Understanding Teacher Resistance to Change: Breaking Down the Walls of the

Classroom Silo with Social Capital

by

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ABSTRACT

School leaders often view teacher resistance to change as willful defiance, but there is much more to understand if change agents are willing to peel back the layers of the resistance and dig deeper into the reasons why teachers may struggle to accept new innovations. This action research project is grounded in the notion that an intentional focus on discourse about change through social interaction with teachers who have varying perspectives will increase the probability of enduring transformation in teaching and encourage teachers to continue sharing best practices beyond the silos of their classrooms. Teachers adopting a new literacy curriculum at Harpeth Academy, a private independent school in South City, TN, worked together to discuss reactions to and experiences with new curriculum in a Professional Learning Community (PLC) consisting of three 60- minute jigsaw collaborative learning activities led by the researcher. The objective was to understand how Jigsaw PLCs may affect teachers' resistance to change and their perceptions of and attitudes towards the new curriculum. The intervention is framed through a social constructivist lens using social capital as a guiding theory. Data was collected through pre and post interviews, meeting transcripts, and teacher journals. The findings of this study suggest that the social capital created in the Jigsaw PLC affected teachers' resistance to change and had a positive effect on their attitudes toward and belief in the new curriculum. The time spent in these collaborative learning communities with diverse colleagues addressed concerns about relationships and autonomy, created a sense of shared vulnerability and fate, and allowed teachers to inquire about the merits and benefits of the change.

DEDICATION

This work is dedicated to all the teachers I have been honored to lead who so willingly rode the tides of change, but mostly to the resistors who were vulnerable enough to ask big, beautiful questions.

AKNOWLEDGMENTS

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CHAPTER1

BACKGROUND TO THE STUDY

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in the introduction of a new order of things."
-Machiavelli

Introduction

Change is hard. It is particularly hard for school teachers who have dedicated a lifetime to educating children. The time and energy invested in the creation of curriculum, lesson plans, and relationships over their years in the profession cannot possibly be quantified. In a field where best practices seem to be ever-evolving, change requires the expenditure of more time and energy, forcing teachers to accept an ongoing expectation from leaders of reevaluating, relearning, and redoing. This constant reinventing of practices can be a burden. Teachers have to deal with the tension between a desire for stability that offers security, and the adaptability that can open up great opportunities for professional growth and ultimately better student outcomes. Schools and the educators who run them cannot be the same, think the same, and act the same if we hope for our children to be successful in a world that has not remained the same. Change is inevitable.

School leaders often view teacher resistance to change as willful defiance, but there is much more to understand if we are willing to peel back the layers of the resistance and dig deeper into the reasons why teachers may struggle to accept new innovations. Looking carefully at the reasons why teachers enter the profession can provide insight into the resistance to change. For most teachers, it encompasses more than their passion for learning or their love of children, and instead, it lies deep within the

ways change challenges the intrinsic rewards teachers identify for entering the profession. If policymakers, change agents, and school leaders are willing to understand teacher resistance to change, we can find ways to usher change into communities of practice that honor teacher voices and help them work collaboratively to improve best practices.

Larger Context

What has appeared to be willful resistance to change in schools generally has had a deeper meaning than what leaders anticipate (Snyder, 2017). Working through perceived resistance to understand the perspectives of teachers who have been expected to carry through with interventions and innovations has provided leaders with valuable information that can propel a community of practice forward (Goodson, et al., 2006). Dan Lortie, professor emeritus from the University of Chicago, suggested that we might mediate the tension between the ethos of teachers and the contingencies of change in his book *Schoolteacher* which outlined the culture of the teaching profession, providing insights into the behaviors and patterns of practice within the occupation. Lortie posited work as a teacher was an "activity directed toward achieving goals. But there is usually something more; the story of work is largely a matter of elaboration beyond economic necessity… with special feeling and broader meaning" (Lortie, 1975, p. 107). Teachers' work entails deep feelings and personal goals that reach beyond material and professional recognition and instead center around the influence of relationships with students and colleagues, and the autonomy derived from being in classrooms. The culture and structure of an occupation influence the emphasis on some rewards rather than others; and teachers generally do not focus on the extrinsic rewards of the profession, but rather the emotional rewards that come from service to students and colleagues (Lortie, 1975).

Goodson et al. (2006) extended Lortie's work on teachers' psychic rewards and identified a type of political and social nostalgia connected to those rewards. In their work, Goodson et al. found nostalgia was "the major form of memory among a demographically dominant cohort of experienced older teachers" (p.42). Two noteworthy types of nostalgia have helped educational leaders clarify resistance and address concerns within their school's community. Social nostalgia is a memory of the sense of family, community, and relationships that define teachers' experiences. By comparison, political nostalgia is a memory of the autonomy and individualism that teachers enjoy in their classrooms without the intervention of top-down initiatives (Goodson, et al., 2006). Thus, any innovation or invention that threatens the political and social nostalgia teachers have maintained must be introduced and facilitated in ways that respect the relationships and autonomy to which teachers have connected meaning in their professional lives.

Snyder (2017) studied the underlying complexity of teacher resistance to change and found that teachers attempt to protect their psychic rewards when change is introduced and often view change through the lens of nostalgia. His research suggested these internal feelings of fulfillment were what teachers were afraid they would lose when a change was introduced by administrators. Notably, Snyder (2017) found teachers participated in change only to the extent it worked towards the preservation of their professional objectives. Thus, when facing resistant teachers, educational leaders are well served to consider which foundational psychic rewards are being threatened and which nostalgic perspective may be at play. Snyder cogently reaffirmed that teachers did not necessarily work towards protecting past conditions as much as they attempt to preserve relationships and the autonomy they experienced in their earlier careers.

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Through semi-structured interviews, Snyder's participants acknowledged they "may be more critical of change, but they were also willing to dialogue about meaningful implementation of initiatives in their local context" (2017, p.11). Educational leaders can provide opportunities to engage in conversations about change before and during implementation. This fosters conversations about the fears surrounding the ways change threatens teacher autonomy and student-teacher relationships.

Ford and Ford (2010) suggest that leaders need to stop blaming resistance to change and start using it to engage in dialogue that can build trust within a school culture. Leaders need to view resistance as an opportunity to hear feedback that can help a community grow rather than as a hindrance that appears to serve narrow self-interests. Resistance is a concept that leaders use "to label the behaviors and communications they don't like or don't think should happen, and which they feel will increase the amount of work they must do to ensure a successful change" (Ford & Ford, 2010, p. 25). Good school leaders need to understand the social dynamics at play when encountering resistance and listen and respond to teachers expressing viable concerns about the change itself, how it was introduced, and the fears surrounding possible failure due to lack of support and resources. Teachers' objections and worries are likely to contain valuable information and rather than dismiss them as resistors, leaders need to encourage discourse that can reveal hidden opportunities that may even strengthen the implementation of an innovation.

Through their own actions and inactions, leaders eliminate the potential awareness that resistance can afford a community of practice. Tomlinson et al. (2004)

suggest that resistance is neither sudden nor a direct reaction to a change initiative, but instead a function of the quality of the relationship between change agents and recipients. Change interrupts normal patterns of organizational structure. When leaders and teachers confront change together an opportunity for community sense-making presents itself. Sensemaking is an active process that "includes extracting particular behaviors and communications… interpreting them to give them meaning, and then acting on the resulting interpretation" (Ford et al., 2007) allowing for the leader to act on this new interpretation of the change in ways that support change recipients and strengthen the change itself.

Most theories surrounding the diffusion of innovations suggest that the success of its implementation is connected to the merits of the change, the qualities of the adopters, and the support of the leader. Although these may be at play, this limited perception suggests that change is an "object-like phenomenon that moves in the same way physical objects move and is slowed by physical contact with recipients… but innovations and change are not objects" (Ford et al., 2007, p. 366). Instead, they are conversations and discourses amongst those experiencing the change and those leading it. Since teachers measure the likelihood a change will lead to personal and organizational benefit (social and political nostalgia), change agents can gain ground by providing opportunities for scrutiny, questioning, evaluating, and countering the elements of the change. Tormala and Petty (2004) posit that refusing to acknowledge and support resistance can perpetuate it and create a sense of injustice within an organization. Dismissing feedback that is based on a teacher's values and beliefs can weaken trust and create a culture in which

teachers close the doors to their classrooms and operate within their silos in fear of being

misunderstood, undervalued, and misjudged by their peers and school leaders.

Local Context

I have spent my career teaching and leading in the private independent school

community. Previously, I was the Head of the Primary and Lower Divisions at a private

independent school in the Midwest of over 850 students that was established in 1962, and

I recently transitioned to a similar role at a private independent school in the South that

was started in 1958 and currently enrolls over 1,200 students. Both schools were started

in response to the progressive movement in education in the 1950s. The founding

families of both schools were disenchanted with the curriculum changes in public schools

and decided they wanted the independence to design their own schools without the

bureaucracy of government intervention. Both of these schools have grown

exponentially over the last five decades funded by tuition dollars and private donations.

Policies, procedures, and curricula are connected to well-established missions and

visions, and many of the faculty members have been employed as teachers for over

twenty years, some of them are graduates of the schools themselves.

Private independent schools are deeply tied to their missions, visions, and

traditions. Every decision is considered carefully based on how well it aligns with the

mission of the school and whether it threatens well-established traditions. Thus, change is

always viewed through the lens of mission and vision as well as the teacher nostalgia that

surrounds those mission statements. Private independent school teachers position

themselves within a variety of traditions and respond to change in ways that help them

maintain their autonomy as well as protect the relationships they have established with students and colleagues. Moore et al. (2002) observed that the professional identities teachers created defined the reasons and motivations behind their resistance to change. Moreover, the authors noted, "teachers as active agents, position themselves within a variety of traditions in response to needs that arise from an assessment of the circumstances in which they find themselves" (Moore et al., 2002, p. 553). This research suggests that teachers will adapt to change, but they will maintain their ideologies, and connections to missions and community traditions in order to maintain their autonomy and protect relationships with students.

Problem of Practice

There is very little research surrounding teacher resistance to change in private independent school settings. Most research on change is focused on public school teachers and studies conducted about private schools have been generated by larger associations like Independent School Management (ISM) and the National Association of Independent Schools (NAIS). Studies comparing private and public school teachers suggest that private school teachers tend to have higher job satisfaction rates due to fewer discipline problems and a greater sense of autonomy over curriculum and teaching practices, even though they have lower compensation rates (Liu & Meyer, 2005). Fidan and Ozturk (2015) conducted a comparative analysis to measure the climate of innovation in both public and private school settings and found that private school teachers tend to have a more positive perception of innovation and Hussain et al. (2020) suggests that the ratio of innovative practices is relatively higher in private schools than in public schools.

Studying perceived resistance in private independent schools can give change agents ways to uncover and tap into this innovative spirit already present in private school communities.

Research conducted in 2017 by the NAIS surrounding private independent school teachers concluded that private school educators want leaders to help them find ways to pass on their expertise and experience while helping them build new knowledge in order to impact their students. Engaging in conversations with colleagues and leaders was indicated as one of the top unmet needs of the teachers interviewed, who came from different geographic, demographic, and grade level teaching backgrounds in private school settings. D'Ercole (2018) conducted a mixed methods study of 100 private school teachers and found that relationships, autonomy, administrative support, and alignment with mission and vision were the reasons private school teachers remained in their communities of practice. These studies suggest that further research could help change agents better understand the connection between psychic rewards and teacher nostalgia, and how they may be connected to a private school's mission, vision, and traditions. Thus, I see a need to study and understand the voices of private independent school teachers and their perception of change at the local level.

During the reconnaissance phase and cycle 0 of my research, I identified how resistance to change among teachers was compounded by the silos in which teachers operated within the independent school community. Without time to engage in meaningful dialogue about change, teachers indicated that they were more likely to resist innovations, especially those perceived as top-down initiatives from administrators.

Furthermore, I discovered that innovative teachers want to find ways to pass on their experience and expertise to their colleagues so that they can impact the learning of all the students in the school. Teachers want to engage in meaningful dialogue with one another across grade levels to share experiences, fears, questions, and expertise, and this became apparent during my interviews with teachers in my community of practice. This connects with what the current research tells us about teachers entering the profession for the relationships and the need to protect these relationships through times of change.

As I entered Cycle 1 of my research, COVID-19 caused my private independent school to shift to remote learning. Teachers were forced to quickly shift to "best practices" in remote teaching and this caused a great deal of panic and fear amongst my faculty. However, armed with the knowledge that dialogue could support them through this change, I created an opportunity for a small group of teachers from different grade levels to meet four separate times via Zoom to engage in honest and open conversation surrounding these new shared practices and how remote teaching could be delivered in alignment with mission, vision, and tradition. Using Shaul Oreg's Resistance to Change Scale (RTC), I created a Professional Learning Community (PLC) that included four teachers from different grade levels, two whose RTC score indicated qualities of being stressed by change and two who had characteristics of embracing change. This PLC met four times to discuss the challenges the new innovation posed and how they were implementing their new skills into their "remote" classrooms. Interviews and surveys conducted after these four meetings indicated that all four teachers were less resistant to the change, felt supported, and less stressed when given the time to share their fears

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openly with peers and leaders. Sharing successes and failures with one another allowed teachers to explore ways to align the change with the mission and vision of the school.

My experience as a private independent school leader is that willful opposition must be understood and overcome in order for systemic organizational change to take place. Understanding the why behind what appears to be resistance, and learning how to be a better change agent will support a more open, communicative, and positive independent school community. The voices of the private school teachers in my community indicate that resistance is not defiant in nature, but instead an attempt to protect emotional investment, organizational structures, relationships, and the autonomy they enjoy as professionals. Understanding this perspective can drive a community of practice forward and should not be trivialized by leaders as an overly emotional reaction. I believe my teachers are more likely to become engaged in change efforts if I am willing to listen and create opportunities for "teachers' meanings, missions, and memories" (Goodson et al., 2006, p.56) to be heard. When change initiatives include teachers' perspectives and they are allowed to spend time making meaning together, teachers will be more responsive and open to innovation.

Introduction of New Literacy Curriculum

During the interview process for the role of Division Head at Harpeth Academy (pseudonym), it was clear that the school was looking for a leader to define and realign the reading curriculum across the Lower School. The teachers at each grade level and across the division were operating as separate entities, delivering their own reading

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curriculum based loosely on whole language and guided reading principles and using text from Fountas and Pinnell. There was very little collaboration among grade level teams and no communication from grade level to grade level in regards to student benchmarks for literacy.

I spent the first quarter as the new division head observing, listening, and investigating how reading instruction was delivered and was surprised at the lack of explicit instruction in phonemic awareness and phonics at the K-2 level. I reviewed the standardized assessments administered to our grade 4 and 5 students and discovered that we consistently fell below the independent school norms in reading comprehension and vocabulary. Through conversations with our reading teacher and learning specialist, I also discovered that a disproportionate number of our K-4 students were being referred out for "learning disabilities" in reading and spelling.

Armed with this knowledge, I invited teachers to join a voluntary "book club" which met four times during the second quarter of the 2020-2021 school year to discuss articles and podcasts centered around the science of reading. We discussed how our K-3 students could benefit from a formal and explicit phonemic awareness and phonics curriculum as well as exposure to decodable readers rather than the leveled books from Fountas and Pinnell.

