and environmental factors that affected self-organizing in high needs, urban, public elementary schools. This questionnaire asked each participant to explain the impact of each of the factors by determining the degree of

agreement regarding which factors were most influential to their self-organizing. This round also provided an opportunity for participants to share any additional comments.

Individual factors. There were four individual factors that had the greatest impact on participants' decisions to self-organize: (a) having a strong sense that the teacher can help the student (self-efficacy), (b) having a high awareness of the student's situation/need, (c) deeply caring for the student, and (d) feeling morally obligated/responsible to help the student. The participants' written responses clarified that having a high awareness of the student's situation was a precursor to the participant deciding that she could address the student's need. This awareness needed to exist prior to one's sense of effectiveness in resolving a student's situation, and for participants, it was a "given." The other five factors affected teachers' decisions to self-organize, but the degree of impact varied with teachers. In fact, a few participants chose not to assign a degree of impact at all to some factors. Overall, participants identified between one and three factors as being most influential to their decision to self-organize (see Tables 8 & 9). Two participants selected more than one factor as the most influential. These two participants wrote in their narratives that these factors were so inextricably linked that it was not possible for them to designate one as the most influential. *Self-efficacy* emerged as an important supporting individual factor of self-organizing. It was ranked as having a strong influence by seven of the 9 participants and ranked as the "most influential" by four participants. This factor appeared consistently with "having a high awareness of the student's situation/need."

Table 8

Contribution of Individual Factors toward Decision to Self-Organize

Factor	Strong	Moderate	Minimal	Did Not
Having a strong sense that she can help the student (self-efficacy)	7	2		
Having a high awareness of the student's situation/need	6	3		
Deeply caring for the student	5	4		
Empathizing with the student's distress	3	4	2	
Having a role model who also went above and beyond	1	1	4	3
Having strong religious beliefs	2	2	2	3
Sees herself in the student	1	1	3	3
Feels morally obligated/responsible to help the student	5	1	3	
Gains a sense of satisfaction in helping the student	2	4	1	1

Once participants became aware of the student's situation or need, they made a decision that they could help that child. Making a judgment about one's ability to take on a task and finding oneself able to do so is a manifestation of self-efficacy (Bandura, 1986). Teachers decided that they could help the student after they knew about the student's situation, and what helping the student might involve. Participants explained how their self-efficacy affected their decision to self-organize:

Table 9

Most Influential Individual Factor(s) Affecting Self-Organizing

Factor	P1	P2	P3	P4	P5	P6	P7	P8	P9
Having self-efficacy	X	X	X				X		
Having a high awareness of the student's situation/need			X						
Deeply caring for the student			X	X					
Gaining a sense of satisfaction in helping the student					X				
Feeling morally obligated/responsible to help the student						X			X
Having a role model who also went above and beyond								X	
Having strong religious beliefs									X

> I was quite sure that I would be able to meet students' needs. I did not think I would fail. (Participant 1, Round 2)

> I knew I could help Sammy. If he needed glasses, I knew how to get them for him if his parents did not have the financial means to provide them for him. (Participant 2, Round 2)

> I very strongly believe that I can help each and every student…some students more than others. I affect every student and I pray that it is for the positive. I was raised believing I was a difference maker, and I have in my belief system that I am a difference maker. (Participant 9, Round 2)

> Having a strong sense that I can help a student is the strongest of the factors listed as a cause for me to "self-organize." This factor is the reason I became a teacher. It is a major factor in what has sustained me as an engaged and interested teacher for forty years. I am an optimist by nature, although I am realistic (one cannot help but be realistic working in an urban school district!). There are many issues in dealing with students in which I can be helpful, and make a difference, yet, reality informs me that some issues I cannot change, academically, socially, behaviorally, and environmentally. (Participant 7, Round 2)

Other factors that were significant for several participants were "deeply caring for the child" and "having a moral obligation or responsibility to help the student." These factors play a significant role in participants' self-organizing:

> When I reflect upon this question, I realize that #3 (deeply caring for the student) has had the greatest impact on me, since that day I decided to become a teacher. It is what drives me. I look at the whole child and want all parts of the child to be successful. Alyssa was getting average grades, doing her homework daily, coming to school on time everyday, and had great behavior. On paper, she was a great student. It was when I looked into her eyes that I saw my job as her teacher. What good was it to have a student who had decent grades but was slowly dying on the inside? And imagine her grades if she was happy inside and out! Teaching to me means preparing a student to go out into the world, becoming a responsible and independent citizen with morals and values. Developing that looks different in every child. Thankfully, most students rely on me to prepare them academically, but every year there are those that need more. Alyssa was one. With budget cuts and minimal resources available I felt the need to take it upon myself to seek out support among my colleagues. (Participant 4, Round 2)

> I think that perhaps the greatest impact on my decision to self-organize comes from my moral obligation and responsibility to help children. It is the reason that I lose sleep at night during the school year when I do not feel that I am serving the students well enough. (Participant 6, Round 2)

Some participants wrote about helping a student because they felt morally obligated or religiously motivated to do so, such as Participant 7, who stated in Round 2 that "having an awareness demands, morally, a response." Other responses included, "Teaching in an urban school I feel that I need to be an advocate for my students" (Participant 2, Round 2); "I also feel that as the teacher, it is my responsibility to do whatever I can to make each student feel successful" (Participant 3, Round 2); and "… my obligation is to the physical, social, emotional well being of a student, not just his or her academic needs" (Participant 6, Round 2).

Others shared that a role model had taught them that helping a child was simply what one did (Participant 8). One participant was unflinchingly honest in sharing that she has a strong need to feel needed by others, which accounts for her feeling compelled to help children who are struggling to have their basic physical, social, and emotional needs met. This participant spoke frankly about how she benefited personally from self-organizing. She gained a sense of satisfaction from knowing that she was needed.

Other factors such as religious beliefs played a role in the decision to self-organize for two participants (Participants 1 and 8).

In comparing the influential factors and the narrative explanations that participants wrote, two themes emerged – one related to the first two individual factors, and one related to the other seven factors. Participants self-organized because they felt that they could and should help their students.

The first theme regarding the individual factors that support self-organizing is that participants self-organize because they have a strong sense that they can help the student once they know about the student's situation (because the teacher has previously helped a student, because the teacher has seen others do so, or because it is within the teacher's capabilities or resources to do so).

The second theme that emerged came from the participants' awareness of the student's situation. Once they were aware of the student's need, some participants decided to self-organize because they had a strong sense that they should (or needed or wanted to) help the student because of a moral obligation/higher power, or because the teacher cared for/empathized with the child, or from a personal sense of satisfaction. The other factors fell into three categories, and these factors were the basis for the second

theme. There are factors that may cause a person to feel that they should help, that they need to help, or that they want to help.

Social factors. The degree to which the social factors influenced participants' decisions to self organize is found in Table 10.

The three primary social factors that teachers cited as having the greatest impact on their decision to self-organize with others were:

1. Having a common goal - helping the child;

2. Having relational trust with one another; and

3. Sharing a sense of urgency to help the child.

These three factors were the major influencing factors among participants, based on the number of participants who rated them as contributing *strongly* or *moderately* to their decision to self-organize.

The three other factors that affected their self-organizing were sharing:

1. Similar religious/spiritual beliefs with one another;

2. A caring relationship with the student; and

3. Similar values with one another.

There was not much agreement regarding the degree to which these factors influenced their decision to self-organize. One participant added a factor that can be described as "relational trust." Most participants were able to identify one relational factor as the most influential, while some participants perceived two factors to be inextricably linked.

Sharing a goal with the person with whom the participant was self-organizing provided a way for the participants to channel their energies in the same direction:

Table 10

Contribution of Social Factors toward Decision to Self-Organize

Factor	Strongly	Moderately	Minimally	Did not
Having a common goal – helping the child	7	2		
Having relational trust with one another – meaning they respect each other, care about each other's well-being, think that each other is competent, and has integrity	6	3		
Sharing a sense of urgency to help the child	4	5		
Sharing similar religious/spiritual beliefs		3	2	4
Sharing a caring relationship with the student	1	3	3	2
Sharing similar values	2	5	1	1

Had I not found someone who shared my goal of helping my girls by providing positive role models I would have continued to mentor students as the opportunity arose but had far less success in providing what my students needed. (Participant 1, Round 2)

In this situation, I self-organized with someone else because I was asked to do so. The school counselor brought me in to discuss problems my former students were having. Our counselor is very professional and understands the needs of her students…Therefore, the only reason I would have been asked to collaborate would be because of my relationship with the students, and her knowledge that I want to help them, even when they are no longer in my room, which provides the common goal of helping the children. (Participant 5, Round 2)

Educators have many tasks to complete within a day, week, month and or year. But the first priority is to help a child in need. When I was approached about helping the child, the adult had already implemented several interventions/strategies to support the needs of the student. I believe she reached out to me because we share a common goal for

helping children. After she realized her strategies weren't enough, she reached out. She was confident that I had something to add to the bag of strategies. Again keeping our eye on the prize…the child. (Participant 8, Round 2)

Table 11

Most Influential Social Factor Affecting Self-Organizing

Factor	P1	P2	P3	P4	P5	P6	P7	P8	P9
Having a common goal – helping the child	X	X			X			X	X
Having relational trust with one another	X		X	X		X			
Having a sense of urgency to help a child							X		X

By focusing on helping the child as the common goal, participants were able to collaborate successfully to help the child meet his or her needs.

Relational trust was another social factor that contributed to the participants' self-organizing. Because mutual respect, knowledge of the other's competence, a shared personal regard, and knowledge of the other's integrity were already intact, engaging the colleague in the work of helping a child was able to occur:

Faced with adversity and very high stress, we found each other. Each one of us could see that the others see teaching as a calling and not just a job. We worked in close proximity and could hear what the others were saying through the thin, removable walls between classrooms. What we saw in each other was integrity, caring, intelligence and competence as teachers. We quickly learned to respect and trust each other. We began to check in with each other at the beginning and end of every day and would call each other if ever one of us happened to be sick. I think that this trust and caring for the others on our team had the greatest impact on my decision to self-organize. I knew that the team would help me in anything I wanted to initiate for the students and I would help them in any project they might undertake. (Participant 6, Round 2)

> My relationship with this teacher had the greatest impact on my decision to self-organize. I work closely with this teacher and respect her and her teaching. Because of the lack of support from the administration at our school site, we have come to rely on each other for support when it comes to helping our students. (Participant 3, Round 2)

Because this foundation of relational trust existed, participants felt that they could rely on colleagues to help them address their students' needs.

