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The Infinity Mirror: Learning to Lead Through Action-Oriented Inquiry

Abstract

This dissertation-in-practice is a reflective self-study exploring the lived experience of the current researcher as a leader of Lesson Study (LS) over 2 years. Drawing on the concepts of perspective and engagement articulated by Wenger-Trayner and Wenger-Trayner (2016) in their Learning in Landscapes of Practice conceptual framework, the study is organized around the primary critical question: How has my perspective on what it means to be a teacher leader been transformed through my engagement with LS in the context of a US community of educational practice? Working within the paradigm of first person action-oriented inquiry, the method of self-study was selected in order to describe, interpret, evaluate and thematize the researcher's experience. This study is informed by a set of data comprising memos from an action reflection journal and artifacts from the leadership of LS, which include emails composed by the current researcher that were sent to colleagues and mentors. The description and interpretation aspects of this study provide an account of the current researcher's practical knowledge about enacting LS for others to consider when planning actions in their own contexts, though the experience disclosed here is unique to the current investigator's perceptual experience and cannot be generalized. The evaluation and thematization aspects of this study contribute to the discussion of the potential LS and action-oriented inquiry have in the guidance of professional learning for scholarly educational practitioners in the United States.

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First Advisor

Paul Michalec

Second Advisor

Norma Hafenstein

Third Advisor

P. Bruce Uhrmacher

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The Infinity Mirror:
Learning to Lead Through Action-Oriented Inquiry

A Dissertation in Practice
Presented to
the Faculty of the Morgridge College of Education
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Robert D. Evans
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Advisor: Paul Michalec

Author: Robert D. Evans
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Chapter One: Introduction

The current study is a retrospective self-study of my experience leading Lesson Study (LS) while I was serving as the Senior Team Lead for a special education team in a Title 1 Public School. As a Senior Team Lead, I was released from my instructional duties as a special education teacher for half of my working day in order to provide leadership for the special education team at my school. During this time set aside for leadership, I was responsible for guiding professional learning experiences for the teachers and special service providers (i.e., speech language pathologist, school psychologist, social worker, etc.) on my team through coaching, observations, and weekly professional development (PD) meetings.

At the time I took the position, there was a strong push from district leadership to move beyond PD targeting compliance with the Individuals with Disabilities Education Act (IDEA) toward the development of the capacity within the school-based IEP team to engage more deeply in the special design of instruction for students with disabilities. Per IDEA regulations, the special education team was responsible for implementing evidence-based practices to the extent possible in our special design of instruction. As I took on the role of leading PD, I took a holistic look at how we developed individualized education plans (IEPs). I began to wonder how special services such as speech-language therapy, social work, and psychological services could be aligned to support the students'

education in subjects across the curriculum. I wanted to move the IEPs my team wrote beyond being a list of disparate services and toward being an integrated whole. I wanted each IEP to become like a mixed methods study of the child's experience in school with an aim to reveal those themes that could make the child's experience more meaningful and fulfilling.

My passion for coherence extended beyond just IEPs. The Title I school where I worked is like many Title I schools across the country in that there is a gap between the achievement of our students and the achievement of students attending schools that serve more affluent populations (Ladson-Billings, 2006). This achievement gap is evidence of an educational debt owed to our students that often arises from a disparity between the opportunities offered to students in affluent schools and the opportunities offered to students in Title I schools (Gorski, 2017). I wanted to offer the students at the school where I work a more coherent, responsive education that would pay down the education debt by providing the kind of engaging educational opportunities my students deserve.