In conjunction with the reading specialist, learning specialist, and the curriculum director we decided to introduce Orton Gillingham (OG) to our teachers, a sequential and multisensory phonics approach to teaching reading. Opportunities were presented for them to be trained through the Institute of Multisensory Education. Currently, all K-2 teachers have been formally trained, and our grade 3 teachers began their training in the spring in conjunction with this research study. K-2 teachers followed the sequence of instruction presented in Recipe for Reading, generated their own sight word lists as grade level teams, developed assessments to measure student mastery, and used decodable readers during their ninety- minute literacy blocks. These changes were significant shifts from the whole language approach the teachers had been implementing over the last ten years. Furthermore, the level of collaboration within and across grade levels required to implement this curriculum was not part of Harpeth Academy's professional culture, making this an opportune time to conduct this action research study on teacher resistance to change.

The Innovation

This innovation required teachers to work together to discuss reactions to and experiences with new practices in a Professional Learning Community (PLC) consisting of three 60- minute jigsaw collaborative learning activities led by the researcher. Teachers met to engage in dialogue surrounding the new literacy curriculum rolled out in

our K-3 program during the 2021-22 school year. The goal was not to measure the success of the new teaching practices, but to understand how the Jigsaw PLC may affect teachers' resistance to change and their perceptions of and attitudes towards the new curriculum. Hall and Hord (2006) suggest that the first three concerns teachers experience as they move through change is to wonder how the change will affect them, what they have to do to make the change, and how it will affect their students. These questions must be answered before a teacher can move to take action and implement a change in their teaching. Giving teachers the platform to discuss this initial stage of concern with one another was the goal of the Jigsaw PLC, so that they could move forward with the change in the classroom.

Rather than individuals operating within the silos of their classrooms to influence student learning, collaborative teams that work towards shared goals can have a positive influence on student learning across the school. Dufour (2004) suggests that the collaboration that exists within "professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice. Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning" (p. 8). Hord and Sommers (2008) suggest that a PLC can foster collaboration and collective responsibility through personal relationships that "support the community's human and interpersonal development, openness, truth telling, and

focus on attitudes of respect and caring among the members" (Hord & Sommers, 2008, p.9). Individual teachers become a community to openly discuss instructional problems, changes, and to explore solutions with an unrelenting focus on improving student learning. This collective learning in a Jigsaw PLC is based on collegial inquiry and ongoing reflection by the teachers through dialogue.

The Jigsaw collaborative learning approach was first developed as a way to combat racial bias among Black, Hispanic, and white students in elementary schools by social psychologist Elliot Aronson. With his research team, Aronson et al. (1978) recommended creating a cooperative environment where students had to depend on each other to learn content rather than compete against one another in a traditional classroom. This original learning structure consists of grouping members with varying aspects of knowledge about a particular topic, allowing each member to provide a valuable component to the group learning experience. This arrangement fosters a community in which students bring a unique perspective and a piece of vital knowledge to the group that was not readily available except from that individual student (Aronson & Patnoe, 2011).

Teachers participating in this innovation worked in jigsaw groups within the PLC based on varying RTC scores. Using the Jigsaw PLC format in the cycles of action research in my context allowed participants to share their different values, knowledge, and experiences surrounding the curriculum with one another. Grouping innovators with resistors encouraged differentiated conversations that allowed the participants to make meaning together. Social networks that impacted the participants' perception of change

impacted behavior since teachers' "ways of knowing may differ as their knowledge emerges from interactions within social groups" (Hamilton & White, 2010, p. 276). Social interactions in Jigsaw PLCs "bolster our narrower selves… and constitute a kind of sociological superglue" (Putnam, 2000, p. 23).

When teachers operate as individuals "there is limited transfer of knowledge within the school. Staff members who stay disconnected and in the confines of their classrooms reduce their shared repertoire. Unless we engage in conversation with others, "we are limited by our own thinking and at our own level of consciousness" (Hord & Sommers, 2008, p 85). The best way to foster change is to use the group to change the group and the researcher's role in this endeavor was to establish a safe environment for teachers to criticize, question, and share concerns about an innovation. Meaning is clarified through dialogue, and the researcher's position within the Jigsaw PLC was to actively listen, refrain from judgment, and avoid formulating solutions to concerns prematurely (Hord & Sommers, 2008, p. 97).

Research Questions

The following are my research questions:

Research Question 1: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' resistance to change?

Research Question 2: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers attitudes towards and perceptions of new curriculum?

Role of the Researcher

As an administrator at a private independent school, I was deeply embedded in the context and was an active participant in this research. The research focused on the qualities and characteristics of my teacher population with the intent to learn about teacher resistance to change in order to make improvements and gain understanding. The new way of knowing can then be applied to a broader context beyond my own private independent school community. The process was cyclical and each cycle led to reflection that spiraled back to further analysis of the problem; thus, it was not necessarily conclusive in nature and does not necessarily solve the problem (Given, 2008; Herr & Anderson, 2005; Mertler, 2017). However, the goal of each cycle was to find new ways of understanding and knowing about teacher resistance to change in a private independent school setting.

Since my positionality was one of membership within the teacher community, I was co-constructing meaning with the teachers through mutual interaction within the research setting (Costantino, 2012). I intended to be an integral part of the social network as I took part in leading the Jigsaw PLC. I attempted to model how to engage in conversation, listen, offer constructive feedback, and ask questions as part of my role as an instructional coach. I encouraged the teachers to break out of the silos of their classrooms and abandon their individualism for a more collective effort that would make this change more palatable, leading to better practices in the classroom. I explored my own understanding and ways of knowing during my interactions with the teachers during

this study; simultaneously attempting to build social capital that had a positive effect on my school's community of practice.

This action research study positioned me as an insider in collaboration with the teachers, but my position as their leader needed to be addressed throughout all steps of the research process. The different roles, positions, and relationships I have with the teachers may have influenced the data since my position as leader can influence what and how they shared their experience with me. My role as administrator within the community of practice requires that I offer ongoing professional feedback, approve grade level budgets, and evaluate teacher performance. Throughout the process I needed to be acutely aware of how this power differential influenced the process and the interpretation of the findings by "continually bringing them to the forefront for discussion with participants and seeking to redress power imbalances that disenfranchise or minimize the voice of key participants" (Coghlan & Brydon-Miller, 2014, p. 4). I asked teachers to review the accuracy of data sources and my interpretation of them through member checking. I worked on my own reflexivity through journal notes that documented my own assumptions and biases during the data analysis process (Mertler, 2017).

I also had to be transparent about my own recent reaction and resistance to change. After teaching and leading in the same school for over twenty-five years, I accepted a new leadership position in another private independent school. I moved from the Midwest to the South, became an empty nester, and had to adjust to the guidelines and protocols of leading under COVID all at the same time. I have always defined myself as spontaneous and more of an innovator than a resistor, but the most recent changes in

my own personal and professional life made me realize that I also can cling to the aspects of social and political nostalgia that can make change difficult. As my own autonomy and relationships shifted within my professional life, I found myself quite resistant to the changes taking place. What I have found helpful is engaging in meaningful dialogue with trusted colleagues who serve in various roles throughout the educational community. These interactions helped transform my resistance to acceptance and empowered me to continue to grow and learn as a leader.

Summary

Teacher resistance to change has been studied within the public school context, but there is very little research that focuses on why private independent school teachers resist change. Understanding this resistance as it relates to teachers' psychic rewards and the nostalgia that accompanies these rewards can help change agents build communities that welcome innovation. Private school teachers value the autonomy that is afforded to them as well as the relationships they forge between one another and their students. Awareness of these professional ideologies coupled with the knowledge that private school teachers value the mission, vision, and traditions within their communities of practice can clear a path to create a culture of innovation.

Teachers need time to engage in dialogue surrounding change with one another and with change agents. Schools need to move beyond grade-level conversations and traditional professional learning communities and make time for resistors and innovators to meet together to exchange experiences. Diverse networks of teachers making meaning together have both an individual and collective gain since individual teachers benefit

from the network and the student community will benefit in the end. Interactions that include a diverse set of people can produce a mutual obligation and responsibility for action. The framework for critical dialogue and self-reflection needed for change can take place as long as school leaders are willing to look beyond resistance to change.

CHAPTER 2

THEORETICAL PERSPECTIVES AND GUIDING RESEARCH

"A change effort that initially feels unwelcome and foreign will gradually be perceived more favorably as people grow accustomed to it… at some point inertia will shift from resisting change to supporting it."- Heath & Heath, 2010, p. 254-255

Introduction

Through the epistemological lens of social constructivism, I examined teacher resistance to change in private independent schools and how Jigsaw Professional Learning Communities (Jigsaw PLCs) affected teachers' resistance to new practices. A new phonics-based literacy curriculum was introduced to K-3 teachers at my private independent school during the spring of 2021. Portions of the new program were gradually implemented during the fall of 2021 and continued to be implemented into the spring of 2022. Teachers' lived experiences with this new literacy program were investigated during this study to measure how professional learning communities may be helpful as teachers adjust to change.

Context of the Problem

What appears to be willful resistance to change in private independent schools generally has a deeper meaning than what leaders anticipate (Snyder, 2017). Working through perceived resistance to better understand the perspectives of teachers during times of change can provide private school leaders with valuable information that can propel a community of practice forward (Goodson et al., 2006). Dan Lortie, professor emeritus from the University of Chicago, suggested that we might mediate the tension between the ethos of teachers and the contingencies of change by understanding the behaviors and patterns of practice within the occupation. As described in chapter 1,

Lortie posits that work as a teacher is grounded in intrinsic rewards and that the work of teaching entails deep feelings and personal goals that have a broader meaning than material and professional recognition. Teachers enter the profession because they value the relationships and autonomy that the occupation affords (Lortie, 1975).

Further research by Goodson et al. (2006) extended the idea of these psychic rewards to suggest that they transform over time into a sense of political and social nostalgia. Goodson et al. found nostalgia was "the major form of memory among a demographically dominant cohort of experienced teachers" (2006, p.42). Two noteworthy types of nostalgia have helped educational leaders clarify resistance and address concerns surrounding change. Social nostalgia is a memory of the sense of family, community, and relationships that defines teachers' experiences. By comparison, political nostalgia is a memory of the autonomy and individualism that teachers enjoy in their classrooms without the intervention of top-down initiatives (Goodson et al., 2006). Thus, any innovation or intervention that threatens the political and social nostalgia teachers maintain must be introduced and facilitated in ways that respect the relationships and autonomy to which teachers have connected meaning in their professional lives.

Change problems come in many shapes and sizes and are often mired in inertia, requiring leaders of change to set an improved course of movement surrounding an innovation (Fullan, 2010). Robert Evans (1996) suggests that the greatest mistake change leaders make is failing to identify the true needs of teachers and instead of using collaborative models to deal with change, leaders implement top-down structural solutions that diminish teacher autonomy and damage morale (Evans, 1996, p. 114). The

failure to consider teachers as resources for one another and to understand their resistance on a personal level is at the core of the perceived problem. Leading change is extraordinarily challenging and to accomplish it school leaders must move beyond the structural components of innovation and focus on people. An individual teacher's acceptance of a new perspective depends on a leader's ability to unfreeze current thinking and build readiness and acceptance. This can best be done through collaborative work that relies on social capital (Fullan, 2010).

Theoretical Framework for the Research

Framing teacher resistance to change in private independent schools as a social problem suggests that it can be better understood through cycles of action research. Action research is an iterative process of inquiry conducted by a practitioner in a situated context. As an administrator at a private independent school, I was deeply embedded in the context and was an active participant in the research. The research focused on the qualities and characteristics of my teacher population with the intent to learn about teacher resistance to change in order to make improvements and gain understanding. The new way of knowing can then be applied to a broader context beyond just this situated change in curriculum. The process was cyclical and each cycle led to reflection that spiraled back to further analysis of the problem; thus, it is not necessarily conclusive in nature and does not necessarily solve the problem (Given, 2008; Herr & Anderson, 2005; Mertler, 2017). However, the goal of each cycle was to find new ways of understanding and knowing about teacher resistance to change.

Since my positionality was one of membership within the teacher community, I was "co-constructing meaning with my participants through mutual interaction within the research setting" (Costantino, 2012, p. 6). I was an integral part of the social network as I took part in leading the Jigsaw PLCs. I attempted to model how to engage in conversation, listen, offer constructive feedback, and ask questions as part of my role as lead learner. I aimed to encourage the teachers to break out of the silos of their classrooms and abandon their individualism for a more collective effort that would make the change more palatable, leading to better practices in the classroom. I explored my own understanding and ways of knowing during my interactions with the teachers during this study, while simultaneously attempting to build social capital that would have a positive effect on my school's community of practice.

Adopting a social constructivist epistemological perspective helped me understand concerns surrounding change that were influenced by teachers' lived experiences as they constructed meaning through social interactions with one another. Constructivist thought is based on the premise that knowledge is constructed through one's experiences and interactions with others. Lev Vygotsky et al.'s (1994) work on constructivist thought suggests that learning is impacted by social and cultural influences and does not take place within the individual but rather through the social and collaborative activities that allow learners to create meaning together through interactions (Schreiber & Valle, 2013, p. 396). The teachers in this study brought their own worldviews and lived experiences to the learning community, and their social interactions allowed for sharing of multiple perspectives about the new literacy curriculum as well as

multiple representations of their reality surrounding their attitudes and perceptions of the new curriculum. A social constructivist perspective required me to create an interactive relationship for the research participants where the Jigsaw PLC activities were not about delivering content or the participants listening to instruction, but one where interactive experience allowed the teachers to make meaning together about their lived experiences with the new curriculum.

Social Capital in Jigsaw PLCs

Social capital theory "refers to the norms and networks that enable people to act collectively" (Woolcock & Narayan, p. 226). Putnam (2000) suggested that social capital is rooted in the interactions between members of a community where mutual assistance, trust, and behavior norms are all used to improve the overall development and performance of a community. Social capital theory has its modern-day roots in the work of Bourdieu, Coleman, and Putnam but can be traced back to community and family studies in the social sciences during the mid-60s. At the core of the theory lies the idea that the relationships embedded within organizations are a valuable resource (Nahapiet & Ghoshal, 1998).

There are three highly interrelated components to social capital as suggested by Nahapiet and Ghoshal (1998). These are structural, relational, and cognitive. The structural dimension of social capital is the most researched and refers to the connections between members- who is connected with whom and how often the connections made. The relational component refers to the types of relationships the members have with each other. The cognitive dimension of social capital refers to the common goals created by

the members. Each dimension plays a pivotal role in the adaptation of an innovation since their interplay allows for the assimilation of knowledge through trust and shared values. Social capital among teachers should facilitate the achievement of a collective goal. "When teachers share information, have quality relations, and share the same conception of the school's mission, performance should be enhanced" (Leana & Pil, 2006, p. 355).

It is through cultivating social capital that I encouraged teachers to adjust their attitudes, beliefs, and motivation towards change. As the teachers began to interpret this change, discussion with peers provided an ideal vehicle for learning since it required a renegotiating of past beliefs and assumptions. Setting the stage for individuals with different values, beliefs, and feelings to have productive discussions surrounding the content, process, and premise of a change can help leaders understand the human side of resistance while simultaneously propelling a community towards acceptance and renewal (Cranton, 2013, p. 269).

When teachers encounter an experience that is "discrepant with their beliefs and values, that encounter has the potential to call those beliefs and values into question and lead to a deep shift in the way people see themselves and/or the world" (Cranton, p. 268). However, discourse with others surrounding these habits of mind that are the product of past experiences and current knowledge of the world can encourage individuals to adapt. Dirkx (2006) suggests that critical self-reflection requires working through "psychic conflicts and dilemmas associated with the learning task or content and of fostering opportunities among our learners for meaning-making, deep change, and transformation" (p. 16). This can take place through the social capital created in Jigsaw PLCs where

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productive discussions and even some forms of conflict can provide a context for inquiry that produces change (Lockton & Fargason, 2019).