The sense of urgency that teachers shared with one another as they worked to help meet the needs of their students provided cohesion among the adults who were collaborating:

> Well, for me, having a common, urgent goal to help any and all children is what motivates me. I feel as though if I/we don't do it now who will? Children are way too precious to take the chance of letting them fall through the cracks. Every child deserves only the best from the people that are supposed to be their teachers and role models. (Participant 9, Round 2)

> The factor of "having a sense of urgency to help a child" resonates with me the loudest. It doesn't matter if the child is a student of mine or in someone else's classroom. It is my own moral compass that directs me to assist, if I am able. If I have the ability to help, in whatever small way, and I did not, I would be haunted forever. (Participant 7, Round 2)

The participants self-organized with other adults who shared their goal of helping the child, with whom they had relational trust, and who had a sense of urgency about the child's situation. Therefore, these three factors were identified as the primary relational factors that support self-organizing.

The other factors presented to participants as possible supporting relational factors were not consistently found to strongly influence their decisions to self-organize. While sharing similar religious/spiritual beliefs, sharing a caring relationship with the student, and sharing similar values were relevant to participants' decisions to varying degrees, they did not play a significant role in their decision-making.

Some teachers believed that relational factors play more of a role in self-organizing than individual factors:

> I strongly agree that it is the relationships that support self-organizing. The need and ability to self-organize feels like a personality trait and is one of the reasons teachers become teachers. Surely there are educators who perform very well without the personal connections, or need for those connections, but I am definitely not one of them. My personal need to be needed is why I self-organize. (Participant 5, Round 2)

The three social factors found to support self-organizing the most were:

1. Sharing a common goal of helping the child with the other collaborators.

2. The existence of relational trust among the people collaborating.

3. A shared sense of urgency about accomplishing the common goal.

Participants confirmed these factors and explained the relationship among these factors in the Round 3 Questionnaire.

Environmental factors. Participants were asked to explain how useful each of four earlier identified factors (society, structure, administrative, and working conditions) would be in their decision to self-organize. Since few of the participants had mentioned having any environmental supports in the Round 1 Questionnaire, this was more of a hypothetical exercise. In order to get them to consider the possible effect of environmental factors, the participants were presented with "what if" questions. In addition, participants were asked to respond to previous findings that environmental supports had less of an effect on their decisions to self-organize than individual and relational factors.

Overall, participants shared experiences and perceptions about the four different types of environmental factors that might support self-organizing. Their experiences were context-dependent, unique to the schools in which they were working. The degree

to which these factors influenced their self-organizing varied significantly depending upon their schools, their administrators, and the situations of the children they were trying to help. No pattern was found in participants' responses. Overall, none of the four factors was considered to play a significant role in any of the teachers' self-organizing, but participants agreed that the potential existed for this to be the case.

When asked if these environmental factors could potentially influence teachers' self-organizing, some teachers wrote that, if such support existed, they would be inclined to self-organize more. Others wrote that these supports would have little influence on their tendency to self-organize. Participants were asked to respond to each of the four types of environmental supports – societal supports, structural supports, administrative support, and working conditions. The potential significance of each environmental support varied. There was consensus that societal, structural, administrative factors, and working conditions, would probably not significantly affect teachers' self-organizing.

Societal supports. The role of societal supports in teachers' decisions to self-organize varied greatly. Some participants said that if there were more governmental and societal supports, they may have self-organized less:

> A stronger societal and governmental support structure would impact my level and need for self- organization. Having resources available to support the varying needs of students would enable me to identify the need and direct it to the "expert" area. I would self-organize to a smaller degree within the classroom, but rely on the environmental structures for supporting what I started. I wouldn't need to wear so many hats and use my energy to focus on things that I have more control over (like academics). It is difficult to teach academics, clothe, and counsel students all in the same day/lesson. Not only is it exhausting but I am not skilled in all of these areas. I am not qualified to counsel a child through a divorce, death etc. (Participant 4, Round 2)

> Clear and consistent societal and governmental support might mean that I , and colleagues in urban districts across the U.S., would not have to self-

organize to the extent that we have, since that implies other factors might be in place to help children immediately. Still, no matter the scenario, I would be inclined to self-organize, the degree, however, would then be the variable. (Participant 7, Round 2)

One teacher said that she would self-organize more if there were governmental and societal supports in schools:

If there were clear and consistent societal and governmental support for my work the decision to self-organize might have been much more simple. It is likely that I would continue to self organize but would do so without the concern for the blessings of school or district administration. If the support you mention were present, then there would be no need to seek approval for work that requires teachers to self organize. Perhaps more teachers would be more likely to do so with clear and consistent support. (Participant 1, Round 2)

Several teachers mentioned that if there were more governmental and societal support, they would continue to self-organize as they already do, so this environmental support would not affect their self-organizing at all:

I believe that my decision to self-organize really is innate. While some student needs are easier than others, helping and supporting is part of the "work." (Participant 8, Round 2)

I don't think that clear and consistent support would change my need to self-organize. I do so because it is what I want and need to do. In order to make my teaching an avocation rather than just a job, my connection to the students is primary. (Participant 5, Round 2)

Another participant indicated that societal support is irrelevant to her self-organizing:

There will never be clear and consistent societal and governmental support. The government can't run anything effectively. The government usually messes things up. It comes from deep within people to do what is right. I don't need the government to motivate me…I have that already. (Participant 9, Round 2)

These statements illustrate that individual variation exists in participants' beliefs and experiences with society at large, thus societal supports for self-organizing may vary significantly.

Structural supports. Some participants indicated that a historically successful,

clearly defined, effective, multi-disciplinary team would support their self-organizing:

> I would feel more empowered to self-organize if there were more clear
> and consistent support systems at my school. I would be more invested in
> taking the initiative to organize with my grade level and other grades to
> help former students. (Participant 2, Round 2)

> There were not enough support/resources to manage all the needs of my
> students, grade level, or school. In third grade, we wanted to improve our
> instruction and build a sense of community within the grade level. The
> environmental structure was unable to support us, so we took it upon
> ourselves to find a way. This meant giving up our own lunches, personal
> necessity days, and spending money from our own pocket (to buy
> materials, incentives, and rewards to celebrate student achievement). If
> we had the support we needed, we would have been able to accomplish
> this same goal without sacrificing our wages and personal time. But I also
> believe that this need has also built a community of respect and trust
> among our colleagues AND across grade levels. We have come together
> for a common goal and since WE voluntarily collaborated, we have
> become more unified. No one dictated our agenda, it was teacher created
> based on what we saw was needed. This has had a significant impact on
> the students. BUT it is also exhausting and teachers are becoming burnt
> out with over half the year still to go. It is not a pace that we can keep up
> forever. If we had the support we needed, then we could plan on paid
> days off and still keep our energy up for direct instruction. We could get
> counseling for students who desperately need it, instead of trying to fill
> their need with our limited expertise. In my opinion, teachers cannot
> depend on the environmental/structural elements to get the job done.
> (Participant 4, Round 2)

> I use this structure when the situation seems serious and basically when a
> paper trail needs to be started. I know there are a list of interventions that
> need to be tried before something can actually be done using this structure.
> (Participant 4, Round 2)

> The information exchanged between the student's private duty nurse and
> me directed the structure of how the child's needs were met. This dictated
> my decision to use school structure. I needed permission from the
> principal to carry out the plan for this child. I needed support from
> Leadership Team members – which I would have had anyway due to their
> support for students- and sought such as a professional courtesy.
> (Participant 1, Round 2)

This was seen as a somewhat hypothetical exercise for participants since few teachers cited how teams supported their efforts to self-organize. Based on the questionnaire results from Rounds 1 and 2, participants did not think that there were structural elements in their school that helped them to self-organize. Most participants saw a team as an entity they were obligated to engage, although two teachers shared how they actively collaborated with grade level teams that were free from the constraints of officially sanctioned cross-disciplinary student intervention teams. As was the case with societal support, structural support for self-organizing tends to be unique to participants' situations.

Administrative support. The degree of support provided by participants' principals and assistant principals varied greatly:

> Administrative support at the school level in this school is neither historical nor consistent. What is historical and consistent is the lack of support on the part of the administration. In the past 24 years, the only principal who showed real support was the interim principal who was there when the arrangement for the student mentioned began. There is no culture of administrative support although some individuals on the Leadership Team do support efforts to help meet students' needs. Think long the lines of mandates, rules, and liability. (Participant 1, Round 2)

> Historically I have not found a great deal of administrative support at my school in areas related to special needs students or behavior issues. They are supportive of me as a teacher and with anything to do with parents. (Participant 2, Round 2)

> I feel this depends on who is currently in administration. Working in a large school in a low income area requires a strong dedicated team of administrators. (Participant 4, Round 2)

> [Administrative support] Does influence, but not to the extent as the grade level. I like to work closely with the ones who are in the trenches with me – sometimes administrative people don't jump into the trenches. (Participant 9, Round 2)

Participants' experiences with administrative support varied depending on the individual

administrator(s) as well as the relationship the teacher had with the administrator(s).

Working conditions. Participants were asked to explain what impact good

working conditions, as defined by Kohn and Schooler (1973), would have on their self-

organizing.

- having ownership of the work,
- the degree of bureaucratization, one's position in the organizational hierarchy,
- how closely teachers are supervised,
- the routinization of the work,
- the substantive complexity of the work,
- the time pressures on teachers,
- the heaviness of the work,
- the dirtiness of the work,
- the likelihood of "dramatic change" in the work that teachers do,
- the frequency of being held responsible for things outside of one's control, and
- the risk of losing the job

Some participants believed that good working conditions would make them more

likely to self-organize:

> If there were good working conditions as defined above I would still be
> likely to self organize. (Participant 1, Round 2)

> I feel completely over worked in the last few years due to budget cuts.
> Better working conditions would greatly improve the climate at my school
> and give me the motivation to try and effect more change. (Participant 2,
> Round 2)

> I feel that if the working conditions were good, then self-organizing could
> be even more successful especially if it was encouraged. (Participant 3,
> Round 2)

Some participants had a different perspective, believing that better working conditions

would cause them to self-organize less:

> I think there would be less of a need to self-organize if educators were
> equipped with the right resources and support. For myself, I seem to self-
> organize when I cannot get what I need. It is my only way of making it

happen. When I see a need, I turn to my colleagues for support to make it happen. (Participant 4, Round 2)

Several participants felt that regardless of the state of working conditions, their tendency to self-organize would remain constant:

> We are being held accountable for circumstances outside our control-how is a student supposed to care about school when his mother is getting beat up, or he/she is getting hit…no home…no clothes, etc. However, even when I am furious at the b.s. thrown around, I still care about my students and performing my job to the best of my ability…so, ultimately, nothing that anyone else does affects my self-organization. (Participant 5, Round 2)

> All of the above (good working conditions) exist presently. They are not factors that would make me more likely to self-organize, as I already do. (Participant 7, Round 2)

> I really believe I self-organize because I want to. I think this holds true for most people that do. Self organizing seems to be something that one does because he chooses to. A person chooses to independently or collaboratively self-organize despite the working conditions….keeping in mind, the child. (Participant 8, Round 2)

> Teachers need to rise above everything that is negative and determine in their hearts to do what is right for every student and at any cost. When that happens we will see all children reach their potential. We will never have all the things set in place, so let's not wait for that to happen…but do what is right, right now. I am a self starter and self motivator…so I don't need outside stuff. (Participant 9, Round 2)

Several participants believed that they self-organize when there are poor working conditions. Participant 6 shared her opinion that difficult working conditions (lack of environmental support) actually promote self-organizing:

> … it is poor working conditions that propel teachers to stick closely together. In adversity it is human to find others in "the same boat" who can help each other…. As teachers in our particular system, we are humiliated every day. We are given totally scripted programs to implement and aren't considered smart enough to know best practices for our children. People who are "higher up" come monthly to judge us lacking and to label us. (Red is inferior, yellow is a warning and green means acceptable.) I think that all of this just makes me know how

terrible it feels and allows me to be even more empathic towards children who are at the bottom of the ladder. (Participant 6, Round 2)

As was the case with the three other environmental factors, the role of working conditions, either good or bad ones, and how they impact self-organizing, seem to be dependent upon each individual's situation.