The working hypothesis that I believe that I held going into the actions examined in this retrospective study was that this opportunity gap arises, in part, from the quality of professional learning afforded to teachers through PD available in the school where I work. We are driven by regulations. Our school must navigate a pathway to maintain accreditation, and because the funds of knowledge that our students bring to school do not align to the requirements of accreditation in the same way that the funds of knowledge of more affluent students do, the school where I work faces pressure to remediate what are perceived as deficits in basic skills (Gonzales, Moll, & Amanti, 2006). The education of students is transformed into a line graph showing their numerical

progress towards reading and math proficiency. Subjects that are harder to plot on a line graph such as science and social studies receive less attention, even though these subjects often have the highest potential to engage students through culturally and community responsive education (Gay, 2010; Andrade-Duncan & Morrell, 2008). My working hypothesis incorporated the idea that social studies and science classes, when critically oriented, could give personal context and meaning to the math and reading skills in a more integrated curricular approach. When students have an internally held purpose for developing their skills, they are more likely to do so (Berger, 2003).

The very nature of American PD is, at least in my lived experience, rooted in an expectation of externally held compliance, and so too is the baseline expectation for how subject matter will be taught. Responsiveness to the specific contexts in which teachers teach and students study is generalized out of the standards-driven professional knowledge base in which current PD efforts are rooted (Andrade-Duncan & Morrell, 2008). Ironically, my experience suggests that the structure of the regulations of ESSA mean that as the remedial needs of a school rise, the impact of the stipulated use of evidence-based practices (EBPs) becomes more and more salient in the structuring of PD (Hale et al., 2017).

This compounds the problem identified above because EBPs are typically developed using scientific experimental design research (the specifications for these research designs are now codified in ESSA), in which variables are isolated while schools typically lack leaders who have a nuanced understanding of how to apply research to practice meaningfully (Zinskie & Rea, 2016). The metric by which the education debt is assessed gets reified into the line graph mentioned above, and EBPs that research shows

reduce the discrepancy between racial, linguistic and economic groups gain currency. PD is then conceptualized around training teachers to implement the procedures of research studies in their practice.

The environment in which teachers work, however, is different from the controlled setting of a research study in terms of scale and interactivity. In use, each of these EBPs interact in the landscape of the practice of the school as a whole and there is variability in outcomes at the local scale of individual practice known as effects heterogeneity (Bryk, Gomez, Grunow, & LeMahieu, 2015). The interactions can be educative as happens in a well-planned integrated curriculum or miseducative as tends to happen in a remedial approach (Dewey, 1938; Herrera et al., 2011), but the interactions do occur.

The underlying point here is that it is necessary to account for differences between the complex practical conditions in which EBPs are used and the controlled scientific conditions in which EBPs are developed. If this difference is ignored, PD is likely to be reduced to promoting fidelity to the procedures of EBPs on the questionable assumption that this will homogenize the effects observed in actual practice. Like any elements within the landscape of practice of a school, EBPs compete for resources with other practices in the building, and to a greater or lesser degree, they tend to complement and interfere with each other. In this study, I hope to explore how PD can be integrated into a richer approach to professional learning that guides teachers in investigating the interactions of various practices within their field of action. I also hope to consider whether this same approach could also be a means for identifying what Bryk, Gomez, Grunow and LeMahieu (2015) call practice-based evidence, supplementing the currently accepted conventional evidence base by which EBP are legitimized.

For the reasons listed above, the conventional evidence-base rarely accounts sufficiently for what I refer to as the praxi-ecological interaction (see Chapter 2: Conceptual Framework for further clarification for why I append the prefix praxi- to term ecological when used in relation to practice) between various role-regulated actors, reified structures and artifacts of practice within a landscape of educational practice (Inoue, 2015). Instead, as is reflected in the IEPs written by teachers who learn their profession through disjointed PD structures focusing on improving fidelity to the treatments of research, these elements are often isolated from each other through the licensing of professionals within the field; this is more pronounced in upper-level grades where math teachers are licensed differently from literacy teachers. The assumption I noticed as I began this study is that math knowledge was thought to be separate from literacy knowledge, with math knowledge being taken care of by the math teachers while literacy knowledge was taken care of by literacy teachers. In the words of my principal as I discussed my project with her, “It’s like they say, we have to stop teaching subjects and start teaching children.” Within the special education team, a similar situation played out amongst the variously licensed professionals that comprise a full IEP team. The psychologist or social worker is thought to take care of mental health while the speech language teacher is thought to take care of speech and language; meanwhile, the special education teacher is thought to take care of instruction.