Social capital increases a teacher's knowledge since it allows access to other educators' professional knowledge. The most effective "feedback teachers will receive is that which is built into the purposeful interactions between and among teachers and the principal" (Fullan, 2010, p. 78); thus, a leader's main role should be to build the social capital of teachers working together to adapt to change. Purposeful collaboration creates peer interactions that can be the social glue that holds the adaptation to change together. When leaders take part in this collaborative process it creates a culture of relational trust that can have a high impact on student learning (Fullan, 2010). According to Leana (2010), the more effective principals are those who facilitate conversations, listen, and provide resources that build social capital in schools. Little meaningful change can take place until social capital enables the group to change the group; thus, teachers need the time, space, and resources to engage in discourse surrounding a change.

Akmal and Miller (2003) researched the resistance to change amongst a group of secondary teachers during a structural reorganization and found that for change and renewal to occur, there needed to be new connections and active collegial networks fostered and formed amongst the group (Akmal & Miller, 2003, p. 411). During the collaborative process, an underlying mistrust about the change was forced into the open during a dialogue about the change, and the diverse faculty members were impelled to examine their own perceptions. Through collaboration and dialogue, it became clear that fear of losing autonomy was at stake throughout the process. A shared sense of

ownership about the students and programs replaced the perception of how the change affected an individual's autonomy (Akmal & Miller, 2003, p. 419).

Many teachers indicate that their schools do not structure time for teachers to discuss changes to their practice in-depth or that norms of collaboration discouraged these types of conversations. Lockton and Fargason (2019) found that the structures and cultures of schools do not promote social capital, but when given the chance "even teachers who had only brief opportunities to listen to others discuss their successes reported that these experiences were influential… teachers who reported being unsure of how to implement reforms and who frequently expressed doubt that they were appropriate for their students reported making small changes to their instruction after repeatedly listening to colleagues discuss how the reforms played out in their classrooms" (Lockton & Fargason, 2019, p. 16).

In their theory of intra-organizational diffusion, Frank et al. (2004) emphasize the positive direction change can take when membership in an organization is valued and fostered by a collaborative group. In their study of the implementation of computer technology across six schools, data was collected that suggests change agents should rely on the social capital within their communities of practice rather than traditional modes of implementation when promoting change. Teachers in a school community "share the fate of the organization. Therefore, they are more likely to help other members implement an innovation that improves their common fate" (Frank et al., 2004, p.151). Change agents in schools must designate professional development time for educators to interact and share their expertise surrounding change, allowing for vast differences of opinions and approaches to exist among these individuals. Rarely will everyone meet and agree about

change, but change agents need to maintain an open dialogue with teachers to help them focus on their areas of influence and build trust (Balka et al., 2010).

When interacting within a Jigsaw PLC, a teacher will become aware of which skills are most valued, will put more effort into learning those skills, seeking to become competent through engaging in dialogue and discourse with colleagues (Frey, 2018). At the start of any change, teachers differ in their readiness to acquire knowledge and skills as a result of prior experiences, social supports, abilities, and attitudes. As they engage in learning new skills their perception of the change can be affected by their own self-reflection, but also by engaging with other learners. Motivation and engagement improve when teachers perceive they are making progress and becoming more competent in the new skill. Slow progress does not necessarily lower motivation and engagement, as long as teachers are being supported by colleagues who believe they can perform better by adjusting their approach (Schunk, 1996).

One way to strengthen teacher motivation and reduce resistance is through the experiences provided by social interactions because "seeing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities required to succeed" (Bandura, 1994, p.2). Social persuasion is another way to strengthen teachers' beliefs that they have what it takes to master new skills. Bandura posits that learners acquire knowledge and appraise their self-efficacy, or ability to use the new knowledge, through observations of models and social comparisons of others attempting to master the same knowledge or skill. Feedback through social interactions can enhance self-efficacy and high self-efficacy can produce competent performance (Schunk, 1996). Teachers who are persuaded by colleagues that

they possess the capabilities to master given activities are likely to mobilize greater effort and sustain it over time (Bandura, 1994). Teachers who are willing to de-privatize their practice prove to be an effective mechanism to challenge institutionalized practices. Teachers who observed colleagues share details of their practice reported that these experiences were instrumental in helping them rethink their own practice.

In a study of 1, 200 kindergarten through fifth-grade teachers in one New York City sub district, Carrie Leana (2010) found that teacher social capital was a significant predictor of student achievement, outweighing teacher experience or ability in the classroom. What Leana found is that in most instances, teachers seek advice from one another, and "when the relationships among teachers in a school are characterized by high trust and frequent interaction—that is, when social capital is strong—student achievement scores improve" (Leana, 2010, p. 33). Furthermore, the most effective principals were those who defined their roles as facilitators of social capital, providing teachers with the resources they needed to build relationships through informal and formal connections, rather than instructional leaders and evaluators.

Initial Cycles of Action Research

Ivankova (2015) identifies action research as a dynamic process with multiple cycles and explorations that can expand understanding of a problem within a situated context (Mertler, 2017). Initially, I wanted to study how teacher resistance to change was connected to the constructed missions and visions of private independent schools. During the reconnaissance phase of my research, I concluded that resistance was not as deeply connected to mission as I had anticipated, but instead, it was fueled by what

Goodson et al. (2006) labeled political and social nostalgia rooted in the desire to protect teachers' psychic rewards.

During Cycle 0, I listened to the voices of the private school teachers in my community, who shared that the resistance to change was not willful defiance, but instead an attempt to protect the reasons they chose to be teachers, which was the relationships they foster as well as the autonomy they enjoy as professionals. Understanding this nostalgia can drive a community of practice forward and should not be trivialized by leaders as an overly emotional perspective. Teachers are more likely to become engaged in change efforts if leaders are willing to include "teachers' meanings, missions, and memories" (Goodson et al., 2006, p.56). When change initiatives include teachers' perspectives and they are allowed to spend time making meaning together, teachers will be more responsive and open to innovation.

Cycle 1 provided me the opportunity to put teachers who identified themselves as resistors with those who identified themselves as innovators in a Jigsaw PLC to discuss a technology innovation during remote learning in the spring of 2020 when the COVID-19 pandemic closed my school community. Using Shaul Oreg's Resistance to Change Scale (RTC), Appendix A, I created a PLC that included four teachers from different grade levels, two of whom had qualities of being stressed by change and two who had characteristics of embracing change. This Jigsaw PLC met four times to discuss the challenges the new innovation posed and how they were implementing their new skill into their classrooms. Post PLC surveys and interviews indicated that all four teachers gained insight and felt supported by their colleagues and were willing to take more risks with the innovation because of the dialogue and discourse with their colleagues and their

leader in the Jigsaw PLC.

The original "jigsaw" learning strategy is one in which teachers arrange students in groups with each group member being assigned a different piece of information. Group members then join with members of other groups assigned the same piece of information, and research and/or share ideas about the information. The original group is then reassembled to make meaning out of the provided information. The Jigsaw learning approach was first developed as a way to combat racial bias among Black, Hispanic, and white students in elementary schools by social psychologist Elliot Aronson. With his research team, Aronson et al. (1978) recommended creating a cooperative environment where students had to depend on each other to learn content rather than compete against one another.

Using the Jigsaw PLC format in the cycles of action research in my context allowed teachers to share their different values, knowledge, and experiences surrounding an innovation with one another and the change agent. Tapping into each member's personal experience and knowledge built social capital and affected teachers' attitudes toward and motivation for becoming more adaptable to change.

Summary

Understanding teachers' psychic rewards and how those are connected to political and social nostalgia within the profession can help private independent school change agents recognize resistance to innovations as not merely willful defiance, but as a need to protect the identity of the profession. As a constructivist, I value how knowledge is constructed through an individual's social interactions. I aimed to understand the

phenomenon of teacher resistance to change from the perspective of those experiencing change initiatives within the private independent school community. Adopting a social constructivist epistemological perspective helped me understand concerns surrounding change as the teachers constructed meaning through social interactions.

My innovation required teachers to work together in a Jigsaw Professional Learning Community to discuss reactions to and experiences with new practices in literacy instruction. Grouping innovators with resistors encouraged differentiated conversations that allowed teachers to make meaning together. Social networks that impact teacher's perception of change can impact behavior since teachers' "ways of knowing may differ as their knowledge emerges from interactions within social groups" (Hamilton & White, p. 276). Social interactions in Jigsaw PLCs can "bolster our narrower selves… and constitute a kind of sociological superglue" (Putnam, 2000, p. 23).

These interactions can create social capital which Putnam (2000) defines as connections among individuals that create norms of reciprocity and trustworthiness. Diverse networks of teachers making meaning together have both an individual and collective aspect since individual teachers benefit from the network but the student community benefits as well. Interactions that include "a diverse set of people tends to produce a norm of generalized reciprocity…. and social capital entail(s) mutual obligation and responsibility for action" (Putnam, 2000, p. 21). These professional learning communities provide the framework for critical dialogue and self-reflection that is needed for adult transformative learning.

CHAPTER 3

METHODOLOGY AND RESEARCH DESIGN

"The promise of practitioner- driven research is that the learning emerges from local, situated inquiry… the kind that emerges from knowing and caring about people in a setting, the kind that emerges when practitioners take seriously the responsibility to collaborate with, care for, support, and empower ourselves, our colleagues, and our constituencies." -Sharon Ravitch (2014, p. 6)

Introduction

As a constructivist, I value how knowledge is constructed through an individual's social interactions. My objective was to understand the phenomenon of teacher resistance to change from the perspective of those experiencing change initiatives within the private independent school community. Adopting a social constructivist epistemological perspective helped me understand concerns surrounding change that were influenced by teachers' professional experiences constructed through social interactions with one another and school leaders. This was a qualitative phenomenological action research study attempting to identify the meaning(s) behind teacher resistance to change in private independent schools. Phenomenology using a constructivist paradigm created an opportunity for the researcher and teachers to reflect on their experiences about a situated phenomenon and share what was meaningful to them in order to gain insight and construct knowledge together about a particular experience (Given, 2008).

Problem and Purpose Overview

The problem, purpose, and research questions in this study were directed at understanding teacher resistance to change in private independent schools. In response to the problem, a Jigsaw Professional Learning Community was created to team up resistors, innovators, and the school leader to discuss current changes in curriculum

across the school community. In chapter 2, the use of social capital explains and supports the work of the Jigsaw PLC. The purpose of the study was to understand the lived experiences of teachers and how social interactions within a Jigsaw PLC can affect teachers' resistance to change and affect attitudes towards and perceptions of new curriculum changes.

Research Questions

The following are my research questions:

Research Question 1: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' resistance to change?

Research Question 2: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers attitudes towards and perceptions of new curriculum?

Qualitative Research Design

Qualitative inquiry aims to understand the meaning of human action and is conducted as a social exchange between people. Participants are valued for the perspectives they hold within the research setting, taking into consideration the social, cultural, and physical contexts within which individuals live, work, and interact. Qualitative research focuses on the commitment to learning about and understanding the perspectives of others. As a qualitative researcher, I maintain that the beliefs and behaviors of teachers, no matter how different from my own, are understandable and valuable when studied within the context in which they occur. Making sense of resistance to change through the eyes and lived experiences of private independent school teachers was at the heart of my qualitative research study (Given, 2008). My work was not about central tendencies and statistical correlations, but about the contextualized meanings,

cultural patterns, and social discourses that are associated with being a private

independent school teacher dealing with change.

Interpretive Phenomenological Analysis

Personal lived experiences are at the heart of interpretative phenomenological

analysis (IPA). IPA aims to grasp the details of how a research participant makes sense of

a phenomenon in a situated context as it is lived by that particular participant. The

researcher and participants are involved in an interpretive process making meaning from

the particulars of each case and then identifying patterns and themes across cases. IPA

attempts to attend to all aspects of the human experience from wishes, beliefs, attitudes,

and emotions (Eatough & Smith, 2017).

An IPA researcher must mine "the material for possible meanings which allow the

phenomena of interest to shine forth" (Smith et al., 2009, p. 35). The meanings that

emerged from this analysis were examined critically and compared and contrasted across

cases. It is essential that the researcher "adopt a both/and approach; on the one hand, to

assume an empathic stance and imagine what-it-is-like to be the participant, whilst on the

other hand to be critical of what appears to be the case and probe for meaning in ways

which participants might be unwilling or unable to do themselves" (Eatough & Smith,

2017, p. 10).

IPA studies use small and situated participant samples so that each individual's

way of being and experiencing the phenomena can be understood before a comparative

analysis of participant material is conducted. Researchers probe for meaning through the

interview process with an understanding that the narratives shared may be layered with

meaning. The real time interaction between researcher and participant provides flexibility

with questions that can guide rather than dictate the course of the exploration. The researcher establishes the interview with basic questions that frame the purpose and focus of the study, but "it is in the response to what the participant says that the interviewer follows up, asks for clarification, seeks concrete details, and requests stories" (Seidman, p. 81).

Teachers in this study were asked to reflect on the meaning their experience with change holds for them in order to explore "the past to clarify the events that led participants to where they are now, and describing the concrete details of their present experience" (Seidman, p. 19) with the goal being a more in depth understanding of the issue rather than just a singular truth. This was accomplished by providing the space for multiple and varied voices, by attending to viewpoints that diverge from the majority and from those of the researcher, and intense collaboration that allowed for member reflection during data collection and analysis (Eatough & Smith, 2017, Tracy, 2010).

Role of the Researcher

Qualitative action research is an iterative process of inquiry conducted by a practitioner in a situated context across the social sciences. The practitioner was embedded in the context, and was an active participant in the work. The research focused on the qualities and characteristics of the population with the intent to learn about this particular problem of practice in order to make improvements, gain understanding or challenge power and oppression. The new way of knowing can then be applied to a broader context beyond the local community. Action research requires the practitioner to identify the problem, formulate questions, design a method to collect data, analyze the data, and draw conclusions related to the research questions. The process is cyclical and

each cycle can lead to new ways of understanding and knowing (Given, 2008; Herr & Anderson, 2005; Mertler, 2013).

Adopting a constructivist perspective means I understand the importance of researcher reflexivity and the value in identifying and understanding biases and assumptions that can affect my decisions and interpretations (Charmaz, 2014). My twenty-five years as a veteran educator and my own lived experiences through innovations, interventions, and change initiatives influenced the analysis of the data; thus, I made attempts to question my own biases throughout the research. However, I brought something to the research that cannot be fully tempered since I am a human being making meaning with teachers as we engaged in social discourse through the research process.

In order to capture the personal and emotional dimensions of teacher resistance to change as it relates to the leader's interpersonal communication, I was completely embedded in this study with the teachers, making myself vulnerable, available, and open during the process. A form of what Tillmann-Healy (2003) called "radical reciprocity", and a shift from "studying them to studying us" (Tillmann-Healy, 2003, p. 735) was part of this work. The teachers and I were co-constructors of knowledge, engaging in the research process together in order to gain a deeper understanding of teacher resistance to change in a private independent school context.

Tracy (2010) posits that qualitative researchers should act as a team with their participants, creating space for multivocality and member reflections that can enhance the validity and credibility of the research. Multivocality emerges when the researcher

willingly surrenders control of the data, seeks to listen to and understand diverging

perspectives, and dialogues with the participants during group and individual interactions.

Member reflections provide opportunities for participants to share whether the findings

are not only accurate but meaningful and took place as the data was being collected and

analyzed.

Being embedded so deeply in the research meant that credibility was sought

throughout the process and was achieved through practices including triangulation and

multivocality (Tracy, 2010). Triangulating multiple types of qualitative data allowed

"different facets of problems to be explored, increases scope, deepens understanding, and

encourages consistent (re) interpretation" (Tracy, 2010, p. 843). Multivocality was

achieved through collaboration during the Jigsaw PLC activities and interview process,

allowing room for differing opinions and perspectives. Along with attending to multiple

voices, member reflections were utilized in the form of taking data back to the teachers,

not to ensure that the researcher "got it right", but as another way to collaborate and

extend the meaning-making process together as research and participant (Tracy, 2010).