Summary of environmental factors. In conclusion, the four types of environmental factors (societal, structural, administrative, and working conditions) have a varying effect on teachers' self-organizing because of each individual's unique perspective and situation.

Participant 3 believed that the absence of supportive environmental factors allows for self-organizing:

I think that self-organizing sometimes comes out of necessity because of the lack of environmental/structural elements. In looking at what I wrote for each prompt in round 1, each of them occurred because of the lack support from the administration and the common goal each teacher had in helping our students. (Participant 3, Round 2)

Other teachers believe that supportive environmental factors would encourage teachers to self-organize even more:

If there were clear and consistent societal and governmental support for my work the decision to self-organize might have been much more simple. It is likely that I would continue to self organize but would do so without the concern for the blessings of school or district administration. If the support you mention were present, then there would be no need to seek approval for work that requires teachers to self organize. Perhaps more teachers would be more likely to do so with clear and consistent support. (Participant 1, Round 2)

Based on participants' responses, the role of environmental factors depends upon each individual's unique context and perspective.

Weight of individual, relational, and environmental factors. Participants agreed unanimously that individual and relational factors have a greater influence on self-organizing than environmental factors, but were divided regarding whether individual or relational factors were more important.

> I would agree with the finding (that individual and relational factors have a greater influence on self-organizing). I don't have a clear understanding of all district and state level support. I do know that I can count on my colleagues (at multiple grade levels) to help in supporting the needs of a child beyond academics. I also feel blessed to work with an administrative team that empathizes with the needs of the whole child. When having general conversations with colleagues about current and former students, I'm often amazed at how much "self-organizing" takes place without accolade. (Participant 8, Round 2)

> I agree that relationship factors have more of an impact than environmental/structural elements in teachers self-organizing. (Participant 2, Round 2)

Some participants saw individual factors as being more influential than relational factors:

> No one and nothing can make teachers care and do their best. It all starts from the minds and hearts of teachers. No government, program, or money can make that happen. (Participant 9, Round 2)

> I am not certain as to whether or not relational factors are more prominent when self-organizing than environmental/ structural elements. I personally do not need others to support my efforts in helping a child. I do not need a mandate, or structural/environmental components built into the school system to assist. My sense of response comes from an internal mechanism and belief, not an external policy. My social commitments are based on my own belief system, not imposed. Having said that, it is true that working with colleagues for the good of a child/children is most satisfying in developing and strengthening relationships with colleagues. (Participant 7, Round 2)

One teacher indicated that self-organizing is a way for her to exercise self-efficacy:

> My students are hungry, the food service worker could, in theory, be disciplined for distributing food outside of designated hours but my students are still hungry. It's just easier to buy cereal or graham crackers to solve the problem. In self - organizing on the individual level there are several factors that impact my willingness to act. Taking on a project is a

choice, not an assignment or responsibility. The element of choice is powerful and is one way to exercise my voice. I can choose to address the issues I wish. Often my motivation is the connection I feel to the student(s). One way to express my connection is by serving the child in appropriate ways. When I make that choice I have a reasonable expectation of success. If I am going to undertake a project I am fairly sure that I can succeed. I can choose to decide what particular students need and devise my own ways to meet those needs. Those ways are likely to be free of institutional barriers that might make meeting students' needs more challenging. In collaborating with others to meet the needs of children, individuals make choices and are not acting because of mandates or responsibilities. In acting with others, a common goal is realized. That common goal is a bond. The knowledge that another individual feels the same way about an issue strengthens my resolve to meet the needs of our children. In thinking about the individuals with whom I have collaborated I have developed a sense of trust, respect, and admiration. I can't say that I feel that way about the individuals I have worked with under district structures. (Participant 1, Round 2)

Participants agree that individual and relational factors have a more profound effect on self-organizing than environmental factors, yet that effect varies for each participant and each context.

Summary of Round 2 results. Concerning the individual factors, participants agree that a teacher can self-organize if she has one or both of the following: (a) a strong sense that she can help the student once she knows about the student's situation, and (b) a strong sense that she should help the student once she knows about the situation.

In terms of the relational factors that must exist between people who self-organize, participants identified three necessary supporting factors: sharing a common goal with others the teacher is collaborating with; the existence of relational trust among the people the teacher is collaborating with; and a shared sense of urgency in terms of accomplishing the common goal.

Regarding the environmental factors, all four types (societal, structural, administrative, and working conditions) may have some influence on teachers' self-organizing, but the effect is context- and situation-specific.

Based on a conclusion drawn from Round 1, and confirmed in Round 2, it does appear that individual and or relational factors affect teachers' decisions to self-organize more than environmental influences. Participants were divided as to whether individual or relational factors influence self-organizing more.

Round 3 Results

The purpose of this round was to gain consensus on the findings related to the individual, relational, and environmental factors that support self-organizing. This was achieved. The Round 3 Questionnaire (Appendix J) was organized according to the individual, social, and environmental factors. Each section contained a summary of the findings from the previous round, and asked participants to identify the findings with which they agreed and disagreed. In the individual and social sections, participants responded to clarifying questions about the evolution and development of the individual and relational factors that support self-organizing. The final questions on the Round 3 Questionnaire asked participants for their general thoughts on what others should know about self-organizing. All participants responded to the Round 3 Questionnaire.

Individual Factors. All 9 participants agreed that there are two connected factors that determine one's decision to self-organize. The first individual factor that plays a role in self-organizing is a strong sense that the teacher can help the student once she knows about the student's situation. This could exist because the teacher has previously helped a student, either before she has seen others do so, or because the

teacher believes that helping is within her capabilities or resources. The second

individual factor that affected a teacher's self-organizing is a strong sense that she should

(or needs to or wants to) help the student once she knows about the student's situation.

This imperative could exist because of a moral obligation or a higher power. It could

also exist because of the high level of caring or empathy the teacher feels for the child, or

because the teacher gains a sense of satisfaction knowing she helped a student.

The participants believed that these two factors, a strong sense of being able to

help a child, and the imperative do so, are highly connected:

> If you think you should do something to ease a student's difficult situation, you probably can find a way to do so. Not so much out of a sense of duty but out of a sense of moral obligation and care for those involved. If one feels strongly about helping, then a way to do so will be found. Many who feel they can do something to help students, feel that they should help that student. (Participant 1, Round 3)

> If I can help a student, then as a teacher, I feel I should help the student. This is probably the most important reason I became a teacher. I wanted to make the lives of the students I work with better and I want them to feel successful. (Participant 3, Round 3)

> A teacher who chooses to self-organize possesses these factors without even thinking about it. He/she sees a situation and acts upon it without too much consideration. It is almost automatic. Teachers take on whatever circumstances they were given. Most teachers will do whatever they "can" do to help a struggling student. The 'should' factor is part of the reason they joined the profession, because they want to help people. I know for myself that I do whatever I can to help a child grow in whatever area they are deficit in, whether it is socially, emotionally etc. Self-organizing teachers see a situation and know that is part of their role to help the student. They do whatever they can to make the situation better for the child. (Participant 4, Round 3)

> If a person cares enough to find out about a student's situation, I believe that they are a person who will take some type of action. Also if one thinks they should help, then they recognize the moral need to do so. My personal feelings are that a person must help another person if at all possible. As a teacher, I have no right to collect a paycheck if my students aren't important enough for me to care about. (Participant 5, Round 3)

> [The two reasons]…are highly connected. We as teachers have been trained, trained, in-serviced, and in-serviced some more on highly effective practices and we have other resources to help students. Even if the needs are out of our knowledge boundary, then we have people in the district that we should at least appeal to for help. (I say this because I work for a large district which does offer help in numerous areas. Smaller districts might be a little different.) So, we have the "can" and the "should" is deep within us to help all students and their challenges. If individuals go into education with no sense of "should" then I would not want that person to be my child's teacher …. (Participant 9, Round 3)

One participant believed that it was her duty to self-organize to help meet children's needs:

> I feel that is my duty, obligation, responsibility, and job as a teacher to advocate for my students. The population that we serve does not always have the support of their families or their families do not know how to get the services needed by the students. (Participant 2, Round 3)

Participants were asked what made them different from others who thought they could and should help, but did not take action. Participants thought that there could be other factors that may play a role in self-organizing, in addition to the ability and imperative to help. They believed that these factors were dependent on the individual's situation. Some of the factors that participants thought could cause a teacher to not help a student, despite being able to and feeling obligated to do so include:

- personal connections with students (Participants 1 and 4)
- lack of support from administration, community, or society (Participant 1)
- not having the energy or stamina (Participant 2)
- being afraid of what others will think (Participant 2)
- just not wanting to get involved (Participants 2 and 7)
- not having enough time (Participants 3 and 5)

Participants 4, 7, and 8 mentioned that they did not know what it is that makes them different from those who do not self-organize – they simply do it because that is who they are.

Social factors. There was significant agreement regarding three social supporting factors. All participants agreed that people who self-organize must share the common goal of helping the child. All participants also agreed that a shared sense of urgency to accomplish this common goal was necessary for self-organizing. Eight of the nine participants agreed that relational trust is necessary among the teachers who are self-organizing. The participant who did not agree that relational trust is necessary explained that:

> I wish I could trust everyone I work with but …not. There have been too many instances of others dropping the ball on a child's needs, even if that is their job. For the most part, it's probably overwork, but the idea that a lack of concern may also be the reason prevents me from putting my full trust into some of my co-workers. Also, (and it hurts me to say this…even think it), many of the parents do a lot of promising (therapy, medication) but most of the time they don't follow through. (Participant 5, Round 3)

Participants had differing opinions about whether or not the three factors needed to exist simultaneously, indicating that their evolution (strength and presence) is dependent upon the individual and the situation in which the teacher is working. To support their perspectives, some of the participants shared their experiences.