I wanted to break through the barriers of this egg carton model of education, wherein each person has their niche role that they fulfill independently of others based on the evidence base of their own isolated community of licensed practice (Wise, 2007). In the special design of instruction for students with disabilities, I wanted to adopt a

professional learning model that places collaboration at the core of our practice. I wanted the math teacher and the literacy teacher to realize that decoding takes place in both subjects (a numeral may be a different kind of symbol than a letter, but meaning is still encoded by both symbols). I wanted the speech-language pathologist to give input to the special education teacher on how speech and language were influencing learning in the classroom, and I wanted the special education teacher to give input to the psychologist on how the demands on learning tasks were triggering various psychological responses. In short, I wanted my team to talk to each other as we specially designed instruction for our students.

In practice, affording this situation was difficult. I discovered that it was all too easy for IEPs to become disjointed lists of the various services the student would receive; it was often difficult to keep the conversation developing the IEP centered in the context of each students' educational experience. That egg carton model of education (Wise, 2007) seemed to me to be deeply embedded in our discourse, structuring how we discussed education with each other. Lacking a different structure, we seemed to mimic the disciplinary organization of Universities we'd been educated in; we seemed to use that model to structure how we understood our roles (which mimics academic specialization. Sadly, I noticed that the IEPs we were creating were often written with the best of intentions only to become irrelevant to what the student and teachers actually needed to fully meet the student's needs through the special design of instruction. I wanted to learn to lead a professional learning model that pushed back against that situation, developing within my team the capacity to create integrated, contextualized relevant IEPs.

Problem of Practice

Unfortunately, professional development (PD) for teachers in the American public school system tends to be disjointed (Jacob & McGovern, 2015), structured and restructured by the distant machinations of academic inquiry sending tsunamis of change over the field of education that are "often less than helpful" (Bryk, Gomez, Grunow & LeMahieu, 2015, p. ix) The topics addressed in the required PD sessions I have attended myself have often been very exciting for me as a professional learner: culturally responsive teaching, trauma-informed practices, universal design for learning, sheltered English language instruction, social-emotional learning, genre study, inquiry-based learning, etc. Yet, time after time, the sessions themselves lacked the very features they were designed to disseminate into the instruction of the teachers who attended them. Instead, these sessions often were (and continue to be) sit-and-get sessions that follow a transmission model of communication (Shannon & Weaver, 1949), in which the PD leader standing at the front of the room holds the knowledge, and then disseminates it into the (often less than eager) eyes and ears of the audience. One particularly memorable PD leader stopped herself mid-sentence in the middle of a session I was attending about inquiry-based learning. She quipped, "Basically, I am telling you to do the opposite of everything I am doing right now."

When I began this study, I was hesitant to make the assertion that my negative impression of American PD sessions was persistent or pervasive beyond my own experience. I figured that my experience of sitting at a desk listening to a PD leader cajole a group of disaffected teachers through a presentation of procedures they were expected to implement in their classrooms must be an exception rather than the norm. As

time passed, though, I began to realize that these sit-and-get sessions were far more common than the invigorating sessions of active knowledge creation that I have had the pleasure to attend from time to time.

One summer, in an effort to wrap my mind around the entire curricular effort of the district, I attended most of all the PD sessions offered over the course of an entire summer. I went to science PDs, social studies PDs, math PDs, literacy PDs, and special education PDs. The pattern held - I was able to identify the set features of PD that I found so dissatisfying. In each case, teachers filed in, often primarily motivated by a desire to comply with PD requirements rather than their interest in the topic to be covered in the PD. These teachers took seats in the audience while the PD leader took a space in the front of the classroom. The teachers displayed many signs of disengagement, and the PD leader took on the role of entertainer, trying to cajole the teachers through the content. In one recurrent strategy, which was often offered by the PD leader and accepted by the audience of teachers, the PD leader would outline several breaks to be taken through the day, then state that the breaks could be eliminated in order to “push through” so we could all get out of the PD session earlier and go home. When this strategy wasn’t offered by the PD leader, one of the teachers in the audience would often inquire if adopting the strategy might be an option. What’s missing in PD situations where this strategy is effective is the opportunity for and commitment to active engagement with knowledge construction through inquiry.