Research Design

This qualitative action research study aimed to answer how Jigsaw Professional

Learning Communities affect teachers' resistance to change and how Jigsaw Professional

Learning Communities may affect teachers attitudes towards and perception of new

curriculum. Table 1 outlines the research questions, the sources of the data collected, and

when the data was collected during the research.

Table 1

Data Collection Resources

Research Question	Data Collection	When
Research Question 1: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' resistance to change?	60-minute Open-ended Interview	Pre and Post Intervention
	Jigsaw PLC Meeting Transcripts	Throughout Intervention
	Participant Journal Entries	Post Each Jigsaw PLC Meeting
Research Question 2: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' attitudes towards and perceptions of new curriculum?	60-minute Open-ended Interview	Pre and Post Intervention
	Jigsaw PLC Meeting Transcripts	Throughout Intervention
	Participant Journal Entries	Post Each Jigsaw PLC Meeting

Table 2 specifies the research timeline which took place between January and August of 2022.

Table 2

Research Timeline

January of 2022	Teacher Selection using the RTC Profile
February of 2022	Pre-Intervention Teacher Interviews

Table 2 continued

March 2022	Jigsaw PLC Meeting #1
	Journal Prompt #1 for Teachers
April 2022	Jigsaw PLC Meeting #2
	Journal Prompt #2 for Teachers
May 2022	Jigsaw PLC Meeting #3
	Journal Prompt #3 for Teachers
May 2022	Post- Intervention Interviews
July 2022	Coding of all data and member checking
August 2022	Sharing of results with teachers

Participant Selection

Twenty-five classroom teachers who engaged in curriculum changes in the Lower
School at Harpeth Academy, a private independent school in South City TN, were asked
to consider participation in this study during a faculty meeting, where the purpose and
design of the research was explained. A letter was provided outlining the research, and
interested teachers were asked to return the letter with their signature to indicate their
willingness to participate. Letter is included in Appendix A.

Out of the twenty- five teachers who were asked to consider participation, twelve
teachers agreed to be candidates for the study and each of the twelve completed the
Resistance to Change Scale (RTC) designed by Shaul Oreg (2003). The survey is
included in Appendix B. This Likert scale survey generates a change profile with

seventeen questions regarding one's general beliefs and attitudes towards change. On a scale of one to six, teachers were asked to rate whether they 1 = *Strongly Disagree* to 6= *Strongly Agree* with statements like: "When things do not go according to plan, it stresses me out" and "If I were informed that there's going to be a significant change regarding the way things are done at school, I would probably feel stressed." Teachers were scored based on four categories to include: Routine Seeking, Emotional Reaction to Change, Short Term Focus, and Cognitive Rigidity.

Routine Seeking was measured by answering 8 items that reflect one's preference for low levels of stimulation and novel experiences. Emotional Reaction to Change was measured by 6 items that reflect one's psychological resilience to the stress that can occur due to imposed changes. Short Term Focus was measured by answering 4 items that reflect one's tolerance for the inconvenience that change can generate. Cognitive Rigidity was measured by 3 items that address the ease and frequency that an individual changes their mind.

An overall mean score between 1 and 2.9 indicates an openness to change (innovator), 3 to 4.9 indicates a neutral attitude toward change, and 5 to 6 indicates a strong negative reaction to change (resistor). The internal consistency of the RTC scale was established through a series of seven studies conducted by Oreg in 2003 and the measurement scale has since been used in a variety of studies in multiple contexts. The Cronbach's alpha coefficient for the entire Resistance to Change scale is .91 and .80, .87, .84, and .86 for Routine Seeking, Emotional Reaction, Short Term Focus, and Cognitive Rigidity subscales respectively (Oreg, 2003).

The researcher scored the twelve individually completed surveys and a change profile (RTC profile) was generated for each teacher. All twelve teachers received the results of their RTC survey even though they were not all selected to be participants. The RTC profiles were used to select six teachers (n=6) who ultimately took part in the study. The Jigsaw PLC consisted of six members, which according to organizational psychologist Richard Hackman is the ideal group size for effective engagement and social connection. Six is large enough to provide the needed diversity and small enough for a team to coordinate among members, allowing for smaller groups to break off for discussion and return to the larger group to share ideas and perspectives (Sutton & Rao, 2014).

The initial intent was to choose two teachers who presented as resistors, two teachers with scores in the middle to average range, and two teachers whose RTC scores fell in the low end of the range in order to create the Jigsaw PLC. There was not a teacher who had an overall RTC that was above average for resistance so the two teachers out of the twelve who had the highest sub scale in the category of Emotional Reaction to Change were selected as participants and identified as resistors. This sub scale was chosen since these were the two highest sub category scores of the twelve willing teachers. During the Jigsaw PLC meetings, the teachers were placed into learning groups of two or three based on their RTC profiles, with each group consisting of a range of attitudes towards change. Table 3 shows the teachers' RTC scores and sub scores.

Table 3

Participants RTC Scores and Sub Scores

Participant	RTC Score	Routine Seeking	Emotional Reaction	Short-term Focus	Cognitive Rigidity
Jill Innovator (1)	1.76	2.20	1.00	1.00	2.75
Gail Innovator (2)	2.25	3.20	2.00	1.75	2.00
Dolly Neutral (1)	2.65	2.80	2.50	3.00	2.25
Mimi Neutral (2)	2.76	2.60	3.00	1.50	3.50
Vivian Resistor (1)	3.18	2.20	4.25	2.75	3.75
Peggy Resistor (2)	3.24	2.60	4.25	3.75	2.50

The following teachers were selected to participate in the study. Their names have been changed to protect their anonymity:

Jill- Innovator (1) who currently serves as a third-grade teacher with nineteen years of experience in the classroom. She has been a teacher at Harpeth Academy for six years and has experience in fourth and fifth grade as well as library science. Her overall RTC score was a 1.76.

Gail- Innovator (2) who currently teaches Kindergarten with thirteen years of experience in the classroom. She has been a teacher at Harpeth Academy for four years. Gail's overall RTC score was 2.25.

Dolly- Neutral (1) who has been a reading specialist at Harpeth Academy for five years. She has been teaching for nine years and has prior experience in Pre- K classrooms. Dolly's overall RTC score was a 2.65.

Mimi- Neutral (2) who has been teaching Kindergarten at Harpeth Academy for seventeen years. She has 21 years of teaching experience to include time in second grade and as a reading interventionist. Mimi's overall RTC score was a 2.76.

Vivian- Resistor (1) who is a third-grade teacher at Harpeth Academy. She has been at Harpeth for nineteen years and has been teaching third grade for eleven. She has experience in kindergarten, first, and at the middle school level. Vivian's overall RTC was a 3.18. Her Emotional Reaction to Change was a 4.25.

Peggy- Resistor (2) who is currently teaching first grade. She has been at Harpeth Academy for eight years with a total of twelve years of experience. She previously taught Kindergarten. Peggy's overall RTC score was 3.24. Her Emotional Reaction to change was a 4.25.

Data Collection

Pre- Intervention Interviews

The six teachers selected for the study engaged individually in 60-minute pre-intervention interviews based on the work of phenomenologist Mark Vagle (2018) and

Irving Seidmen (2006) whose form of qualitative interviews include open-ended questions that aim to understand the meanings, opinions, and emotions of the teachers' lived experiences in the situated context. The interviewer used a guide with established questions that set the purpose and focus of the interview, and the teachers' responses were followed up for clarification and more detail, with requests for stories about their experience with change (Seidman, 2006). Teachers were asked to reconstruct their past experiences with change and reflect on the meaning their experiences hold for them (Seidmen, 2006). They were invited to respond to their RTC profiles and share their perception of the results as well as share their past experiences with change initiatives in schools. The pre- intervention interview guide is included in Appendix C. The goal of the individual interview was to learn as much as possible about the teachers' experiences with the phenomenon of change in their profession. Interviews were recorded and transcribed using Otter Pro.

Jigsaw PLC Meeting Transcripts

The innovation consists of three Jigsaw PLC meetings, each lasting one hour in length. Teachers with varying RTC scores were placed in pairs, triads, and engaged in full group collaborations. These various groupings during the innovation were designed to expose each teacher to different perspectives about the new literacy curriculum at Harpeth Academy so that the degree that social interactions affect resistance to change could be measured.

Jigsaw PLC Meeting Number One: Pre-Mortem Discussion- 60 minutes

Jigsaw PLC Meeting Number One consisted of a "premortem" discussion; a technique pioneered by research psychologist Gary Klein that encourages people to engage in prospective hindsight. Klein's research found that when teams engage in prospective hindsight—imagining that an event has already occurred—the ability to correctly identify reasons for future outcomes increases by 30%, allowing teams to feel more in control of their fate (Klein, 2008). Raising and acknowledging private doubts surrounding future outcomes can help leaders avoid corrosive conformity (Sutton, 2014).

The six teachers in this study were placed in two separate groups of three, with members falling within different ranges on the RTC scale. Triad group 1 was Resistor (1), Neutral (1), and Innovator (1). Triad group 2 was Resistor (2), Neutral (2) and, Innovator (2). Each triad was directed to imagine a future in which the new literacy curriculum was an unmitigated disaster, generating reasons about why the failure occurred. Individual thoughts, outcomes, and reasons for the initiative's failure were written on orange Post-it notes and shared with the triad. The triad was then directed to imagine a future in which the new literacy curriculum was a roaring success, generating reasons why success was achieved. Ideas were written on green Post-it notes and shared within the triad. Each group then shared their results for both outcomes with the larger group, displaying the Post-it notes on chart paper. The Jigsaw PLC meeting was recorded and transcribed using Otter Pro. Figure 1 shows the Post-it notes on the chart paper that was created during the group discussion about disaster. Figure 2 shows the Post-it notes on the chart paper that was created during the group discussion about success.

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Figure 1

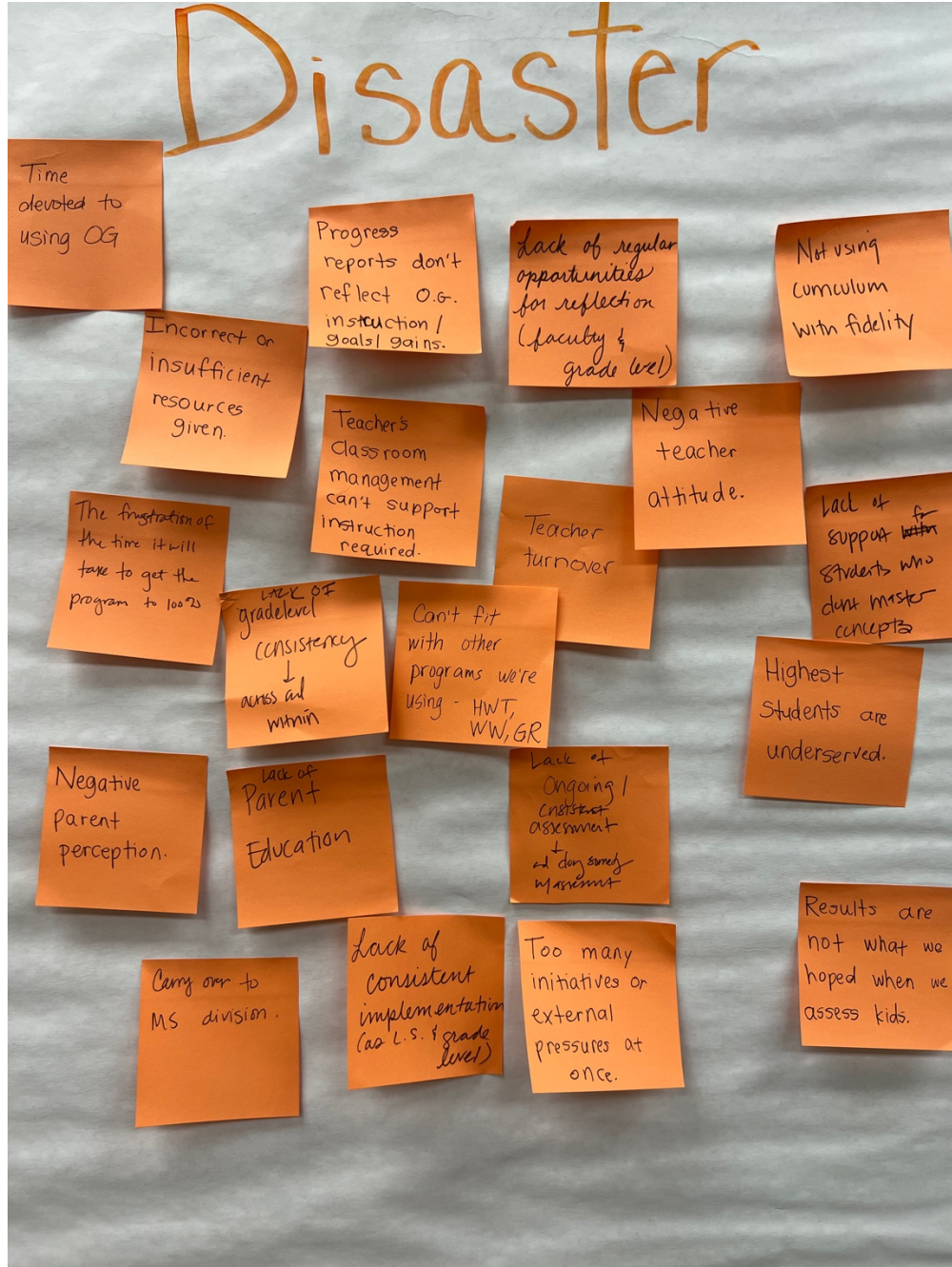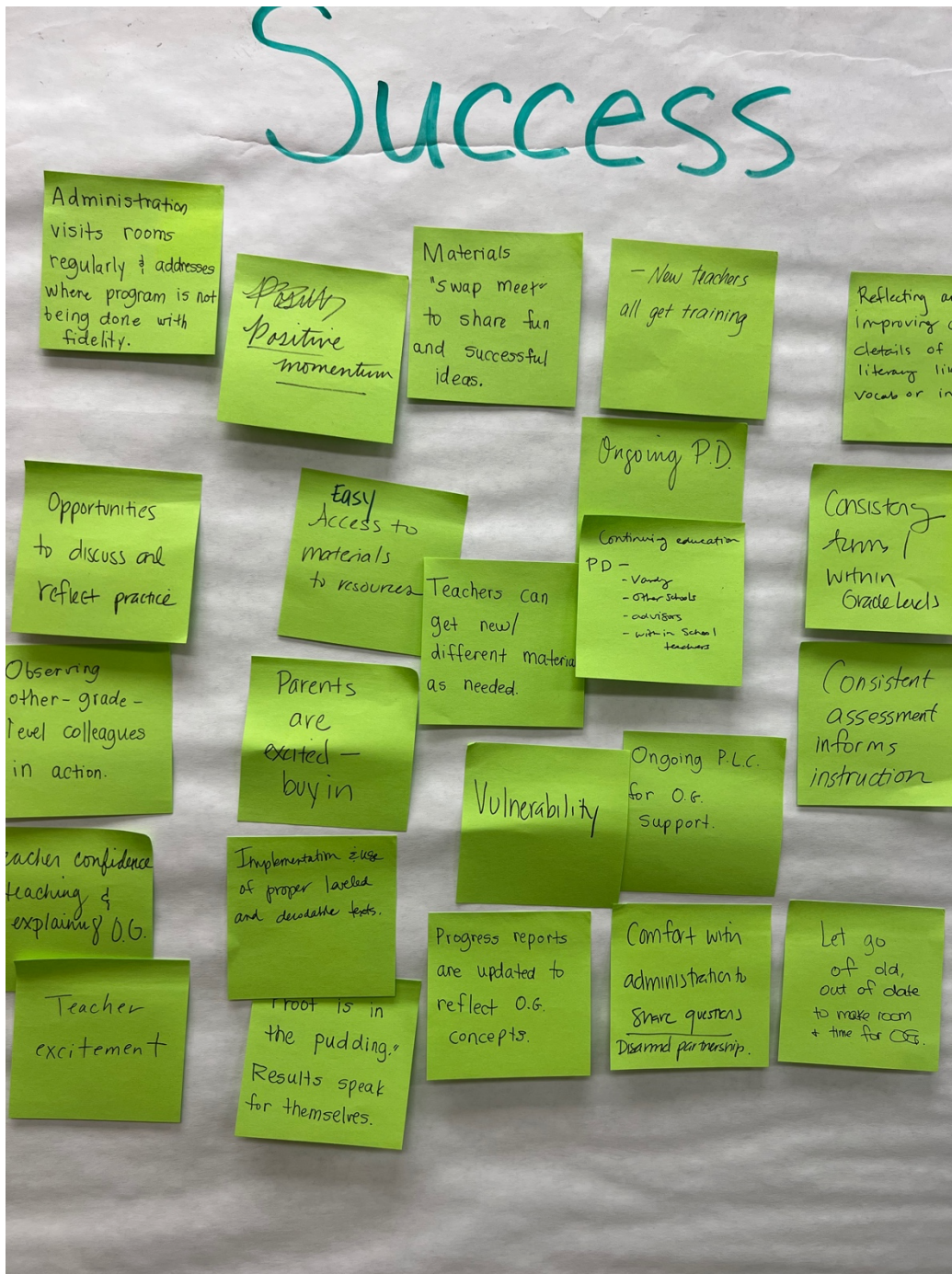*Pre-mortem Jigsaw PLC meeting results on disaster*