Participant 4 believes that ideally, all three factors need to be present. Even if one of the three is at a low level, in this case relational trust, her self-organizing still occurs:

> I think all 3 factors need to be evident, at least on some level. The common goal and sense of urgency may instigate the collaboration but the level of trust can sustain and or affect the level teamwork. I personally have been working with a colleague with whom I recently (last year) have questioned my level of trust with. I was reluctant to collaborate with her this year but because I hoped it would benefit the student, I have chosen to combine forces with her. It has been a positive experience so far. But I personally feel that having a *strong* relationship with the person you are self-organizing with makes that collaboration even more effective. (Participant 4, Round 3)

Participants 9, 3, and 1 indicate that having a shared goal and relational trust are most

important, while a sense of urgency acts as a vehicle:

> I think that the top 2 (shared goal and relational trust) need to be there for sure. The third one just makes it happen sooner...before the year is over and gone. Really for it to happen in a school year---180 days--- there does need to be all three. If the last one is not there, there will be results, but maybe not carried out to completion because time truly ran out. One thing about teaching is that we are under a very tight time frame…there is no wiggle room. When the year is over, it is over. For me to feel like I have been a difference maker, all three need to be there otherwise I would feel like I did a half job of helping that particular student. (Participant 9, Round 3)
>
> In my opinion the first two have to exist simultaneously because I believe that the trust colleagues have and a common goal go together. You have to trust one another in order to work together on a common goal to help a child. I am not sure how urgency to accomplish a goal goes together with the other two factors. I am assuming it has to do with the student issue. I feel you may have an urgency to determine a plan to help a child, but to attain the goal may take time. (Participant 3, Round 3)
>
> I agree that all three factors must be present in order for self-organizing to occur. I believe the first two factors are tightly tied to each other. It would be difficult for me to choose to work with an individual or group whose motives I did not trust. It would be difficult for me to choose to work with an individual or group who did not have the needs of my children at the forefront of my agenda. The shared sense of urgency is the catalyst for action. Without urgency, action is slow to occur, if it does occur. (Participant 1, Round 3)
>
> No, I don't think that all three factors need to exist simultaneously in order for self-organizing to occur. However, if they do I think self-organizing is developed and planned and carried out more effectively. (Participant 8, Round 3)

One issue that came up was how the relational trust that self-organizers have with

colleagues sustains them as they self-organize to help meet children's needs:

> I think that all three probably have to be present because often teachers go 'out on a limb to help children.' This may mean that they get into trouble with the administration. (Participant 6, Round 3)

The participants' opinions varied regarding the order of development of the three factors, again depending on the situation and in this context, on the individual and the needs of the child. The presence of all three factors though were thought to be necessary for self-organizing

Table 12

Summary of Participants' Proposed Order of Development of Social Factors

Participants	First to Appear	Second to Appear	Third to Appear
1, 2, 3, and 9	Relational trust	Shared goal of helping the child	Sense of urgency
7	Shared goal of helping the child	Relational trust	Sense of urgency
5 and 6	Shared goal of helping the child	Sense of urgency	Relational trust
7	Sense of urgency	Shared goal of helping the child	Relational trust
8	All factors appear simultaneously		

Environmental factors. The environmental factors that support self-organizing are highly context dependent, which is perhaps the reason that all participants agreed with the following statements:

1. The presence or absence of societal factors, such as district support and information given to teachers about resources for children, may affect a teacher's decision to self-organize to help a child.

2. The presence of structural factors may affect a teacher's self-organizing. If there is a historically successful, clearly defined, effective, multi-disciplinary team the

teacher can collaborate with, this may be a structure that can support a teacher's efforts to self-organize.

3. The presence of historical and consistent administrative support at the school level may support a teacher's self-organizing.

4. Good working conditions may cause some teachers to organize less and others to organize more. The quality of working conditions may not affect some teachers' self-organizing at all.

Some participants indicate that societal support, although desirable, may not necessarily have a direct impact on the daily work of teachers who self-organize:

> The general public doesn't have the slightest idea of what we do outside of the time spent in the classroom. We are teachers but have to act as surrogate parents, nurses, counselors, and advocates for the students. We are often the ones who report child abuse, physical neglect, and get them the uniforms and health care they need. (Participant 2, Round 3)

> I feel teachers self-organize because we are placed in situations where we must self-organize in order to make our students successful. For educators, I think all educators should be encouraged to self organize and be trained on how to work collaboratively. Self organizing is a way to preserve our desire to teach in order to not burn out with all of the demands we face these days. (Participant 3, Round 3)

> I self-organize because it is just a part of who I am. I didn't even realize that I was doing it (until this project). I see a need or situation and I try to help. With my experience, I have learned how important it is to teach the "whole" child. For example, what good does it do in the big picture to have a great reader with no social skills? The more experiences I have, the more roles I find myself in as a teacher. (Participant 4, Round 3)

> I self-organize because it is the right thing to do. I think the public should know that it is not my job to have a personal relationship with my students (and care for them as human beings). If the public sentiment that appears to be growing continues that teachers are the evilness in the educational system, we will lose teachers and that will only harm the children more. Parents are the most important part of a child's education in terms of their support and interest (behavior and academics). Often we are seen as the enemy when we are the ones that care the most. The general public doesn't care…they are just worried about money and sometimes think that

we have an easy job which is pretty amusing considering they were once students too! I guess I self –organize because that's what a caring person does when in a situation where they see need. For the record…I wouldn't change a thing and when I stop caring…time to find a new job. (Participant 5, Round 3)

Environmental factors, societal, structural, administrative, and working conditions, apparently vary so widely across school settings that it is difficult for participants to say with any degree of certainty which of the environmental factors support self-organizing.

The conflicting opinions around working conditions reveal the complexity of the construct. Several participants indicated that if working conditions were better, they would self-organize more, while others indicated that they would self-organize more if working conditions were worse. As mentioned in Chapter 2, because the construct of working conditions includes 12 elements (Kohn & Schooler, 1973), and each teacher in each school will have different perceptions of the 12 elements, this specific construct may not be a useful tool to analyze working conditions in schools.

All of the participants agree that the environmental factors play less of a role in self-organizing than the individual and relational factors.

Summary of Delphi Conclusions

The Delphi participants explored three levels of self-organizing. This exploration allowed participants to identify the individual, relational, and environmental supports for self-organizing. The findings illustrate the importance of context in self-organizing, especially in terms of social and environmental supporting factors. The factors identified at the individual, social, and environmental levels can act as catalysts for people coming together to help meet a child's needs. These factors were seen to be necessary ingredients for self-organizing by this group of self-organizing educators. Four

conclusions are presented below which will provide the focus for final discussions and recommendations presented in Chapter 5.

Conclusion 1. At the individual level, participants identified that a sense of being able to help a child, and feeling as if they should do so, plays a role in their decision to self-organize.

Conclusion 2. At the social level, participants have identified relational trust, sharing a common goal, and having a sense of urgency as the three factors that affect how they collaborate with others to self-organize. Participants believe that these three factors are necessary ingredients to self-organizing, but the degree to which the factors play a role differs, depending on the individual and the situation.

Conclusion 3. At the environmental level, participants concur that societal support, structural support, administrative support, and working conditions have a tentative, conditional relation to their self-organizing. Participants agree that the impact of these factors on self-organizing is highly dependent upon the context in which the teacher works.

Conclusion 4. Individual and social factors have a greater impact on self-organizing than do environmental factors.

Summary

This chapter is a compilation of the conclusions from the Delphi study that explored the self-organizing experiences of teachers in a social system. The participants of this study were able to identify the factors that do support self-organizing and might support self-organizing. The following chapter is a discussion of the conclusions from this study and how they are situated in the related literature.

Chapter 5: Study Overview and Conclusions & Recommendations

The purpose of this study was to explore the self-organizing experiences of teachers in a social system (specifically, a school) and to identify the factors that support their efforts, with an eye to how it may help address the needs of students living in poverty. The issue prompting the need for the study was to better understand how teachers in these schools self-organize to help meet students' physical, social, and emotional needs. Engaging 9 teachers from Long Beach, CA and Philadelphia, PA, a Delphi method was used to investigate how individual, relational, and environmental factors enable teachers to self-organize. Through three rounds of interaction, individual elements and experiences that promoted their self-organizing were uncovered. Identifying the dynamics found among these teachers as they interacted with other adults to meet the needs of children created a clearer picture of what is necessary for adults to self-organize. This research is especially timely given that the number of children living in poverty has been steadily increasing over the past few years (Land, 2010), and that schools are not structured to address the myriad needs that children in poverty bring to the classroom.

All young children in the United States are expected, if not required, to attend school, regardless of their families' socioeconomic status. Along with the hunger to learn that young children bring to school, they may also bring a physical hunger for food because there is not enough to eat at home. They may also come to school without the clothing needed during cold weather. They may come needing more positive adult attention and guidance than can be provided by their parents who are working multiple jobs to stay afloat. What is our collective responsibility, as a society, to these children?

The teachers in this study were clear that as educators, their responsibilities included helping children meet their basic needs.

Over the past 10 years, the number of children living in poverty and low-income homes has increased dramatically to the point that, as of 2009, there were approximately 30-42% of children living in low-income or poor families (Wight et al., 2011). Unfortunately, public schools are neither structured nor sanctioned to help children meet their physical, social, or emotional needs. Yet, every day, there are many teachers who help children who are being negatively affected by poverty. They are the ones who ensure that children living in poverty are getting their needs met. They are the active members of the moral underground – the members of our society who work to help children who are struggling to thrive in an unfair economy (Dodson, 2009). These teachers are the focus of this research.

The ways in which these extraordinary teachers helped students meet their physical, social, and emotional needs varies, depending both on the context of the schools in which they work and on their individual beliefs. What these remarkable teachers have in common is that they engaged other adults, mostly other teachers, to help students who face the challenges of living in poverty. These teachers are self-organizers, individuals who collaborate with colleagues to help children. It is these teachers, who go beyond their job descriptions to help children in need, who were the focus of this study.

Prior to this research, the phenomenon of self-organizing, examined at the individual, social, and environmental levels, was non-existent in the education and systems theory literature. There has been no previous research regarding the adaptations that teachers make in high-needs schools to meet their students' needs, yet these

adaptations occur regularly. With regard to the matter of self-organizing, the only education-related literature that exists consists of teacher quotes or autobiographies of "going above and beyond" (Anonymous, 2007). Thus, the present study is an application of systems thinking to educational practice, which represents a new way of conceptualizing schools.

This study is grounded in the research on complex adaptive systems (CAS) (Keshavaraz et al., 2010). In this study, schools are viewed as dynamic systems that respond to the environment as opposed to the notion that schools are factories that produce educated students. In such dynamic schools, one of the promising ways in which the teachers in schools respond to the environment is through self-organizing – taking in new information and behaving in ways that are unscripted.