There were exceptions, of course, but overall, I ended that summer with a decided sense of an underlying pattern in which teacher learners are squeezed into a passive role of receiving information and PD leaders are squeezed into an intermediary role between

researcher and policy makers on one end and teachers on the other, in which their mode of instruction becomes the dissemination of pre-constructed knowledge in the form of information about expected procedures. I use the expression “squeezed into” to indicate the ill-fitting and constrictive nature I perceive these roles to have. The PD leadership strategy of “pushing through” noted above highlights how teachers also participate in squeezing the PD leader into this intermediary role, through either accepting or requesting PD structures that maximize the efficiency of dissemination in order to spend as little time in PD as possible; the goal of efficiency, it seems to me, reinforces the status quo and closes off the possibility of structural transformation.

My experience that summer established enough confidence in my impression to begin to assert that this form of PD represented a persistent problem-of-practice (PoP). Later, my recognition of this pattern was corroborated when I read a study conducted by The New Teacher Project (TNTP) entitled *The Mirage* (Jacob & McGovern, 2015). Other sources in the research literature of professional development (PD) for teachers also corroborate the patterns I noticed during the summer PD experience described above (Leu, 2004; Stewart, 2014). These studies helped me realize that the PoP I had identified as persistent in my own experience was also pervasive throughout the country. The *Mirage* study (Jacob & McGovern, 2015), in particular, found that a large cross-section of teachers in the United States find that professional development (PD) is disjointed, decontextualized and largely irrelevant to their learning needs. At the end of the study, the authors call for a re-imagination of PD for teachers in the United States. Engaging in that re-imagination has been my purpose in this study.

Framing The Problem

Many of my colleagues seem resigned to the nature of PD sessions for teachers in the United States. It is simply a burden they carry, something they must push through. Their perspective renders PD as several minutes they lose to accommodating institutional requirements each week. Although I hadn't clearly discerned my own perspective when I took the actions that I retrospectively critique in the current study, I now notice that the perspective that led me into this study differs from the resignation that many of my colleagues hold. As I write this study up in the aftermath of my retrospection, I now discern that my perspective arises from the experience of professional learning that I had during my formative years as a classroom teacher, which took place in Japan when I was a participant on the Japan Exchange and Teaching (JET) Program.

In Japan, professional learning sometimes takes on the form of PD similar to the the kind of sessions I take issue with in the PoP of this study: the lecture style dissemination of expected procedures. There are certainly teachers in Japan who would recognize the “push through” spirit in relation to PD that I describe above - in Japanese, the “push through” spirit might be captured in the word *gaman suru*. The distinction I am drawing between the professional experience I had in Japan and the one I take issue with here in the United States is not dichotomous in nature with things being one way in Japan and another way in the US. Instead, it is a question of abundance and scarcity in the elements of professional learning experiences. The lecture-style PD, especially in its required form, is relatively abundant in the US. In Japan, however, that kind of PD is only one aspect of a broader landscape of professional learning known as *kounai-ken* (Asada, 2004). At the

centerpiece of the Japanese professional learning landscape (especially in elementary schools) is a relatively abundant practice called Lesson Study (LS) (Cave, 2010).

Without fully discerning what had made my experience of LS in Japan so attractive, I found myself filled with the desire to replicate that experience in the professional learning landscape of my practice as a teacher in the United States. To frame this desire in terms of abundance and scarcity, I found that experiences like that of LS are relatively scarce in the professional learning landscape in the United States and I desired to make those experiences more abundant by introducing LS to my practice here. I quickly discovered that wanting to make experiences like LS more abundant in the American professional learning landscape is far easier said than done (Cheng, 2018).