Figure 2

Pre-Mortem Jigsaw PLC meeting results on success

Jigsaw PLC Meeting Number Two: ABC Roundtable Conversation- 60 Minutes

The structure of this Jigsaw PLC meeting was taken from *Teacher Teams that Work* by Gregroy and Kuzmich (2007) and provided an opportunity for non-judgmental inquiry, allowing space for teachers' thoughts, experiences, and suggestions while promoting the expansion of possibilities to adapt to change (Hord & Sommers, 2008). Gregory and Kuzmich (2007) suggest that time spent with others questioning, reflecting, and analyzing can reinforce positive attitudes towards investing in a new practice, and Fullan (2010) posits that new information can only transform into personal knowledge through dialogue and meaning making with others.

The six teachers were arranged into new triads for the second Jigsaw PLC meeting in order to expose them to new group members. Triad group 1 consisted of Resistor (1), Neutral (1), Innovator (2); and triad group 2 consisted of Resistor (2), Neutral (2), and Innovator (1). I chose these groups in order to expose the teachers to a member they had not engaged with during the previous meeting. Teachers engaged in conversation with a predetermined list of questions surrounding the use of the new curriculum. Each member of the triad was randomly assigned a letter; A, B, or C. A was the Questioner, B was the Respondent, and C was the Scribe. The Questioner asked the Respondent to reply to the prescribed questions while the Scribe took notes in a Google document during a 15-minute time frame. The questions posed are listed below:

Questions:

What success did you have with the new curriculum over the last week?

Which concepts were particularly challenging to teach from this curriculum over the last week?

In what way did you feel resistant towards the curriculum?

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In what way did you feel innovative towards the curriculum?

After 15 minutes the roles were shifted so that the Questioner became the Scribe, the Scribe became the Respondent, and the Respondent became the Questioner. The roles were then shifted a third time after 15 more minutes so that each teacher filled all three roles. Table 4 outlines the roles for each round.

Table 4

ABC Roundtable Roles for Each Round

Round 1	Round 2	Round 3
A Questioner	B Questioner	C Questioner
B Respondent	C Respondent	A Respondent
C Scribe	A Scribe	B Scribe

Groups were given 15 minutes to reflect on the conversation and then shared common themes, concerns, and differences with the larger group. The Jigsaw PLC meeting was recorded and transcribed using Otter Pro. The electronic notes created by the teacher teams during the small group discussions were collected and coded for analysis.

Figure 3 shows an example of the notes from triad group 1 during the first round of the ABC Roundtable discussion. The questions posed were highlighted in different colors in the document for easier reading when the teachers were working in the triad groups.

Figure 3

ABC Roundtable example of notes

ROUND ONE

Questioner: VV

Respondent: LA

Scribe: JM

What success did you have with the new curriculum over the last few weeks?

LA - I administered a nonsense word list to kindergarten students and my colleagues experienced seeing the students successfully spell the nonsense words. I could see that the students understood the concepts.

Which concepts were particularly challenging to teach from this curriculum over the last few weeks?

LA - I work with students that need support. I am running out of ways to help students retain and apply phonics rules and concepts.

In what ways have you felt resistant toward implementing the curriculum?

LA - One area that I am not comfortable with is the multi-sensory trains and kinesthetic movements, but I would like to do it more.

In what ways have you felt innovative toward implementing the curriculum?

LA - A fellow teacher shared a Tic Toc video game showing a race for digraphs and it felt like a new and innovative way to teach the rule "magic e."

Jigsaw PLC Meeting Number 3: Doubling Up Force Field

This Jigsaw PLC meeting began with individual teachers completing a flow chart titled Force Field. Each teacher was given a template in a Google document and was instructed to write down the forces hindering them from adjusting to the new curriculum and steps that could be taken to overcome those forces. Teachers also wrote down forces

that were helping them adjust to the change and the steps that would continue to support them. Individual self-reflection lasted 10 minutes. Figure 4 shows an example of a teacher's Force Field notes.

Figure 4

Example of Force Field notes

Identify FORCES that are hindering your adjustment to the new curriculum:	Identify STEPS/SUPPORT to overcome these HINDERING FORCES:
-The initial training was very unpleasant and made me think that OG was going to be very difficult. -Feeling my way through the first year of implementation has had its bumps. -Trying to figure out how OG fits with Writing Workshop and Guided Reading presents a challenge.	-That training is done–thank goodness. -Being able to chat with my kindergarten colleagues always helps me feel like I'm doing okay and on the right track. Also, having LA to send students to for extra reinforcement with concepts they're struggling with is a weight off my shoulders. -Writing Workshop seems to fit with OG better than Guided Reading. I think the K team is up for continuing the conversation about how Guided Reading should look for our students going forward. We're open to readjusting however we need.
Identify FORCES helping with adjustment to the new curriculum:	**Identify STEPS/SUPPORT to continue these HELPFUL FORCES:**
-The fact that the whole K team is doing this together is like having a built-in support network. I love being able to run ideas by them and ask them questions. -Not being required to "do OG" during a certain time block in the day is very much appreciated. I like being able to do it when I have time and feel the kids are ready for it.	-More regular meetings for the K team during PE would be great. Maybe we could get back on our once-per-rotation meeting schedule (just for the teachers)? Allowing teachers to determine when OG best fits into the day should definitely continue.

Teachers were then paired up based on their RTC profiles to share their Force Field work. Resistor (1) was paired with Innovator (1), Resistor (2) with Neutral (1), and Innovator (2) with a Neutral (2). These pairs were chosen in order to expose teachers to members they had not yet dialogued with during the previous two Jigsaw PLC meetings.

After 4 minutes, the teachers were instructed to discuss their Force Fields in a group of three for 8 minutes, teaming up Resistor (1), Neutral (1), and Innovator (1); and Resistor (2), Neutral (2), and Innovator (2). In the fourth round, all six teachers discussed their reactions for 16 minutes. Throughout the process, teachers were encouraged to add any forces and steps for support that they gained from the group discussions. According to Gregory and Kuzmich (2007) this process works well when planning major changes since it gives teachers the opportunity to hear varied points of view, share their experience with the change, and address with leaders what is needed for a successful result. The process directly addresses resistance and helps staff see and hear the details regarding any perceived roadblocks to transformation. This Jigsaw PLC meeting was recorded and transcribed using Otter Pro. The Force Field Flow Charts created by the teachers during the discussions were collected and coded for analysis.

Journal Entries

Teachers were asked to write about their experience by journaling in a Google document created by the researcher after each Jigsaw PLC meeting. Each teacher had their own Google document that was shared between the teacher and the researcher. At the conclusion of each Jigsaw PLC meeting, teachers were asked to respond to the following two prompts within 24 hours:

1. Explain how this Jigsaw PLC meeting affected your attitude towards the new curriculum.

2. Explain how this Jigsaw PLC meeting affected your perception of the new curriculum.

After the third Jigsaw PLC meeting, teachers were asked to respond to this additional prompt:

> Explain your experience with the Jigsaw PLC meeting that had the greatest
>
> impact on your perception of and attitude towards the new literacy curriculum.

Journals were coded by the researcher at the conclusion of the study.

Post Intervention Interviews

After the third Jigsaw PLC meeting, the teachers engaged individually in 60-minute post-intervention interviews based on the work of phenomenologist Mark Vagle (2018) and Irving Seidmen (2006) whose qualitative interview format includes open-ended questions that aim to understand the meanings, opinions, and emotions of the participants' lived experiences in the situated context. Interviews were recorded and transcribed using Otter Pro. The interviewer used a guide with established questions that set the purpose and focus of the interview, and the teachers' responses were followed up for clarification and more detail, with requests for stories about their experience with the intervention (Seidman, 2006). The post intervention interview guide is in Appendix D.

Data Analysis Procedures

Pre and post-interview transcripts, Jigsaw PLC meeting transcripts, and journal entries were coded using inductive analysis. I used an iterative and inductive IPA analysis process as suggested by Smith et al., (2009) which involves reading and rereading, initial noting, developing in vivo codes, identifying superordinate themes, and then identifying the nested themes within the superordinate themes.

This analysis process honored the individual members as active participants in the creation of their own knowledge and acknowledged that their resistance to the new curriculum and attitudes and belief in the curriculum were rooted in their interactions with one another in the Jigsaw PLC. The teachers in this study brought their own worldviews and lived experiences to the learning community, and their social interactions allowed for sharing of multiple perspectives about the new literacy curriculum as well as multiple representations of their reality surrounding their attitudes and perceptions of the new curriculum.

Before beginning to analyze the transcripts, I listened to the interviews and read along with the transcripts to familiarize myself with the data over a three-day period. During this cycle, I just listened to the teachers' voices familiarizing myself with the twelve hours of transcripts and eighteen journal entries. I refrained from coding at this point since my goal was to completely familiarize myself with the teachers' experiences. I listened to and read each transcript and journal entry twice before taking any notes or attempting to code the data.

During the next cycle, approximately 48 hours later, I engaged in the same listening and reading process. This time I made handwritten exploratory notes in a journal, documenting what emerged as significant about each interview and journal entry keeping my two research questions in mind. A sample page of these notes is in Figure 5.

Figure 5

Sample page from noting journal
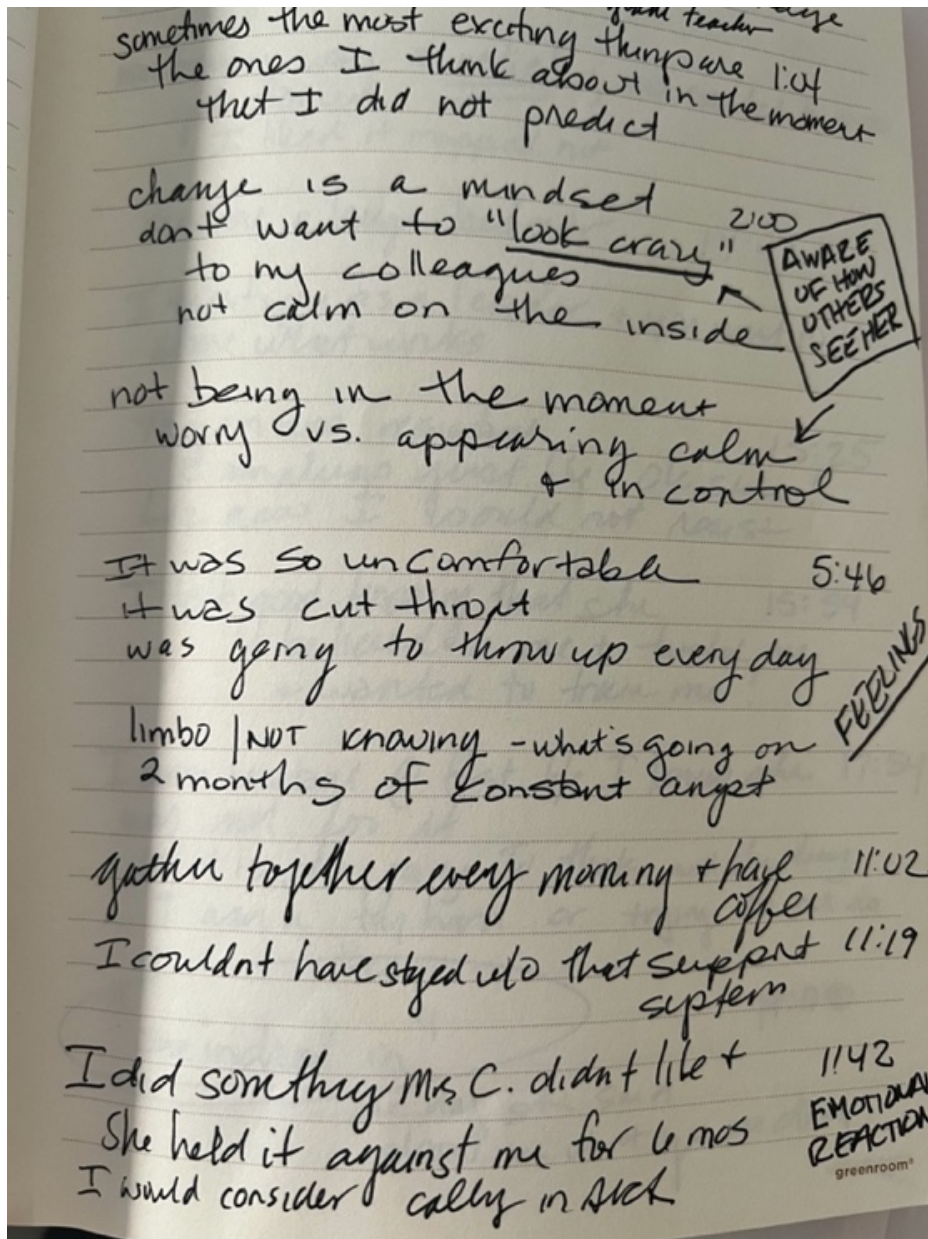
I used the teachers' exact words in my notes since I was trying to capture the

individual teacher's subjective experience as correctly as possible. The intention was to

begin to consider codes that may be emerging from the data in order to capture the

inherent meanings of the teachers' lived experiences. I allowed the interpretation of the

data to be inspired by the teachers' words and interactions with one another rather than

imported from the outside (Saldana, 2012). As I engaged in this note taking process, I

attempted the self-reflective process of "bracketing", by recognizing and setting aside,

but not abandoning, my a priori knowledge and assumptions, with the goal of attending to

the teachers' accounts with an open mind. I noted my own reactions to the data in the

margins in all capital letters to indicate that it was my personal interpretation of the

teachers' experience. By doing this I was attempting to avoid the "potential trap of

simply categorizing responses into preordained slots or filtering the participant's lived

experience through the researcher's own personal experience" (Tufford & Newman,

2012, p.91). After I completed this stage of the analysis, I shared these notes with the

teachers individually to check if my assumptions and judgments were reflective of their

subjective experience.