When children arrive at school with needs that are primarily the result of living in poverty, a change has occurred. Thus, the *schools as CAS framework* is used in this study to explore how teachers in schools are responding to the diverse challenges that students living in poverty bring to school. Self-organizing in social systems, and the factors that support its development, have not yet been studied in depth, but social psychology, educational psychology, and organizational change theory provide several constructs that act as facilitating elements. These constructs include: self-efficacy (Bandura, 1977); relational trust (Bryk & Schneider, 2002); goal setting theory (Locke & Latham, 2006); and urgency (Kotter, 2008). In order to uncover how self-organizing occurs, this study explored the self-organizing experiences of teachers and used the individual, relational, and environmental levels as lenses.

Bandura's concept of self-efficacy is the individual factor that was proposed to be a supporting factor for self-organizing. Self-efficacy is the judgment one makes regarding her ability to be effective in a given situation (Bandura, 1997, 1982; Bandura & Cervone, 1983; Bandura & Schunk, 1981). Teachers in this study have shown that they endeavor to help meet students' needs when they believed that they would be successful.

The relational factors examined include: relational trust; a shared goal; and a sense of urgency. Relational trust is a construct from the field of education, found in the school research by Bryk and Schneider (2002). It is comprised of respect for one another, integrity, personal regard for one another, and role competence. Teachers who self-organize require all four of these elements in order to self-organize with others. Schunk's (2001) work on goal-setting underscores the importance of self-organizers sharing a common goal. Kotter (2008) highlights how a sense of urgency is needed for change to occur. Both a common goal and a sense of urgency provide the "glue" connecting self-organizers.

The environmental factors, (societal, structural, administrative, and working conditions) are based on the work of Deci and Ryan (1985), Katz and Kahn (1971), and Kohn and Schooler (1973). These four kinds of environmental factors are different in each school, and different for each teacher, given the nature of how schools function. The support of these factors in self-organizing varies widely since they encompass many variables.

Research Methods

The design of this Delphi study was based on Dalkey and Helmer's 1963 method for gaining consensus among experts. It involved working with a group of

geographically scattered professionals (9 teachers from Long Beach, CA and Philadelphia, PA) who have expertise in self-organizing. These two groups of teachers were recruited through professional networks by the researcher. These 9 teachers were interested in participating in the study for a variety of reasons: because they self-organize frequently to help their students; because they wanted to learn more about how and why they were self-organizing; and because they wanted to shine a light on tasks that are crucial to their work as teachers but are not recognized as necessary and or legitimate in the field of education. They are a group of teachers who are able to clearly communicate their thoughts and feelings in writing.

Through three rounds of email correspondence during the first quarter of 2011, these self-organizing experts came to agreement on the individual, relational, and environmental factors that support self-organizing. In this study, they shared their stories of self-organizing and their thinking about what it was that enabled them to do what they needed to do in order to help their students. By identifying the dynamics among these teachers as they interacted with other adults to meet the needs of children, a clearer picture of what is necessary for adults to self-organize was generated.

The first round of data collection required that each participant tell stories about their self-organizing. Analysis of this data identified the different individual, social, and environmental factors that appeared to support their efforts at self-organizing.

The second round of data collection asked participants to confirm the presence of these factors (i.e. self-efficacy, awareness of the child's situation, empathy) in their self-organizing, as well as indicate their importance in making their decisions to self-organize. Participants were also asked to explain how these factors affected their self-organizing.

Data collection for the third round asked participants to confirm the specific factors that supported self-organizing at the individual, social, and environmental levels, as well as the evolution of these factors. Participants were also asked to confirm the themes that emerged from these factors, which resulted in several findings about which were the most important factors to self-organizing, and what role these factors played in teachers' decisions to self-organize.

Findings

First, the participants in this study acknowledged that they are self-organizers and that there is self-organizing occurring in their high-needs, urban, public elementary schools. As anticipated, there were individual, social, and environmental factors that supported the concept that self-organizing exists at three levels: the individual; the social; and the environmental.

Six research questions guided this study. The first question focused on individual factors. Three questions involved the social factors, and one question focused on environmental factors that affect self-organizing. A final question was intended to elicit what other variables or conditions might impact how these teachers choose to self-organize.

Research Question 1: How does one's individual self-efficacy evolve and affect one's ability to self-organize? All participants agreed that a teacher's self-efficacy, in terms of self-organizing, is tied to a sense that she should do something to help meet the child's needs. This self-efficacy could exist because the teacher has previously helped a student, she has seen others do so, or because the teacher believes that helping is within her capabilities or resources. A self-organizer's self-efficacy is

connected to a strong sense that she should (or needs to or wants to) help the student once she knows about the student's situation. This imperative could exist because of a moral obligation or a higher power. It could also exist because of the high level of caring or empathy the teacher feels for the child, or because the teacher gains a sense of satisfaction from knowing she has helped a student.

Research Question 2: How does relational trust evolve and affect one's ability to self-organize? Eight of the nine participants believed that relational trust is an integral element of one's decision to self-organize with others, including colleagues, community members, and or parents. Eight of the nine participants agreed that relational trust must be present between the two (or more) individuals who self-organize to help meet a child's need. The level of relational trust that is necessary for self-organizing to occur is based on participants' perceptions of their collaborators, as well as the specific help that the child needs. Most participants acknowledged that they had to have some degree of relational trust with their collaborators, even if it was at a very low level.

Research Question 3: How does having a shared sense of urgency evolve and affect one's ability to self-organize? All participants believed that a sense of urgency is necessary for self-organizing. The evolution of urgency within the context of self-organizing is unique to the teachers' perceptions of the child's need. Because self-organizing occurs in order to address students' basic needs (food, clothing, shelter, safety), urgency acts as an impetus for self-organizing, rather than as a factor that evolves as the self-organizing occurs. Additionally, in some situations, a sense of urgency seems expedite the actions of self-organizers.

Research Question 4: How does having a common goal evolve and affect one's ability to self-organize? Participants believed that a shared goal of helping the child is necessary for self-organizing. The goal does not have to be exactly the same for all of the self-organizers, but the general goal of helping the child must be shared by all involved. The participants' goal of helping the student is formed once all involved have become aware of the student's situation.

Research Question 5: What are the environmental variables (such as people, structures, or processes) that promote self-organizing? Participants felt that the environmental variables that promote self-organizing are situation-dependent. The presence or absence of societal factors, such as district support and information given to teachers about resources for children, may affect a teacher's decision to self-organize to help a child. The presence of structural factors may affect a teacher's self-organizing. If there is a historically successful, clearly defined, effective, multi-disciplinary team with which the teacher can collaborate, this may prove to be a structure that can support a teacher's efforts to self-organize. The presence of past and consistent administrative support at the school level may support a teacher's self-organizing. Good working conditions may cause some teachers to organize less and others to organize more. On the other hand, the quality of working conditions may not affect some teachers' self-organizing at all. In general, participants perceived environmental variables as having little to no effect on their proclivity to self-organize.

Research Question 6: What other variables shape or affect one's ability to self-organize? In addition to the individual, relational, and environmental factors mentioned earlier, participants suggested that there might be secondary factors that affect

one's ability to self-organize. For example, some teachers may have more time to spend self-organizing to help meet a child's needs. Conversely, some teachers may have stronger personal connections with their students that compel them to self-organize. Out of fear, some teachers may not want to get involved beyond the traditional parameters of classroom life because of the added responsibility and the possibility of administrative disapproval.

Research Conclusions

This study led to four specific conclusions about self-organizing by teachers working in a high-needs, urban, public elementary school environment.

Conclusion 1. At the individual level, once teachers become aware of a student's situation, teachers seemed to self-organize to help the child for one or both of the following reasons: they have a strong sense that they can and or that they should help the child. The basis of their sense of being able to help is grounded in several possibilities – the teacher has previously helped a student, the teacher has had a role model who has helped a child, or the teacher has the means to help. The imperative for acting on one's ability to help a child can come from a variety of places. It may be based on the teacher's sense of morality, her religious beliefs, or a high level of empathy or caring. It could also be based on the teacher's need to feel needed by others, and the sense of satisfaction she gains from helping others. The expert participants of this study believed that both being able to help a child, and feeling as if one should help a child, are strongly linked. Participants realized that both the belief that they can help a child, and the imperative to do so, causes them to self-organize.

The first part of this finding (that one can help) ties in directly with Bandura's (1997) research on self-efficacy. People need to believe that they will experience success in taking action before they do so. This proved to be the case with the participants of this study. They believed that they could positively address their students' needs and they took steps to do so.

The second part of this finding (that one should help), is a new avenue to study. One's morals, caring and/or empathic personality, past experiences, and religious beliefs, played a role in teachers' descriptions of this sense of obligation. Noddings (2003) and Combs and Gonzalez (1994) have written about the role of caring and empathy in working with children. There has not yet been research on the role of teachers' morals and how they affect teachers' decisions to self-organize. Based on the work of Dodson (2009), it is evident that individuals' morals play a role in deciding to stand up against the consequences of economic injustice. More research is needed in this area to clarify what creates this sense of obligation to help address a child's physical, social, and emotional needs. The role of morality in teachers' decisions to self-organize may prove to be quite significant, based on this research, and must continue to be investigated.

Conclusion 2. At the social level, three factors significantly affected participants' willingness to self-organize with others: a shared goal; relational trust; and a sense of urgency. Participants' opinions varied regarding how and when these factors developed, though they agreed that all factors play a role as groups self-organize. The evolution of these factors may be dependent upon the relationship that previously existed between the self-organizers.

Kotter's (2008) work on a sense of urgency as a necessary element for change supports this finding. Schunk's (2001) work on common goal setting also upholds this finding. These participants found that urgency and a common goal can act as catalysts among collaborators who self-organize. Bryk and Schneider's (2002) research on relational trust also corroborates this finding, as eight of the nine participants agreed that the four elements of relational trust (respect for one another, integrity, personal regard for one another, and role competence) are necessary among collaborators for self-organizing.

Conclusion 3. Four types of environmental factors were reported to affect participants' self-organizing: societal; structural; administrative; and working conditions. However, participants' experiences and knowledge with each type varied widely. There was consensus that each of these four environmental factors might affect self-organizing, though the extent of the effect was dependent upon teachers' unique contexts.

Theses findings are well supported by the research of Deci and Ryan (1985) regarding the societal support of education, the research of Katz and Kahn (1971) on structure (including administrative) of organizations, and the research of Kohn and Schooler (1973) on working conditions. There are a multitude of variables within each of these types of environmental factors which allows for significant variation within each teacher's context. Therefore, teachers were unable to say with any degree of certainty that these environmental factors absolutely had (or did not have) an impact on their self-organizing. Because there were conflicting opinions among participants regarding the role of working conditions (as presented by Kohn & Schooler, 1973), this construct may be too complex to be of use in another study of self-organizing.

Conclusion 4. The individual and relational factors have a greater affect on participants' decisions to self-organize than any of the environmental factors. This finding was evident after the results from the Round 1 Questionnaire. Teachers talked more about their own actions and those of their collaborators than any environmental factors.

The reasons for this finding could be several: the environmental factors are irrelevant to teachers as they self-organize; the environmental factors are simply not considered by teachers as they self-organize; the environmental factors are so negative that teachers intentionally avoid them; or the environmental factors are so negative that they force increased reliance on individual and relational factors that support self-organizing. There is some research on this last possible explanation. Solnit (2009) wrote extensively on how individuals came together in extraordinarily difficult situations, such as earthquakes, fires, acts of war, and natural disasters. It could be that teachers are self-organizing in high-needs, urban, public elementary schools because there are difficult working conditions in these sites. If this were the case, then an environmental factor – working conditions – could be the impetus for self-organizing. More research in this area is necessary within structured organizations, such as schools.

The findings from this study support the idea that there are factors at the individual, social, and environmental level that must be taken into account when analyzing the phenomenon of self-organizing. The dynamics of self-organizing are quite complex, as evidenced from this study. This complexity might account for the fact that, while participants' agreed on which factors were required for self-organizing, there was no consensus on how these factors interact and evolve.

Methodological Considerations of the Study

This Delphi process helped those involved clarify their thinking about self-organizing. The 9 teachers, prior to this study, were unaware that they were practicing the construct of self-organizing. Through the questionnaires, there was collaborative dialogue and some knowledge creation. All participants remained engaged throughout the three rounds and demonstrated appreciation for the opportunity to collaborate. By the third round, there was consensus about what factors must be present if a system desires its professionals to self-organize.

The nature of a Delphi process provides participants with opportunities to review and respond to gathered data. This mimics a *member check* validation process. In addition, a second researcher was involved in reviewing the coded data prior to submission to the participants, thus supporting the reliability of textual interpretation.

This was a small study, and so the results cannot necessarily be generalized to include all teachers working in the targeted environment. However, this representative sample of self-organizing teachers epitomized the type of teachers sought by the researcher. They were teachers interested in providing support to their students, above and beyond their job descriptions. They were ready to collaborate with others to help their students meet their basic needs. They were self-organizers who were committed to engaging in the intellectual work that was required for this study. All respondents had to be willing to participate during their non-work time, despite the many demands that most teachers experience, and they were. The teachers who participated in this study demonstrated a commitment to better understanding their practice in a way that not every teacher shares.

Some other limitations need to be mentioned. The teacher participants in this study were comfortable sharing their stories through writing. Additional teachers may have had stories to tell but did not participate because of their discomfort or lack of skill with virtual communication. The fact that all study procedures were conducted electronically may have limited the researcher in locating those who would be interested, as well as limiting participation to teachers with access to a personal computer outside of the work environment. Another limitation was that all participants in the study were female. It is not known why no male teachers chose to participate, but teaching has long been a female-dominated profession (National Education Association [NEA], 2010).

Another limitation was that there was no opportunity (aside from the emailed questions and responses) to converse with participants about specific issues that arose during the study. This was a consequence of the method of data capture. Although all the participants saw the information being shared in subsequent rounds of emails, any discrepancies in their own responses, such as a discrepancy between a ranking and anecdotal comments, could not be explored individually. Consideration of how the study could still protect confidentiality, while allowing the researcher to speak individually with participants to clarify discrepancies, is warranted in any future studies.

Implications for Practice

At the societal level, education has been experiencing negative press coverage, as evidenced by the Phi Delta Kappan Gallup Poll (Bushaw & Lopez, 2010). This survey reveals that while most parents are happy with their own child's school, they are unhappy with the schools in the United States in general. The findings from this Delphi study highlight many remarkable steps that teachers can take to help ensure the well-being of

children, especially those living in poverty. Publicizing this work could begin to sway public perception of the U.S. education system. Making the findings of this research available to professionals within the educational community could help teachers become aware of the self-organizing that they may be doing, and legitimize it.

This research reveals that there are teachers who take extraordinary steps to ensure the well-being of children. As suggested by Participants 3 and 9, district and school-based personnel can continue to support this work by providing teachers with time to collaborate during the school day. Administrators can also support the self-organizing of teachers by allowing functional teams of teachers to stay together and promoting the development of teacher networks. The findings from this study could help society in general and schools specifically focus more closely on how they support children living in poverty.

The findings from this study provide information to instructors in teacher preparation programs about the behaviors needed by teachers who work in high-needs schools. These results suggest that teachers with a sense of self-efficacy can be successful helping children in high-needs schools. It would behoove pre-service teachers (teachers who have yet to be certified) to become more aware of the individual and social supports they can develop in order to be successful in high-needs, urban, public elementary schools.

The participants in this study have additional suggestions as to how federal, state, and local policymakers can use the findings from this study:

> (Policymakers must) understand the many roles educators play and provide them with ample resources so that teachers can meet the different needs of students. So many teachers meet student needs out of their own pocket book. (Participant 4, Round 3)

Policymakers need to provide more resources for teachers to help students without placing limitations on the number of resources a student is allowed to receive. (Participant 3, Round 3)

…teachers should not be held accountable for student performance/test scores when factors that they cannot control, such as poverty, violence, drugs, and lack of parental support, consume the daily lives of such children. Teachers should be held accountable for what they can control. In conclusion, teachers should not be the scapegoats for society's failures. (Participant 7, Round 3)

Hire more well-trained school counselors to deal with social and emotional problems of children and to help teachers learn more about these troubles. (Participant 6, Round 3)

Provide professional development/resources to educate teachers on how to help a child who is facing these types of struggles. I know that I am always trying to figure out ways to help students deal with loss, anger, attachment, self-esteem issues etc. A child cannot and will not learn to the best of their capabilities when their basic needs (physical, social, and emotional) are not met. (Participant 3, Round 3)

Let's hold parents responsible for their children. Parents aren't being paid to teach but they must support their own children by expecting the best in effort and behavior. Teachers are being held responsible for aspects of their students' lives upon which we have no control. If a parent allows their child to stay awake watching tv until 1 a.m., why are the teachers responsible. When a youngster comes to school in dirty clothes and smells, no homework, etc. how are teachers responsible? We deal with the consequences but we cannot make the changes that need to be made – only parents can…so if they won't…let's regulate parenting! (Participant 5, Round 3)

While I feel that it is my charge as an educator to self-organize to address the physical, social and emotional needs of children, it is great when resources are available. In this time of diminishing resources, the need for teachers to self-organize will become more and more necessary. However, self-organizing becomes much more attainable, which can lead to effectiveness, when we have multiple resources to pull from. While I do believe that it takes a village to raise a child, the village needs the help of outside sources. Students are much more successful when they are supported – so holds true for the educator. We are much more effective when we are not pushed or pulled to the limit. (Participant 8, Round 3)

Policymakers, both in education and economics, can use this research to highlight how

teachers are addressing some of the effects of poverty, and should be given the resources

to do so, whether it comes in the form of additional personnel, regulating parenting, or providing petty cash for teachers.

Suggestions for Future Research

Examining how the factors identified in this study interact and co-exist is a starting point for future research in the area of self-organizing. While this study provides basic information regarding the factors that support self-organizing, more information is needed about the evolution of these factors at each level, especially at the environmental level. Further information is also needed to better understand the interplay of the individual, social, and environmental factors.

The frequency with which self-organizing occurs is still unknown. In addition, the places in which self-organizing occur most often is not known. Self-organizing could exist in rural schools as well as in urban schools. More investigation in this area is necessary in order to determine where self-organizing can be supported.

Another area of future research involves deeply investigating the individual factors that support self-organizing, particularly one's sense that she should help. Where does this originate? Does everyone have this sense? How much of this sense is necessary to compel a teacher to self-organize if she already has self-efficacy? What role does personality, caring, empathy, and altruism play in deciding to self-organize?

There is a need to investigate the role of teachers' morals in their decision to self-organize in high poverty schools. In this study, several teachers mentioned that self-organizing to help children was an ethical or moral obligation. In Korea, teachers are tested on their ethics before being allowed into teacher preparation programs (Wang, Coleman, Coley, & Phelps, 2003, as cited in IIEP Virtual Institute, 2008). Should that

happen in the United States? Perhaps teachers' morals need to be considered when hiring teachers to work in high poverty schools, since going above and beyond for children may be something that should regularly occur in these places. More research in this area could possibly reveal that hiring teachers with a specific morality can allow schools to better serve children in poverty. This study is a further investigation into Dodson's (2009) moral underground, yet more investigation is clearly warranted to uncover the morality of teachers in high-poverty schools who self-organize.

More research about schools as CAS is needed in order to clarify how such systems function and how they can be intentionally changed. Schools are social institutions tasked with the purpose of teaching children, and are structured to impart knowledge. The teachers who work in high-needs, urban, public elementary schools do much more than that – they address the well-being of the whole child. Education policy makers would do well to learn from this research that schools are complex adaptive systems that change in response to new information from the environment. Schools must keep pace with societal changes or they could become increasingly irrelevant to the society they are expected to serve.

Closing Comments

The moral underground is a place where professional stand up against economic injustice. The teachers in this study have advocated for children living in poverty, working with colleagues to help ensure that students' needs are met. Self-organizing is how teachers have engaged colleagues in their work to help children.

This study has yielded agreement on the elements of self-organizing – meaning the factors at the individual, relational, and environmental – but not necessarily how these

factors evolve. Through this research, it is evident that there are teachers who are self-organizing to meet the needs of students living in poverty. This new information provides schools with an alternative to the programmatic approach that is being attempted in some high-needs schools (Kleinman et al., 2002). Because the programmatic approach is reliant upon funding that can disappear, self-organizing is perhaps a better option for schools to use in order to support children's well-being. It is a method of change that capitalizes on the strengths of the people already within the school community.

The results of this study support a theoretical foundation for self-organizing in human systems. It is the first study of its kind that identifies the supporting factors for self-organizing in the complex adaptive system of a school. It builds on the work of Keshavaraz et al., (2010) who has conceptualized schools as social complex adaptive systems. This study adds to the work of Houston (1999) and Eoyang (2009) on self-organizing as a construct. Future researchers can use the conclusions gleaned from this study as a springboard to further the study of self-organizing in schools.

As educators and as people, we possess the ability to bring about change for children. With the increasing number of children in poverty, this is all the more vital. Self-organizing can truly help children meet their basic needs and this research has shown that it is within our power to do so. The phenomenon of self-organizing must continue to be studied in order for educators to better understand how our schools can respond to the changing needs of students.

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Appendix A

Recruitment Flyer

DOCTORAL CANDIDATE WANTS TO HEAR AND LEARN FROM YOUR
SUCCESSES (BOTH BIG AND SMALL)

My name is Jennifer Moore, and I've dedicated my professional life to <u>improving urban schools for students</u>.

Currently, I am a doctoral student studying how people like you, who teach in high-poverty, urban, public elementary schools rise up, going above and beyond to meet students' needs.

I know this type of effort makes a huge difference in our students' lives, which is why I'm studying it.

Please consider <u>sharing your stories</u> with me. Don't think your story or efforts are too small!