After I completed the note taking process and member checking, I transferred all

of the transcripts from Otter Pro and the journal entries into Hyper Research so that I

could code them. I read line by line using my exploratory comments from step 2 as a

guide to develop emerging in vivo codes. A sample of the Hyper Research code book is

in Figure 6.

Figure 6

Sample of code book in Hyper Research

This in vivo coding process was used during this cycle of analysis in an attempt to draw from the exact words of the teachers themselves in order to capture recurrent experiences, common participant expressions, and emotions based on change and the effects collaborative relationships may have on teachers' experiences. I returned 24 hours later to code a second time in order to ensure coding consistency. Before I began, I used the Frequency Report tool in Hyper Research to identify the most common codes. During

the second pass, I read parts of the transcripts backwards from the end to the beginning, a paragraph and sometimes a sentence at a time, to get a feel for particular phrases and sentences in isolation rather than in the context of the natural flow of the interview. This bottom to top rather than top to bottom review was an attempt to avoid a simplistic reading of what the teachers were saying and writing. This de-contextualization can develop a better understanding of the embedded nature of the teacher's experience by fracturing the flow of the interview and journal entry, avoiding a simplistic and outsider interpretation of the data (Smith et al., 2009, p. 9).

Two days later, I revisited the data and began to identify patterns in the codes in order to identify emergent themes. I took the codes and the chunks of verbatim statements from each interview transcript, Jigsaw PLC meeting transcript, and journal entry and began to cluster them into emergent themes that were expressed as phrases that I felt captured the essence of the experience for the teachers, attempting to map relationships, connections, and patterns that addressed my research questions. I created Google documents for each theme, pasting segments from transcripts and journal entries into the Google documents labeled with each theme. I noted the teacher's name and documented the time the excerpt was taken from the transcript so that I could return and read/ listen to it again in its proper context if needed. Seven themes emerged from this cycle of analysis. A sample of these Google documents can be seen in Figure 7.

Figure 7

Sample of emergent theme document

THEME: Protect Relationships and Autonomy

Don' t Be Bossy… Tread Lightly? Don't ROCK the Boat/ you can't rewind/ don't want to look crazy/ self protection?
HOW a JPLC may affect resistance to change…
made changes as we went along. I was comfortable with and then I didn't think would rock the boat too much. I was nervous a lot about it because I did want to get to again, I think when you're in those situations, you can never really rewind and make it the right way perfectly, we'll always have that little bump in the road

This is something new for them. So I need to go easy and slow, I am now, secure enough in the relationship that we have now I know it's not about me. And so, and this is going this is my teacher self coming out. I think we can even teach our peers.

16;50
And I am not, by any means the best model around or someone who does something perfectly. I have to be careful about giving that impression too. But I would rather gain their respect in a way of like, she's trying things, and she's honoring our feelings, then she's Miss bossy. She does everything she wants to do here. Yeah. So I try to walk in between those two.

So I have found I've had, I have been lucky to be under some really good, especially women, strong leaders, and I have noticed that a lot of what is done is pitching out an idea. Having meetings where we talk about it, a lot of these meetings include feelings about it, the benefit of students, but that we were involved and I could tell now looking back that the leader you know probably had an end goal in mind or a hopefully a direction

DARR Innovator
2:58
I'm just be professional, and they're not my children. And yeah, just not to look crazy.
20:01
I don't I don't like controversy at all. I don't like any kind of that kind of stuff. And so I don't want people to be upset with me or most teachers don't know but I feel like your colleagues are the most important,

18:01
Well, at first I was hesitant because I knew she was not for it. And we usually do things like you

I then engaged in the practice of abstraction by developing superordinate themes by putting like with like and developing a new name for the cluster. I developed nested themes within these superordinate themes. I created four superordinate themes from the original seven themes, each having two to three subordinate themes nested within them. One superordinate theme had four nested themes that I ended up reducing to three. Once I felt confident that I had saturated the data, I returned to the code book again and used

the Frequency Report to determine if there were any nested themes missing that belonged with one of the four super-ordinate themes. I looked for connections between the less frequent codes to see if I could merge them with any of the nested themes that I had created. This inductive and iterative analysis process as seen in Figure 8 allowed me to explore, organize, and reduce the qualitative data to its most applicable and important aspects in order to identify the meaning of my teachers' experiences as it relates to my research questions. The flow of my data analysis can be seen in Figure 8.

Figure 8

Data analysis process
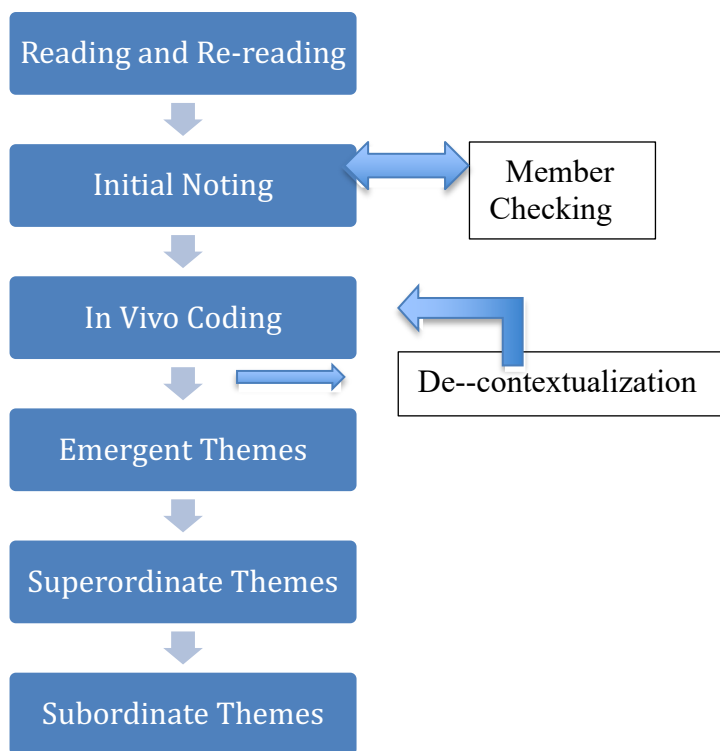
Ethical Considerations and Trustworthiness

Teacher participation in this study was voluntary. Teachers were informed that if they decided not to participate or to withdraw once engaged in the research, there was no penalty whatsoever. The teachers were informed that the interviews and Jigsaw PLC meetings would be audio-recorded and transcribed and that their journals would be copied, reviewed, and annotated. Triangulation of data is important in social constructivist research; thus, the various data collection methods to include interviews, Jigsaw PLC meeting transcripts, journals, and member reflections added trustworthiness to this study. Each teacher reviewed the initial notes during the analysis process and the final results with the researcher. All six teachers attended all three Jigsaw PLC meetings, engaged in pre and post interviews, and completed the journal entries after each Jigsaw PLC meeting.

CHAPTER 4

DATA ANALYSIS AND RESULTS

"At the outset, it is important to bear in mind that doing such analysis is inevitably a complex process. It may be an experience which is collaborative, personal, intuitive, difficult, creative, intense, and conceptually demanding. Our own commitment to IPA stems from the fact that it can often be a uniquely interesting, insightful, and rewarding process." – Smith et al. (2009, p. 80)

The problem, purpose, and research questions in this study are directed at understanding teacher resistance to change in private independent schools. In response to the problem, a Jigsaw Professional Learning Community was created to team up resistors, innovators, and the school leader to discuss current changes in curriculum across the school community. This is a qualitative action research study using interpretive phenomenological analysis (IPA) which is an iterative and inductive process of analyzing the participants' lived experiences. The analysis of the qualitative data was an attempt to answer the following research questions:

Research Question 1: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' resistance to change?

Research Question 2: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' attitudes towards and perceptions of new curriculum?

Qualitative Data Analysis

The data was collected over the course of the study in the form of pre and post-interviews, intervention meeting transcripts, and journal entries. The qualitative results are presented as themes that emerged from the codes and research questions. The data were coded using an iterative and inductive IPA process as suggested by Smith et al. (2009) which involves reading and rereading, initial noting, developing in vivo codes,

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identifying superordinate themes, and then identifying the nested themes within the

superordinate themes. The coded text and categories combined together to lead to four

superordinate themes with additional nested or subordinate themes in each. Table 5

shows the superordinate themes and their corresponding nested themes as the themes

relate to the research questions.

Table 5

Themes and Research Questions

Research Question 1: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' resistance to change?

Super Ordinate Theme #1: Jigsaw PLCs reveal that resistance is not even resistance but an attempt to protect:
Nested Theme A: Relationships with Colleagues
Nested Theme B: Autonomy of their Colleagues

Super Ordinate Theme #2: Jigsaw PLCs create a sense of shared vulnerability that affects the level of resistance to change.
Nested Theme A: We are in this together and share a common fate.
Nested Theme B: We can share the process and the burden of this change.
Nested Theme C: We can establish connections for ongoing support

Research Question 2: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers attitudes towards and perceptions of new curriculum?

Super Ordinate Theme #3: Jigsaw PLCs prevent teachers from feeling like they have to be blind believers in a new curriculum.
Nested Theme A: Safe space to ask specific questions/ to "kick the tires".
Nested Theme B: Safe space to discuss potential problems related to the specific curriculum.
Nested Theme C: Safe space to troubleshoot solutions to these curriculum-specific problems.

Super Ordinate Theme #4 Jigsaw PLCs can have a positive effect on attitudes and perceptions of the new curriculum when the innovators maintain a positive rapport with other teachers.
Nested Theme A: Innovators need to refrain from being dismissive.
Nested Theme B: Innovators need to refrain from passing judgment.

Themes

The interpretative phenomenological analysis process led to four major themes that addressed how the Jigsaw PLC affected teacher resistance to change and affected attitudes and perceptions of the new curriculum.

Theme 1: Jigsaw PLCs reveal that resistance is not even resistance, but an attempt to protect relationships (nested theme A) and the autonomy of others (nested theme B). Teachers indicated that trying something new was not necessarily difficult for them personally or professionally and they did not generally feel that they resisted change, but instead were fearful of how their attempts at engaging with a change could affect their relationships with their colleagues or threaten the autonomy of other teachers. Spending time engaging in direct conversations about the change with other teachers helped alleviate the fears they had surrounding what others would think of them if they tried the proposed changes.

For Gail, Innovator (2), before the Jigsaw PLC there was "a little bit of an element of protecting my relationship with my colleagues, right? Because if I tried this, I was afraid they might judge me and I wasn't sure if they bought into it or not. I don't like controversy at all, and so I don't want people to be upset with me…" After engaging in the Jigsaw PLC, she indicated that the social interactions allowed her to see that her colleagues were "not resistant. They aren't anti, some are just questioning it."

Mimi, Neutral (2), shared pre-intervention that "this job is relationships with the adults around you… And that's like what sustains you… so I don't want to make any waves by trying something my colleagues don't believe in so maybe I behave in a certain

way to preserve relationships". Her journal entries after the Jigsaw PLC indicated a relief to hear how others were trying the new curriculum as "It was invigorating to talk with my group, and hear what they were trying. It reminded me of things I completely forgot about or missed from my training almost two years ago that I want to try. I feel like so much learning happens through these social interactions."

Peggy, Resistor (2) shared pre-intervention that she questioned whether her "colleagues were really going to accept this change" and she was resistant to try because of one particular colleague she admired and did not want to upset. She shared pre-intervention that "I really do think I've really tried a lot to think about how 'X' felt about this, what they're bringing to the situation, how they're feeling, what their perspective is, what they're seeing, what, what they're thinking." And she added:

> It was really hard especially with 'X' because I respect her so much and she is
> such a great teacher but she had great resistance to the whole OG training. And
> that was, it was hard for me, because I saw her have such big emotions about it.

Peggy's post-intervention interview revealed that her social interactions with this colleague during the Jigsaw PLC helped her understand how far her colleague had actually come and though she "couldn't imagine her getting to the other side of that, to hear her talk about it so positively was really… that she is there is just so wonderful now." This gave her freedom to move forward and embrace the change since she indicated:

> It was hard to kind of want to get on board with this and seeing other people
> excited and wanting to get on board with it and knowing that 'X' was on board
> with it made it not so hard for me".

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Even the teacher with the lowest overall RTC score indicated a "fear that my team would be mad at me if I just went ahead and tried this new curriculum behind their back." Jill, Innovator (1), shared that she is constantly aware of others' autonomy and tries to protect relationships by not being "Miss Bossy" when it comes to making changes within the grade level:

> You don't want to hurt feelings, you don't want to insult. You have to be on this team, this is not about me. So, I didn't want to hurt feelings, but also didn't want to just go behind their backs and do things all of a sudden.

Time in the Jigsaw PLC engaged in social interactions with her various colleagues helped Jill share her successes with the new curriculum and provided an opportunity to share her excitement while protecting her relationships since:

> I was able to share and I enjoyed knowing that the other teachers in the group were planning and thinking about the next steps of the curriculum, too. It is exciting and invigorating to see the beginnings of change and institutional adjustments.

Vivian, Resistor (2), shared explicitly that:

> Emotion plays into it because you have to be so connected in this profession and resistance sometimes is protection that a teacher is trying to have when it comes to the relationships with their students, their relationships with their colleagues and their own autonomy.

Suggesting that resistance is not necessarily resistance to the change but a reaction to how the change may affect coveted relationships, which are the center of a teacher's work life. Vivian's journal entries suggest that her interactions with others, particularly Gail,

Innovator (2) offered her "relief and reassurance. Not only to verbalize concerns drawn from past experiences but to know colleagues share those considerations as well and have thought about them like I have."

Theme 2: Jigsaw PLCs create a sense of shared vulnerability that affects the level of resistance to change. We are in this together (nested theme A), we can share the process and the burden (nested theme B), and we can establish connections for ongoing support (nested theme C). Jigsaw PLCs offered teachers the opportunity to be vulnerable about their fears regarding the change and created a shared sense of purpose through social interactions. Teachers perceived a shared sense of the burden and were able to establish connections with one another for ongoing support as they continue to adjust to the change.

Gail and Jill, both Innovators, indicated that their already positive attitudes about the change were reinforced since time was spent focusing on what resources and support need to be put in place in order for the teachers to accept the change. Gail was energized and found that her "already positive attitude towards OG is even more positive. After listing all of the things that need to happen to make OG successful at Harpeth, I feel confident we will be supported and the students will thrive." Jill shared in her post-intervention interview that she is:

> Aware this process will have setbacks, excitement, and even disappointments, but I have experienced and been a part of leading curricular change enough to know that when we share our experiences like we did and share the burden of the change we can be successful.

During her post-intervention interview, Mimi, Neutral (2), expressed how:

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I think having conversations with people is always a better way to process things

rather than just on your own. Right. And so, I think just the fact that we had all

those conversations within a group of, you know, with a variety of people, to me

is a cathartic process. But I enjoyed it. I liked having those conversations with my

colleagues and it made me feel supported to know that we have people invested

personally and professionally in wanting it (the new curriculum) to be successful.

In her last journal entry, Mimi indicated that if she knew she was going to engage in

dialogue about change with a variety of colleagues before the implementation process

began, she may have been "more open to the change from the start because I was going to

be able to either share and/or hear about people's experiences with it and that feels good."

She also added that her attitude about this change was already growing positive before

the Jigsaw PLC meetings, but that:

Brainstorming all the ways the OG initiative could be successful was very helpful

because it helped me envision actual things we could do together to work toward

long-term success. Knowing actual steps you can take together as a school to help

a new process along is always very reassuring.