The stories I'm interested in hearing are those efforts that aren't written into your job description, but efforts <u>you knew would make a difference</u> in your students' education and overall success.

Particularly, I want to understand <u>group efforts</u>, where you may have enlisted the help of volunteers, colleagues, other school staff, parents, or people in the community.

Examples of such stories people include:

- a teacher who collaborated with other volunteers in her school to help a child get school uniforms that fit, even though she wasn't asked to do so.
- a teacher teaming up with cafeteria staff to make sure students had the extra food they needed in the mornings.
- a counselor and a teacher who alternated picking up students to make sure they were able to get to school on time.
- a parent and teacher who worked together to create a tutoring program for struggling students.
- a security guard and teacher who worked together to increase student attendance, even though no one asked them to do it.
- a teacher and teacher assistant who collaborated with health professionals to provide students with resources/opportunities because she saw a need to do so.
- a group of teachers who came together , on their own, to introduce a new way of doing something at their school.

☼   ☼   ☼   ☼   ☼

I appreciate your help! Our work will be done via email during the first few months of 2011, and anonymity is assured. Contact me at ▮▮▮▮▮▮▮▮▮▮▮▮▮▮ by December 15, 2010 or ▮▮▮▮▮▮. Feel free to share this opportunity with others you know who could participate!

Appendix B

Initial Meeting Guidelines for Researcher

At Initial Meeting:

1. Tell me about yourself and your work.

2. Here's an overview of the study: I am interested in studying how and why groups of adults work together to go above and beyond for children. You do this work all the time and this study is a way to make all of your hard work public. It's important to acknowledge how and why school staff and volunteers are coming together to help students – now more than ever, given the increasing number of children living in poverty coming to schools with unmet needs. With nine other individuals, we will work together to explain the how and why people self-organize in schools by sharing stories and ideas about this phenomenon during the first few months of 2011.

3. Emphasize that in the study, the participant *is* the study because each round depends on the contributions that s/he makes. All of their input will be funneled back into the data.

4. In what ways have you or people you know self-organized?

5. Clearly convey logistics of the study and the criteria for participants

6. What questions do you have for me?

7. Provide individuals with information about next steps, if there is interest

Appendix C

Informed Consent Form

Participant: _____

Principal Investigator: Jennifer Moore

Title of Project: *An explorative study of self-organizing in high-needs, public, urban elementary schools: Supporting individual, relational, and environmental factors*

I, _____ , agree to participate in the research study being conducted by Jennifer Moore under the direction of Dr. Kay Davis. I understand that this project is research being conducted in partial fulfillment of the requirements for a doctoral dissertation.

The overall purpose of this study is to explore self-organizing systems in schools, specifically the people and the conditions that support self-organizing in urban elementary schools. This is an important early step in identifying the existence of these potential mechanisms for change. The method used in this study is referred to as the Delphi method. Round one involves participants *giving three examples of when they have self-organized*, round two involves participants responding to a summary of round one and identifying areas of agreement and disagreement, and round three involves participants reaching consensus regarding key ideas related to self-organizing.

This study is conducted in partial fulfillment of the requirements for the degree of Doctor of Education in Organization Change at Pepperdine University.

My participation will involve the following:
 ● Meeting with the researcher prior to beginning the research.
 ● Responding to three separate emails within a week of receiving each one, writing between 1-3 pages. I understand that it will take me approximately 30 minutes to respond to each email.

My participation in the study will occur over the course of the first three or four months of 2011. The study shall be conducted via email, with my personal computer and my personal email address, during my personal time.

I understand that a possible benefit to myself or society from this research is that the results of the study can be used to help schools better serve meet students' myriad needs, specifically, those students living in poverty. Another benefit of this research is that the work that teachers do, usually considered "above and beyond their job description," will be acknowledged and legitimized, providing the public with more information about the dedication and commitment of public school teachers.

I understand that the risks involved with participating in this study are minimal. The information gathered throughout this study will be anonymously presented to the other participants, ensuring participants' anonymity. There will be no identifying information regarding any of the participants in the feedback and analysis presented in the rounds of data collection.

I understand that I may choose not to participate in this research.

I understand that my participation is voluntary and that I may refuse to participate and or withdraw my consent and discontinue participation in the project or activity at any time without penalty or loss of benefits to which I am otherwise entitled.

I understand that the investigator(s) will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project. The confidentiality of my records will be maintained in accordance with applicable state and federal laws.

I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Dr. Kay Davis at ▇▇▇▇▇▇▇▇ or at kay.davis@pepperdine.edu if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Dr. Doug Leigh, Chairperson of the Graduate and Professional School Institutional Review Board, Pepperdine University, at ▇▇▇▇▇▇ or at doug.leigh@pepperdine.edu

I will be informed of any significant new findings developed during the course of my participation in this research which may have a bearing on my willingness to continue in the study.

I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research described above.

_____

Participant's Signature   Date

_____

Witness Signature   Date

    I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

_____   _____

Principal Investigator   Date

Appendix D

Confirmation of Participation Email

(sent to participants immediately following receipt of Participants' Informed Consent Form)

<<email address>>

Dear   ,

Congratulations! You are going to be participating in the exploratory study of self-organizing systems. Thank you for agreeing to share your wisdom and experiences! Please enter the following dates in your calendar because the timeline for data collection is fairly tight:

Phase	Dates Participants will Receive Questions	Due Dates by which Participants are Expected to Respond
Round One	January 2011	January 2011
Round Two	January 2011	February 2011
Round Three	February 2011	March 2011

- You will have 1 week to respond to each round of questions.
- Please anticipate spending approximately 30 minutes to respond, which includes reading the data summary and answering the questions.
- Please do everything you can do respond by the Due Dates.
- If, for some reason, an emergency arises and you are unable to send in your responses by the Due Dates, please send Jenn an email as soon as possible.
- You can expect a reminder email the next day if you have not responded by each Due Date.

I understand and respect that you are very busy people and you are participating in this research during your 'free' time. Thank you very much for doing so.

Sincerely,

Jenn Moore

Appendix E

IRB Approval Letter

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

January 21, 2011
Jennifer Moore

████████████████████
███████████

Protocol #: E1210D02
Project Title: *An Explorative Study of Self-Organizing in High Needs, Public, Urban*
Elementary Schools: Supporting Individual, Relational, and Environmental Factors

Dear Ms. Moore:

Thank you for submitting the revisions requested by Pepperdine University's Graduate
and Professional Schools IRB (GPS IRB) for your study, *An Explorative Study of Self-*
Organizing in High Needs, Public, Urban Elementary Schools: Supporting Individual,
Relational, and Environmental Factors. The IRB has reviewed your revisions and found
them acceptable. You may proceed with your study. The IRB has determined that the
above entitled project meets the requirements for exemption under the federal regulations
45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html that govern the
protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:
(b) Unless otherwise required by Department or Agency heads, research activities in
which the only involvement of human subjects will be in one or more of the following
categories are exempt from this policy:

Category (2) of 45 CFR 46.101, research involving the use of educational tests
(cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures
or observation of public behavior, unless: a) Information obtained is recorded in such a
manner that human subjects can be identified, directly or through identifiers linked to the
subjects; and b) any disclosure of the human subjects' responses outside the research
could reasonably place the subjects at risk of criminal or civil liability or be damaging to
the subjects' financial standing, employability, or reputation.
Your research must be conducted according to the proposal that was submitted to the
IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and
approved by the IRB before implementation. For any proposed changes in your research
protocol, please submit a **Request for**

Modification Form to the GPS IRB. Because your study falls under exemption, there is
no requirement for continuing IRB review of your project. Please be aware that changes
to your protocol may prevent the research from qualifying for exemption from 45 CFR

46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

6100 Center Drive, Los Angeles, California 90045 □ 310-568-5600

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,
Yuying Tsong, Ph.D.
Clinical Professor/Research Methodologist
Psychology Division
Pepperdine University
Graduate School of Education and Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
█████@pepperdine.edu

cc: Dr. Lee Kats, Associate Provost for Research & Assistant Dean of Research, Seaver College
Ms. Alexandra Roosa, Director Research and Sponsored Programs
Dr. Yuying Tsong, Interim Chair, Graduate and Professional Schools IRB
Ms. Jean Kang, Manager, Graduate and Professional Schools IRB
Dr. Kay Davis
Ms. Christie Dailo

Appendix F

Summary of Participation in Data Collection

Total Number of Participants on Panel (as determined by Consent Forms): <u>9</u>

	Responses Received								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Round 1	X	X	X	X	X	X	X	X	X
Round 2	X	X	X	X	X	X	X	X	X
Round 3	X	X	X	X	X	X	X	X	X

Appendix G

Round 1 Questionnaire Sent via Email

From: jmoore ███████████████████

To:

Subject: Round One Questionnaire for Research Study

Date:

Dear   ,

Hello! I hope that you are well! Welcome to the first round of data collection!
Please respond to all of the following three prompts in one email/document, clearly identifying your response to each prompt (#1, #2, #3).
You can respond in the body of an email or a Microsoft Word document that you attach to an email.
Please answer in as much detail as possible, explaining who was involved in each story, how they were involved, who did what, and why people did what they did. I would appreciate as much specificity as you think is necessary to give me a full picture.
Please just use first names.

I will send you a confirmation email as soon as I receive your response to this first round.
Please send your response back to me no later than Friday, February 18. *The earlier, the better!*

Round One Prompts:

1. ***Please describe a time when you initiated a project/event where you collaborated with other adults at your school to help a child's physical or social/emotional needs be met.***
2. ***Please describe a time when other adults at your school asked you to informally collaborate on a project/event to help a child's physical or social/emotional needs be met.***
3. ***Please describe a time when you worked with a formal team (such as a leadership team, a grade level team, or a student study team) at your school to help a child's physical or social/emotional needs be met.***

I look forward to reading your responses!

Thanks,
Jenn

Appendix H

Round 2 Questionnaire Sent via Email

From: jmoore███████████████████

       To:

Subject: round 2 questions

      Date: Sat, Feb 26, 2011 10:23 am

Attachments: round_2_questions.doc (85K)

Dear   ,

Hello! I hope that you are doing well! Attached you will find the questions/prompts for Round 2.

Please write your responses directly into the document and then send it back to me as an attachment by **Tuesday, March 8th**.

If you have any questions about what you're supposed to do for the Round 2 prompts, please email me or give me a call at ████████████.

I'm looking forward to reading what you write!

Take care,
Jenn

Attachment:
Round 2 Questions

For this second round of data collection, there are 3 sections that I'd like you to respond to. Each section has a summary of results from the previous round and then two writing prompts. Please write your answers in this document and send it back to me as an attachment by Tuesday, March 8th.