Dolly, Neutral (1), shared after Jigsaw PLC #2 that she "felt energized and it gave

me an opportunity to think about some areas for growth going into the summer and next

school year, particularly with teacher support and resources that we can work on

together." This comfort in shared vulnerability and burden also came out in her post-

intervention interview when she shared, "It actually helped strengthen my attitude

towards this change and showed me visually how much we have accomplished and how

much support we can continue to offer one another as we adjust."

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The two Resistors, Peggy and Vivian, both indicated that this time for vulnerability and coming together to acknowledge a shared common fate left them feeling hopeful and supported. In her pre-intervention interview, Peggy shared her trepidation about the change stating:

When I am trying something new. I need time to like, think about it and find things and plan things and imagine how it's gonna go and did it go where I wanted it to go and what do I want to change and I just don't have the luxury of blocks of time to dig into that or to have conversations or talk with my teammates to reflect.

That made her anxious about the change. Peggy shared in her last journal entry that:

It was a bit of a relief to have acknowledgment that this may not all work like we hope it will - for a number of reasons. This helps me as a classroom teacher feel like the burden of guaranteed success is not entirely on me. It's helpful to list potential obstacles as a group, to discuss together, and know our leaders notice and address them on the front end.

Vivian shared a similar sentiment in her pre-intervention interview when she said she did not want to accept the change blindly just because it is the next "shiny new thing" and she expressed her fear about investing "all of that time for something that ultimately won't last." Her last journal entry indicated that time with her colleagues clarified her "understanding of what to troubleshoot prior to the start. These brainstorming sessions created a mental map of what could happen during this curriculum implementation and how to navigate the waters and who to ask when I need help." Vivian indicated that her encounters in the Jigsaw PLC with her neutral and innovator colleagues helped her see how invested teachers are in this change, that she does not need to carry the burden alone,

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and that there were people to reach out to when she felt stuck who have alternative ways to address concerns she may encounter. She shared that:

 We had a couple of different grade levels represented in different personality types, represented who see things in different ways. This was interesting to me because I don't get to work with them as much as I'd like to. And I value their insights and thoughts on things which are often different than mine, but I like the way they explain things. And I think 'Jill' makes a lot of sense to me.

Theme 3: Jigsaw PLCs prevent teachers from feeling like they have to be blind believers in a new curriculum. Safe spaces are created that allow teachers to ask specific questions/ to "kick the tires" (nested theme A), discuss potential problems related to the specific curriculum (nested theme B), and troubleshoot solutions to curriculum-specific problems (nested theme C). Jigsaw PLCs provide open moments for teachers to ask questions specific to the new curriculum, openly share problems they have encountered while adjusting to the new curriculum, and share possible solutions to curriculum challenges. These open moments to "kick the tires" made the teachers feel more positive about the curriculum since they felt it allowed them a safe place to be vulnerable. Every participant expressed some level of relief in being able to openly share concerns and questions about the curriculum with their colleagues.

Jill, Innovator (1), shared that she was:

 thrilled to be discussing the literacy program with peer teachers and talking with other teachers about the positive parts, and even the negative and the challenging parts of implementing this new curriculum is comforting. Knowing that other teachers have some questions too brings comfort. Talking through frustrations

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also brings about suggestions or even solutions from people that may have

experienced the same concerns or issues; especially when talking to multiple

grade levels of teachers.

Gail, Innovator (2), offered a similar sentiment when she shared in her post-intervention

interview that:

We don't have all the answers like, you know, I have a great idea about that. Like,

just, that's my favorite thing about teaching like bouncing ideas off of each other

and working together to figure this new program out even when we have

questions about it.

Dolly, Neutral (1) experienced the Jigsaw PLC as a "gift of time to think together.

Just giving the gift of time, like just having time to think together and to ask why things

are done a certain way made people feel heard." Mimi, Neutral (2) had a similar

experience and appreciated being able to openly admit that she wanted more time to

figure out the new curriculum. In her post-intervention interview, she stated that:

I think one of the hard things about the frantic pace that we find ourselves in here

is it makes it hard to stop and say hold on, let's just touch base and what's going

well and what's not and let's troubleshoot and when we talk about like, you know,

what's going well, and what do we need to fix. This is how we solve (problems)

so let's engage.

The resistors specifically appeared to appreciate this time to ask curriculum

questions and indicated that they felt more confident and positive about the curriculum

after engaging in the Jigsaw PLC. Before the intervention, Peggy Resistor (1) stated that:

This was a pretty big change and I understand why that change was necessary. So, there's a part of my brain that says, Alright, we're gonna have to just bite the bullet and get through it. But I'm wondering, will it continue? And is this the best way we should be doing it or is there another way we could do it better?

In her post-intervention interview Peggy shared that her experience in the intervention allowed her to engage in:

Conversations and reflection that felt imperative to my success with OG. If nothing else, it confirms that we are all still doing this new thing. There is accountability and I am encouraged to hear my colleagues talk about their belief in and commitment to it.

In her last journal entry, she echoed this sentiment by writing "It's refreshing to be realistic and ask questions and to acknowledge the roadblocks that stand in our way. I am hopeful knowing we have leaders in place who will make time for reflection, sharing, and conversations."

Pre-intervention, Vivian shared that she struggled:

Fast forwarding to the decision to implement, because, in my mind, I'm still thinking what were the original choices, and what were the pros and cons and did everybody think about those. I guess I like a discussion with everyone including the decision-makers about the specifics of this new curriculum. This is a lot of work to make the change and if I am going to do it, I need to know it will be worth my effort.

She indicated that she would appreciate the opportunity to ask questions and kick the tires, using the analogy of buying a new car stating:

I think that it is a process to get there. There is a part that has been ingrained in

me to ask questions about the practicality of things and the longevity of things.

And you know, I want to know. I want to know how many miles it will take to get

through an oil change. I want to know those basics. Are there new tires on this

car, you know, that kind of stuff.

Post-intervention, Vivian shared that the Jigsaw PLC allowed her to "process the

process" and "it created relief and reassurance. Not only to verbalize concerns, but to

know colleagues share those considerations as well. These types of conversations and

reflections feel imperative to my adjustment to and feelings about the curriculum."

**Theme 4: Jigsaw PLCs can have a positive effect on attitudes and perceptions
of the new curriculum when the innovators maintain a positive rapport with
teachers. Innovators need to refrain from being dismissive of their colleagues'
concerns (nested theme A) and refrain from comments that appear judgmental
(nested theme B).** Innovators can be impatient and steamroll those who appear reluctant

to adopt new practices. Experiences in Jigsaw PLCs are positive for teachers when

innovators seek to understand resistors rather than persuade them too aggressively.

Resistors indicated how important it was for them to express doubt without feeling

judged or forced to adopt the curriculum. In addition, the innovators in the Jigsaw PLC

realized through their experiences that their approach to resistors matters if they are going

to change attitudes and perceptions of the new reading curriculum.

Vivian, Resistor (2), indicated in her pre-intervention interview that her reaction

to this curriculum:

Could potentially be based on the rapport I feel towards the colleague who is

trying to engage me to adopt it because in the past I have experienced the mindset

from faculty that you're either with us or you're not, you're on the boat or you're

not you're on the boat and I just wanted to ask questions about the boat.

Her experience in the intervention when she was partnered with Gail, Innovator (2), was

significant. Gail "has been a really positive influencer in all of this, because she really,

she dove into it. But she had some questions. She maybe had the same doubt as me and

that helped me." In her journal entry after the second Jigsaw PLC, Vivian shared that

"having room to talk with someone who loves this curriculum but was willing to just

listen to my concerns made me feel open to it." During that Jigsaw PLC, Vivian shared

with the other teachers in her triad that she felt a "positive momentum" from her

colleagues because they were "listening to me without trying to sell it to me". During the

post-intervention interview, when Vivian was asked how the experience in a Jigsaw PLC

affected her perception of the new curriculum she shared:

> It felt okay to say, I'm not totally sold. And I think that that is a really important
>
> piece for me to work towards how I feel about OG. Opposing views especially
>
> when it comes to everyone trying something new for the first time are crucial to
>
> really sorting things out.

Gail shared about her interaction with Vivian in her journal when she wrote:

> It felt a bit negative at first but that one -on-one discussion was really nice
>
> because it felt like both my partner and I benefited greatly from listening to and
>
> understanding one another's thoughts. I felt a shift in her during that.

In her post intervention interview Gail elaborated on her interaction with Vivian expressing understanding of her being:

> Very skeptical about the program. She teaches third grade and has gone through many different literacy programs that did not work well in her opinion. So, she is hesitant to start another new curriculum and it just gave me that perspective. Like I guess not everybody is on board and I better try to understand that.

In her pre- intervention interview, Peggy, Resistor (1), shared that she has felt frustrated in the past about adopting new curricula because:

> I feel like over the years, there have been many times that we're doing this but there's very little time for reflection on it. I think the biggest thing that I kept saying over and over again was how much I felt I like to face the realism of there are going to be things that don't work, or challenges that we have to work around or some problems that we are bound to encounter and that needs to be acknowledged and discussed.

After the intervention she stated:

> It felt freeing to be able to name the negatives and to admit that I am struggling with this. I felt more refreshed that we are going to call it like it is. I know that negative attitudes about things can kind of sour things and everyone around you. But I didn't feel like that was the attitude of these conversations at all. I felt more refreshed and acknowledged.

Teachers with neutral and innovative attitudes towards the new literacy curriculum indicated in several data sources that they realized how vital their reaction to resistance was in helping teachers create positive attitudes towards the new reading

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program. Jill, Innovator (1), shared in her post intervention interview that during her interactions with teachers she:

> Realized that those are moments where someone can be heard, which is valuable whether you say anything back or not. I could tell it just releases a little something for them. Yeah, it was a comfort thing. Yes. So that's where that team dynamic comes in to help each other adjust in that way without judgment.

> Pre intervention, Dolly shared past experiences with leading curriculum changes

and admitted that:

> I probably didn't do a good job and I can take some ownership for I didn't do a good job of like working on building the trust first that I just kind of came in. I think I should have been maybe a little bit more deferential or like relying on their expertise more like maybe being a learner along with them. I think they felt threatened.

In her second journal entry, after Jigsaw PLC two, Dolly shared:

> I thought today, sitting in that conversation in our small group, with a lot of different personalities, that we were able to get something accomplished. Everybody in the group contributed something really meaningful, and brought up concerns and listened to each other respectfully.

During this particular Jigsaw PLC, Dolly's reply to a concern posed by Peggy, Resistor (1), about the pacing of the curriculum was, "You're right, you should feel that way, what are we going to do to kind of help us all move through that?" Post intervention, she shared that during her interaction with her resistant colleague she recognized that she needed to:

Validate her fears. And like, understood where she was coming from and didn't dismiss her and that's so important, especially with someone with her concerns and I really tried to play into like all of her strengths, like a trainer and a leader. And I think like, so much of this is like psychology, like trying to just understand people's personalities and how they're going to react to things and meeting them where they are.

During the Force Field discussion in the third Jigsaw PLC, Vivian shared the forces hindering her adjustment to the new curriculum with her jigsaw group. She told Jill and Dolly that it "feels gimmicky… and salesy… and there is such a big push for all of us to be trained and use it with fidelity" to which Dolly replied, "Yes, I see that, but it can be fun to learn something new and have a new approach." Jill added, "but you do not need to master it all at once or learn to teach it perfectly." Vivian indicated in her third journal entry that "meeting with that team allowed me to be vulnerable and I feel like I need to continue meeting to weigh out the strengths and weaknesses of OG."

Conclusion

Relationships embedded within the community were used in the form of a Jigsaw PLC to help teachers interpret and adjust to a curriculum change at Harpeth Academy. The social capital created in each of the three meetings, fostered opportunities to make meaning together through purposeful interactions. As the participants worked though interpreting this change together, discussions surrounding the content, process and premise of this change provided a vehicle for differing values, beliefs, and feelings to be shared openly. These interactions provided opportunities for shared vulnerability and helped the teachers feel a sense of shared fate. Providing time to ask questions about the

specifics of the change and to allow teachers to express doubt without being judged was critical to their adjustment in attitude towards and belief in the new curriculum. The social capital created in the Jigsaw PLC affected teachers' resistance to change and had a positive effect on their attitudes toward and belief in the new curriculum. The time spent in these collaborative learning communities with diverse colleagues addressed concerns about relationships and autonomy, created a sense of shared vulnerability and fate, and allowed teachers to inquire about the merits and benefits of the change.

CHAPTER 5

DISCUSSION

This chapter presents a discussion of the qualitative results in relation to the previously reviewed literature for each of the research questions:

Research Question 1: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' resistance to change?

Research Question 2: How and to what extent does implementation of Jigsaw Professional Learning Communities affect teachers' attitudes towards and perceptions of new curriculum?

Results in Relation to the Reviewed Literature

The innovation of a Jigsaw PLC was designed using social capital theory as a guiding concept. Social capital theory "refers to the norms and networks that enable people to act collectively" (Woolcock & Narayan, 2000, p. 226). Putnam (2000) suggested that social capital is rooted in the interactions between members of a community where mutual assistance, trust, and behavior norms are all used to improve the overall development and performance of a community. The social capital created in the Jigsaw PLC affected the teachers' resistance to change and had a positive effect on their attitudes toward and belief in the new curriculum. The time spent in these collaborative learning communities with diverse colleagues addressed concerns about relationships and autonomy, created a sense of shared vulnerability and fate, and allowed teachers to inquire about the merits and benefits of the change.

Relationships and autonomy. Consideration of teachers' relationships and autonomy when introducing change and allowing them to dialogue about the change can create an opportunity for community sense-making that can support change recipients and strengthen the change itself. During my first cycles of research, it became clear that

what may appear to be resistance to change was more about teachers protecting relationships and autonomy. What appears to be resistance has a much deeper meaning than school leaders anticipate and working through that perceived resistance through interactions and dialogue with colleagues and school leaders can propel a change forward (Goodson et al., 2006; Snyder 2017). This is consistent with my research findings.

The teachers indicated that they were actually interested in trying the new curriculum but fearful of how their colleagues would perceive them if they knew they were trying the new concepts in their classrooms. Teachers indicated that trying something new was not necessarily difficult for them personally or professionally and they did not generally feel that they resisted change, but instead were fearful of how their attempts at engaging with a change could affect their relationships with their colleagues or threaten the autonomy of other teachers. Spending time engaging in direct conversations about the change with other teachers helped alleviate the fears they had surrounding what others would think of them if they tried the proposed changes.

This is consistent with the work of Dan Lortie (1975) and Goodson et al. (2006) who identified relationships and autonomy as two of the most compelling influences in the teaching profession and aligns with the findings of Snyder (2017) who suggested that change agents must consider how innovations can threaten these personal objectives that teachers value in their profession. Teachers in this study indicated that the various social interactions during the three discussions helped them work through their fears surrounding the ways this change may threaten their relationships with their colleagues. The teachers in this study did not indicate that the change was a threat to their own autonomy. Instead, they indicated that they feared their adoption of it would threaten the

autonomy of their colleagues and thus have a negative effect on their collegial relationships. This aligns with the findings of Akmal and Miller (2003) who suggested that through collaborative dialogue about change, teachers' underlying fears that present as resistance can be forced into the open and replaced with stronger collegial networks that propel the change forward.

Shared fate. Social capital increases teachers' knowledge since it allows access to the professional knowledge of other educators that do not normally have the opportunity to interact with one another. The most effective "feedback teachers will receive is that which is built into the purposeful interactions between and among teachers" (Fullan, 2014, p. 78). These interactions can create a culture of relational trust and provide resources that allow teachers to adapt to the change (Lockton & Fargason, 2019, p. 16). Frank et al. (2004) found that teachers in a school community "share the fate of the organization. Therefore, they are more likely to help other members implement an innovation that improves their common fate" (p. 151). This is consistent with my findings.

The teachers indicated that this time together with faculty they do not normally have the opportunity to interact with allowed them to share the process and the burden of this change and establish connections for ongoing support as they adjusted to the new curriculum. Interaction in the Jigsaw PLC allowed teachers to become aware of which skills are most valued while offering them the support and knowledge they need to adapt to those new skills. Teachers indicated that their encounters in the Jigsaw PLC with colleagues helped them see how invested teachers are in this change, that they do not need to carry the burden alone, and that there were people to reach out to when they

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encounter questions about the new concepts and skills. This shared sense of ownership helped to displace some of the negative perceptions of the new curriculum. These interactions including a diverse set of teachers created a sense of mutual obligation and responsibility for action through social capital (Putnam, 2000).

Time to ask questions. Balka et al. (2010) found that when change agents allow time for educators with vast opinions and approaches to interact and share their experiences and expertise through social interactions it can build a level of trust within the community, which can transform attitudes towards a change. My teachers indicated that this trust was built by providing safe opportunities for educators to ask questions, discuss potential problems related to the specific curriculum, and troubleshoot solutions to curriculum-specific problems. Social capital can play a pivotal role in the adaptation of an innovation when teachers are not expected to be blind believers in the change but rather encouraged to inquire about its merits and ask specific questions about how it will affect student outcomes. Motivation and engagement with a new curriculum improve when teachers perceive that they are allowed to ask questions and they are likely to be more reflective if they believe they are being supported by their colleagues and the change agents. According to Leana (2011), the most effective use of social capital in schools occurs when purposeful collaboration allows for questioning and listening. Dirkx (2006) suggests that the critical self-reflection needed to adapt to change requires time working through conflicts one has with the new task and this can be done by fostering opportunities for dialogue and collaboration among learners.

Innovators Beware. As educators engage in learning a new curriculum their attitude and perception of the curriculum can be affected by their colleagues. Schunk

(1996) found that slow progress to adopt a change does not necessarily mean a lack of motivation or interest in the change and that teachers can be inspired by their colleagues through social interactions. My results indicate that the tone of these interactions is crucial to encouraging teachers to change their attitudes and belief in a new curriculum. Jigsaw PLCs can have a positive effect on attitudes and perceptions of the new curriculum when the innovators maintain a positive rapport with participants and create disarmed partnerships. Innovators need to refrain from being dismissive of their colleagues' concerns and refrain from comments that appear judgmental.

Social persuasion is a way to strengthen teachers' beliefs that they are capable of mastering new skills as long as they are encouraged in a positive way. Teachers who are persuaded by colleagues that they possess the capabilities to master a given skill are more likely to mobilize greater effort and sustain it over time than those who are judged harshly for not adopting the change sooner (Bandura, 1994). The resistors in my study reinforced that this type of cooperative and patient collaboration was key to their shift towards a more positive outlook on the new curriculum.

This was the original intent of Aronson's jigsaw learning strategy since the goal was to reduce competition and bias while enhancing multiple perspectives. If the social networks created during Jigsaw PLCs are going to be effective, the innovators need to approach these social interactions with respect for the multiple ways of knowing. A diverse set of people can produce a norm of generalized reciprocity and mutual obligation as long the quality of their relationships allows for honest and respectful dialogue.

Implications for Practice

Response to RQ 1. Change agents in schools need to understand that what appears to be resistance to change may just be an attempt by teachers to protect relationships and the autonomy of their colleagues. Working through this perceived resistance by creating interactions amongst diverse colleagues so that they can dialogue through these concerns can create inertia that will propel the change forward. Change can interrupt normal patterns of organizational structure that can affect relationships and autonomy, but when leaders and teachers confront these changes together it can create an opportunity for community sense-making, allowing the leader to then act on this new interpretation of the change in ways that support the needs of change recipients and the change itself.

Jigsaw PLCs can create a sense of shared vulnerability that can reduce resistance to change. When leaders create opportunities for teachers to connect and dialogue with colleagues who have different experiences and perspectives of the change, it can allow teachers to break out of the silos of the classrooms and share the process and the burden of the change as a community. These social interactions create a shared sense of purpose and provide connections for teachers who may need support as they continue to adjust to the change. These social networks can be the glue that holds the new initiative together while teachers adjust to the change.

Response to RQ 2. Jigsaw PLCs can change teachers' attitudes towards and belief in a new curriculum as long as the Jigsaw PLC is a safe space to ask specific questions, discuss potential problems, and troubleshoot solutions to curriculum-specific issues. Leaders need to establish disarming environments for teachers to raise questions,

criticize, and share concerns about the change. Creating a safe collaborative environment can reveal any underlying mistrust about the change, forcing it into the open and giving teachers room to reflect and make meaning together. Refusing to acknowledge and support resistance to change can perpetuate the resistance; thus, leaders and innovative teachers can't be dismissive of teachers' questions and concerns surrounding a new curriculum.

When leaders create opportunities for resistors and innovators to collaborate, it is pertinent that leaders guide innovators regarding how they engage with their colleagues. Resistant teachers want to be heard and acknowledged, rather than discounted, and through active listening and collective problem solving, resistors can feel valued, making them more likely to get on board with the change.

Limitations

The major limitation of this study was that there was not a teacher who was identified as resistant to change on the RTC scale. This could be due to resistors not wanting to take part in a study that requires them to consider their own resistance to change. The original objective was to choose two teachers whose RTC scores were between 5 and 6 on a scale of 1 to 6 for negative reactions to change. Out of the twelve teachers who agreed to participate there was not a single one whose overall responses on the RTC identified them as a resistor; thus, I chose the two teachers who had the highest sub score for Emotional Reaction to change. Even the score of 4.25 for Vivian and Peggy on the Emotional Reaction sub score did not place them in a category for being highly resistant. This limitation could have affected the findings since I was working with teachers in the Jigsaw PLC who appeared to be relatively neutral and even open to

change. The data did reveal that resistance to the change did exist, but it was not about the change itself as much as it was about the effect this change would have on relationships and autonomy. This finding could have been affected by the fact that there were no real resistors in the Jigsaw PLC.

My role as the researcher in the study is another limitation of this research. I was embedded in the study as the leader of the Jigsaw PLC, and consideration should be made surrounding the fact that teachers may have said things they thought I wanted to hear as their leader and the change agent in the school community. I did attempt to create a space for multivocality and member reflection, but as their superior, it may have been impossible for the teachers to remove the employee and employer dynamic from our interactions. I tried to be aware of my own active role when interacting with the teachers, keeping the focus on their subjective experiences, but I found this challenging since I have personal and professional relationships with each of them, and completely removing the influence of these relationships is not entirely possible. By adopting a social constructivist lens, I wholeheartedly attempted to engage in researcher reflexivity by identifying and considering my own assumptions and biases. However, I recognize that I played a role in the research process, particularly in the development of dialogue between the participants in which I was an observer and participant. It can't be understated that I brought my own situated life experiences with change to this study that could have influenced the teachers' experiences in the Jigsaw PLC as well as the analysis of the data.

My inexperience with open-ended interviews was another limitation of this study. I feel confident about the preintervention interviews as they seemed relaxed and natural. I gave the participants room to really share their stories about change. I presented the

questions, allowed the teachers to openly share, and probed with follow-up questions that solicited narratives about the teachers' situated experiences. The transcriptions indicated that I spoke less than 20 % of the time during these interviews. I created space for multivocality and surrendered control of the data by seeking to listen and check for understanding.

However, the post-intervention interviews did not have the same quality and felt rushed and somewhat disjointed. I followed the post-interview guide but I was surprised to hear how much I inserted myself into the participants' answers, at times cutting them off with my own thoughts. In reviewing the transcriptions there were two interviews in which I actually spoke almost as often as the teachers. I assume that my excitement about their responses and positive reaction to the intervention had me overly enthusiastic. This could have affected how the teachers were responding to the questions presented. I failed to provide a space during the post-intervention interviews that would enhance the credibility and validity of the data. The timing of these interviews may have affected the outcome since each of them was scheduled during the last two weeks of the school year. It is likely that the participants and I were a bit distracted by the activities required to wrap up the school year and prepare for in-service. The post-intervention interviews had a rushed energy about them that may have affected the responses and thus the data collected.

This action research study was an attempt to understand teacher resistance to change when a new curriculum was introduced. The study was able to measure how Jigsaw PLCs may affect resistance to change and affect the feelings and beliefs surrounding a new curriculum, but it did not measure whether the teachers were actually

implementing the new curriculum in their classrooms. A follow up study that investigates if and how teachers take action to develop lessons with the new curriculum would allow change agents to measure effectiveness of Jigsaw PLCs in addressing resistance to change and whether this type of PLC encourages teachers to incorporate the new curriculum into their lesson plans.

Closing Thoughts

From the reconnaissance cycle to the data analysis, I learned so much about teacher resistance to change and how to get teachers out of the silos of their classrooms to collaborate. I experienced my own life change through this process as I relocated and changed jobs after living and working in the same place for 25 years. This change occurring in my own life as I was studying the effects of change on teachers makes this study and the work I conducted during it that much sweeter. I have a completely new appreciation for how teachers experience change and understand now how values, beliefs, and past experiences can have an effect on how teachers approach change in their classrooms. Resistance is not necessarily willful defiance, but rather an emotional reaction, and I experienced my own emotional reactions to change during the span of this work, including the changes required to operate a school during a worldwide pandemic.

Change agents in schools would benefit from finding ways to peel back the layers of resistance to change by digging deeper into the reasons why teachers may struggle to accept new innovations. I hope this work encourages leaders to slow down, create disarming partnerships, and really listen to the big, beautiful questions that resistors pose. When we value and acknowledge the members of a community of practice, we create a sense of trust that can encourage collaborative relationships across the school, and it is

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these relationships that will ultimately benefit the students who count on us to help them

become the best version of themselves.

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APPENDIX A

PARTICIPANT LETTER

Dear Colleague:

My name is Heather Caponi and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Dale Baker, a faculty member in MLFTC. We are conducting a research study on teacher resistance to change. The purpose of this study is to understand better the current situation with respect to how private independent school teachers experience change.

We are asking for your help, which will involve your participation in a qualitative research study concerning your knowledge, experiences, attitudes, and beliefs about change. We anticipate this research to last a semester and entail a survey, two 60 minute interviews, and journal writing. I would like to audio record meetings and interviews. The meetings and interviews will not be recorded without your permission. Audio recordings will be deleted from the original recording device upon transfer to a password-protected computer and then deleted from the computer once transcribed. Please let me know if you do not want the interview to be recorded; you also can change your mind after the interview starts, just let me know.

Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty whatsoever. You must be 18 years of age or older to participate.

The benefit to participation is the opportunity for you to reflect on and think more about how we deal with change within our school community. Responses will also inform future iterations of the study. Thus, there is potential to enhance the experiences of your colleagues. There are no foreseeable risks or discomforts to your participation.

Your survey responses, interviews, and journal responses will be confidential. Results from this study may be used in reports, presentations, or publications but your name will not be used. Any recordings will be labeled with a study ID rather than your name, transferred to a password-protected computer, and deleted from the original recording device.

If you have any questions concerning the research study, please contact the research team at dale.baker@asu.edu or Heather Caponi at hcaponi@asu.edu or 414-412-8694.

Thank you,

Heather Caponi, Doctoral Student
Dale Baker, Professor

Please let me know if you wish to be part of the study and will let me audio record your responses by verbally indicating your consent.

If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Institutional

Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

APPENDIX B

RESISTANCE TO CHANGE SCALE

I generally consider change to be a negative thing.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

I'll take a routine day over a day full of unexpected events any time.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

I like to do the same old things rather than try new and different ones.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

Whenever my life forms a stable routine, I look for ways to change it.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

I'd rather be bored than surprised.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

If I were to be informed that there's going to be a significant change regarding the way things are done at school, I would probably feel stressed.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

When I am informed of a change of plans, I tense up a bit.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

When things don't go according to plans, it stresses me out.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

If one of my professors changed the grading criteria, it would probably make me feel uncomfortable even if I thought I'd do just as well without having to do any extra work.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

Changing plans seems like a real hassle to me.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

Often, I feel a bit uncomfortable even about changes that may potentially improve my life.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

When someone pressures me to change something, I tend to resist it even if I think the change may ultimately benefit me.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

I sometimes find myself avoiding changes that I know will be good for me

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

I often change my mind.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

I don't change my mind easily.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

Once I've come to a conclusion, I'm not likely to change my mind.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

My views are very consistent over time.

1-strongly disagree   2-disagree   3- inclined to disagree   4-inclined to agree   5- agree   6- strongly agree

Oreg, S. (2003). Resistance to change: Developing an individual differences measure. *Journal of Applied Psychology,* 88 (4), 680–693.

APPENDIX C

PRE- INTERVENTION OPEN ENDED GUIDE FOR THE RESEARCHER

Share your reaction to your RTC profile.

What surprised you about your profile?

What about your profile seems reflective of your feelings about change in your profession?

The purpose of this part of the interview is for you to describe a time when you experienced a change as a teacher. The goal is to think about a specific experience when a change in curriculum, protocols, or requirements forced you to adapt. Once you choose a specific experience, consider the following:

> Describe the experience as you lived through it, like you are watching it unfold on film.

> Describe how you felt and what you thought.

How would you describe your lived experience with the most recent change in literacy at Harpeth Academy?

> Describe the experience as you lived through it, like you are watching it unfold on film.

> Describe how you felt and what you thought.

Follow up questions will consist of details taken from the interview and may include:

You mentioned _____, share more about that experience.

Tell me again about _____.

Share more about what you mean by _____.

You shared _____. What was that like for you?

APPENDIX D

POST- INTERVENTION OPEN ENDED GUIDE FOR THE RESEARCHER

The purpose of this interview is for you to describe your experience in the PLC. What was the experience like for you?

Tell me about your perception of the new literacy curriculum after the PLC experience.

Tell me about your attitude toward the new literacy curriculum after the PLC experience.

Explain which Jigsaw PLC activity affected you the most.

Follow up questions will consist of details taken from the interview and may include:

You mentioned _____, share more about that experience.

Tell me again about _____.

Share more about what you mean by _____.

You shared _____. What was that like for you?

APPENDIX E

IRB APPROVAL

EXEMPTION GRANTED

Dale Baker
Division of Educational Leadership and Innovation - Tempe
-
DALE.BAKER@asu.edu

Dear Dale Baker:

On 2/7/2022 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Understanding Teacher Resistance to Change: Breaking Down the Walls of the Classroom Silo with Social Capital
Investigator:	Dale Baker
IRB ID:	STUDY00015259
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Caponi Letter of Requested Changes Completed.pdf, Category: Other; • consent_form- 29-01-2022 (1).pdf, Category: Consent Form; • recruitment _methods_ letter 20-01-2022.pdf, Category: Recruitment Materials; • Research Permission Letter.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Supporting Documents 29-01-2022 (1).pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Updated Caponi IRB Social Behavioral 2019_posted 09082021_4 (1) (1) (2).docx, Category: IRB Protocol; • Workshop Activities .pdf, Category: Participant materials (specific directions for them);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 1/25/2022.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

REMINDER - - Effective January 12, 2022, in-person interactions with human subjects require adherence to all current policies for ASU faculty, staff, students and visitors. Up-to-date information regarding ASU's COVID-19 Management Strategy can be found here. IRB approval is related to the research activity involving human subjects, all other protocols related to COVID-19 management including face coverings, health checks, facility access, etc. are governed by current ASU policy.

Sincerely,

IRB Administrator

cc: Heather Caponi