Section 1 – Individual Factors

<table>
<tr><td>

Summary
The following list is a compilation of the factors that seemed to impact teachers' decision to self-organize, based on the summary and analysis of everyone's stories from round 1, prompt 1. The list begins with the most common factors that led participants to self-organize as individuals and ends with the least common factors. The self-organizing teacher…

1. has a strong sense that she can help the student (a.k.a. self-efficacy);
2. has a high awareness of the student's situation/need;
3. deeply cares for the student;
4. empathizes with the student's distress;
5. has a role model who also went above and beyond;
6. has strong religious beliefs;
7. sees herself in the student;
8. feels morally obligated/responsible to help the student; and
9. gains a sense of satisfaction in helping the student.

</td></tr>
</table>

Now I'd like you to recall the situation(s) you wrote about in round 1, prompt 1, which asked you about a time that you initiated a collaboration with another adult to help meet a child's physical or social/emotional needs. Please use that as the context to respond to the two prompts in this section.

Writing Prompt 1: Next to each factor below, please select how much the factor affected your decision to self organize by putting an 'x' in one of the rating columns. Then, write about the item that you gave the strongest ratings to. Please write as much as you would like to in the boxes – they will expand as you write. If there are factors that affected your decision that you would like to add, please do so.

Individual Factors		How much did this factor contribute to your decision to self-organize?				How did this factor contribute to your decision to self-organize?
		Strongly	Moderately	Minimally	Did not	
1	having a strong sense that she can help the student (a.k.a. self-efficacy)					
2	having a high awareness of the student's situation/need					
3	deeply caring for the student					
4	empathizing with the student's distress					
5	having a role model who also went above and beyond					
6	having strong religious beliefs					
7	sees herself in the student					
8	feels morally obligated/responsible to help the student					
9	gains a sense of satisfaction in helping the student					
Other						
Other						

Writing Prompt 2: Of all of these factors, which, if any, had the greatest impact on your decision to self-organize? Please write your response below:

Section 2 – Social Factors

Summary

The following list is a compilation of the factors that seemed to impact teachers' decisions to self-organize and collaborate with others, based on the summary and analysis of everyone's stories from round 1, prompt 2. The list begins with the most common factors that led participants to self-organize and collaborate with other adults and ends with the least common factors. The teacher and her collaborator(s):

1. have a common goal - helping the child;
2. have relational trust with one another - meaning they respect each other, care about each other's well-being, think that each other is competent, and has integrity;
3. share a sense of urgency to help the child;
4. share similar religious/spiritual beliefs;
5. share a caring relationship with the student; and
6. share similar values.

Now I'd like you to recall the situation(s) you wrote about in round 1, prompt 2, which asked you about a time when other adults at your school asked you to collaborated to help a child's physical or social/emotional needs be met. Please use that as the context to respond to the two prompts in this section.

Writing Prompt 3: Next to each factor below, please select how much the factor affected your decision to self organize with someone else by putting an 'x' in one of the rating columns. Then, write about the item that you gave the strongest ratings to. Please write as much as you would like to in the boxes – they will expand as you write. If there are factors that affected your decision that you would like to add, please do so.

	Social Factors	How much did this factor contribute to your decision to self-organize with someone else?				How did this factor contribute to your decision to self-organize with someone else?
		Strongly	Moderately	Minimally	Did not	
1	have a common goal - helping the child					
2	have relational trust with one another - meaning they respect each other, care about each other's well-being, think that each other is competent, and has integrity					
3	share a sense of urgency to help the child					
4	share similar religious/spiritual beliefs					
5	share a caring relationship with the student					
6	share similar values					
Other						
Other						

Writing Prompt 4: Of all of these factors, which, if any, had the greatest impact on your decision to self-organize with someone else? Please write your response below:

Section 3 – Environmental/Structural Factors

Summary
The following is a list of environmental factors that were available to teachers to help them self-organize to meet the needs of a child, based on everyone's responses from round 1, prompt 3. These environmental factors were:

1. an historically successful, clearly-defined, effective, multi-disciplinary team
2. historical and consistent administrative support at the school level
3. clear and consistent district support
4. information distributed to teachers about programs and resources for children

Now, I'd like you to recall what you wrote about in round 1, prompt 3, which asked you about a time when you worked with a formal team to help meet a child's social/emotional needs.

- If you did use an environmental/structural support and it went well, please answer Writing Prompt 5 based on your experience.
- If you did not use an environmental/structural support or had an unsuccessful experience using one, please write about how each of the factors in the table would impact your decision to self-organize using a school structure.
- Please write as much as you would like to in the boxes – they will expand as you write.
- Please respond to the questions below the table regarding two additional factors that could potentially contribute to your decision to self-organize using an environmental/school structure.

Writing Prompt 5:

Environmental/Structural Factors	How useful would each factor be to your decision to self-organize using a school structure?				How would this factor contribute to your decision to self- organize using a school structure?
	Very	Moderately	Minimally	Not at all	
1	an historically successful, clearly-defined, effective, multi-disciplinary team					
2	historical and consistent administrative support at the school level					
3	clear and consistent district support					
4	information distributed to teachers about programs and resources for children					

What if there were clear and consistent societal and governmental support for your work? How would that environmental/structural support affect your decision to self-organize?

What if there were good working conditions (defined as having ownership of your work, the degree of bureaucratization, your position in the school hierarchy, how closely teachers are supervised, the routinization of your work, the substantive complexity of your work, the time pressures on teachers, the heaviness of the work, the dirtiness of the work, the likelihood of "dramatic change" in the work that teachers do, the frequency of being held responsible for things outside of one's control, and the risk of loss of your job)? Would that make you more likely to self-organize?

Writing Prompt 6: Based on your stories from round 1, it seems that individual and relational factors support teachers self-organizing moreso than environmental/structural elements. Do you agree or disagree with this finding? Why?   Please write your thoughts below.

Appendix I

Email Confirmation of Receipt of Responses for Rounds One and Two

(sent to participants immediately following receipt of the responses for each round)

From: jmoore ███████████████████
To:
Subject: Round _____ Questionnaire for Research Study
Date:

Dear   ,

I received your Round _____ responses. Thank you! I'll be in touch with the Round ___

Questions in 7-10 days.

Take care,

Jenn

Appendix J

Round 3 Questionnaire Sent Via Email

From: jmoore█████████████████████

To:

Subject: round 3 questionnaire

Date: Wed, Mar 16, 2011 6:29 pm

Attachments: Round_3_Questionnaire.doc (48K)

Dear   ,

Hello! I hope that you are doing well. I've found all of the Round 2 responses to be illuminating. Thank you so much for your insightful thinking and writing!

I'm attaching the final round of questions in the Round 3 Questionnaire. Like last time, please write your answers on the document and send it back to me as an email attachment.

Please return your completed responses to me by Friday, March 24th. I'm really looking forward to reading your final thoughts and reflections!

Take care,
Jenn

Attachment: Round 3 Questionnaire Regarding Self-Organizing

Individual Factors

Summary

Based on Round 2 responses, it seems that there are two individual factors that support self-organizing.

You self-organize because you experience one or both of the following:

1) a strong sense that you **<u>can</u>** help the student once you know about the student's situation
   (because you have previously helped a student, because you have seen others do so, or because it is within your capabilities or resources to do so);

2) a strong sense that you **<u>should</u>** (or need to or want to) help the student once you know about the student's situation
    (because of a moral obligation/higher power, because you care for/empathize with the child, or because of a personal sense of satisfaction).

Based on this summary, please respond to the following prompts:

1. Do you agree that the findings above are an accurate description of individual factors in self-organizing? Please write 'yes' or 'no' here: _____

   If you disagree with a finding, please write the number(s) of the finding(s) and why you disagree with it below.

2. How do you think the two reasons above are connected, if they are? Please write your answer below.

3. What do you think makes you different from the teacher who recognizes that she **<u>can</u>** help, feels like she **<u>should</u>** help, but decides **<u>not</u>** to help?

Relational Factors

Summary

Based on Round 2 responses, it appears that there are three social factors that support self-organizing:

1. sharing the common goal of helping the child with the others you're collaborating with;

2. the existence of relational trust among the people you're collaborating with;

3. a shared sense of urgency to accomplish the common goal.

There are inevitably other factors that affect participants' decisions to self-organize with others, such as shared values, shared religious/spiritual beliefs, and sharing a caring relationship with the child. These factors seem to affect each participant slightly differently, whereas the three listed above seemed to play a prominent role in all participants' decisions to self-organize with others.

Based on this summary, please respond to the following prompts:

4. Do you agree that the findings above are an accurate description of relational factors in self-organizing? Please write 'yes' or 'no' here: _____

    If you disagree with a finding, please write the number(s) of the finding(s) and why you disagree with it below.

5. Do all three of these factors need to exist simultaneously in order for self-organizing to occur? Why or why not? Please write your answer below.

6. What is the order that these three factors developed in your overall experiences with self-organizing? Please write your answer below.

Environmental Factors

Summary

Based on Round 2 responses, there are five findings about the four kinds of environmental factors (societal, structural, administrative, and working conditions*) that support self-organizing.

Finding 1: The presence or absence of societal factors, such as district support and information given to teachers about resources for children, **may** affect a teacher's decision to self-organize to help a child.

Finding 2: The presence of structural factors **may** affect a teacher's self-organizing. If there is an historically successful, clearly-defined, effective, multi-disciplinary team the teacher can collaborate with, this **may** be a structure that can support a teacher's efforts to self-organize.

Finding 3: The presence of historical and consistent administrative support at the school level **may** support a teacher's self-organizing.

Finding 4: Good working conditions **may** cause some teachers to organize less and others to organize more. The quality of working conditions **may** not affect some teachers' self-organizing at all.

Finding 5: Individual and relational factors have a more significant impact on self-organizing than environmental ones.

*Working conditions are defined as: having ownership of the work, the degree of bureaucratization, one's position in the organizational hierarchy, how closely teachers are supervised, the routinization of the work, the substantive complexity of the work, the time pressures on teachers, the heaviness of the work, the dirtiness of the work, the likelihood of "dramatic change" in the work that teachers do, the frequency of being held responsible for things outside of one's control, and the risk of loss of your job.

Based on this summary, please respond to the following prompts:

7. Do you agree that the findings above are an accurate description of the environmental factors in self-organizing? Please write 'yes' or 'no' here: _____

     If you disagree with a finding, please write the number(s) of the finding(s) and why you disagree with it below.

Summary of Factors Influencing Self-Organizing

8. What do you think other educators, as well as the general public, should know about how and why you self-organize to help children? Please write your answer below.

9. What recommendations do you have for policymakers to support teachers as they self-organize to address children's physical, social, and emotional needs?

Appendix K

Round 3 Confirmation Email

(sent to participants immediately following receipt of Round 3 responses)

From: jmoore ████████████████████

   To:

Subject: Re: round 3 questionnaire

   Date: Mon, Mar 21, 2011 8:45 pm

Dear   ,

Thanks so much for completing the Round 3 Questionnaire! I appreciate you taking the time to respond! I'll be in touch again once I get back all of the Round 3 Questionnaire results.

Take care,
Jenn