Culturally, LS is very different from what I, and by extension, the majority of pupils in the United States, have been accustomed to as learners (Fernandez, 2002). When I first encountered LS in Japan, I struggled with the etiquette of observing and providing feedback on the teaching of my peers. In fact, I struggled with the very concept of teaching as a collaborative effort. I had been raised and lured into the teaching profession by American movies that portray teachers as solitary heroes who enter a classroom, turn the status quo on its head (often with a very satisfactory rebellion against the established authority), and then change the lives of all their students for the better (Aronson, 2017).

This mentality is known in current research literature as the savior mentality - and in the racialized context of the United States of America, where cultural adjacency to white norms of appearance and behavior is privileging, savior mentality often takes on the form of white savior mentality. Fueling white savior mentality, predominantly white college graduates are recruited each year to teach in schools serving students of color

(Kavanagh & Dunn, 2013). I was recruited in this way. I had a mental list of my own favorite teachers who I wished to be like, and I was certain that I was already like those teachers. Then, partially thanks to my experiences on the JET program, I discovered that the kind of teaching I was interested in learning how to do requires substantially more cultural humility than is possible in the mentality of white saviorism.

Learning to open myself to feedback was a difficult process. Learning to negotiate the meaning of teaching was sometimes agonizing because I believed that my own vision was right. Learning to experiment with alternative ways of teaching that go beyond an approach that simply gets the job done was frustrating in those early years; I held the conviction then that if the approach fit my own needs within my own world view, it should have been sufficient. The outcomes I achieved, however, belied this conviction and shook my worldview. These outcomes helped me to see education as an inquiry into what my students need rather than advocacy of what I believe to be good and right. Making that shift was (and continues to be) the hardest lesson I've ever learned. It is not the sort of lesson one can "push through" in the space of an abbreviated full day session.

As a result of my experience in Japan, I had to come to understand that teaching is quite different from how it is portrayed in the movies, and that, in order for successful outcomes to emerge, it is my transformation as an educator that needed attention rather than the assimilation of students to the norms of dominant culture that had allowed me to achieve success in my own educational career. Fortunately, my life experience had equipped me with the cross-cultural skills I needed to begin this transformational journey as a teacher. Perhaps also, my status as a foreigner in Japan intensified the transformative quality of professional learning that I experienced when I engaged in LS there.

As noted above, I had struggled when I was in Japan to acculturate to the norms that afford Lesson Study, but I was, gradually and with increasingly conscious ethnorelative intent, able to do so (Kohls, 1994; Paige, 1993; Tervalon & Murray-Garcia, 1998). Those years in Japan left their impact on me and formed in me the expectation that professional learning contexts should be cross-cultural places of collaborative constructed community where teachers learn from each other in a process that is moved forward through careful observation and experimentation with actual practice. In those formative teaching years, I learned that the disciplined inquiry which gives rise to evidence based practices is something teachers can do through the actions we take every day.

I remember experiencing a kind of culture shock upon my return to the United States. There was this phrase that seemed to be on the tip of everyone's tongue and it struck me strangely each time I heard it: it goes, "Well, the research says,". The phrase was so strange to me because it was often used in these highly confrontational exchanges of opinion that took place between teachers and PD leaders or administrators. As a linguistic strategy, this phrase seemed to be a way of elevating one opinion over another in a battle of advocacy over conflicting ideas. The spirit of inquiry that I had come to associate with research seemed to be absent in the use of this phrase, "Well, the research says,". I was often left to wonder what research said this as specific citations are often absent when this phrase is used colloquially in PD sessions. Who were the authors? How did they design their studies? What was the logic behind the assertion? The answers to these questions are often absent from the discussion, and I discovered that posing these questions out loud during PD sessions tended to be interpreted as a rhetorical attack on

the person asserting research in support of their position rather than an invitation to deeper inquiry.

When I was working in a Program for Intensive English serving international students conditionally admitted to American Universities soon after my return to the United States from Japan, I had a discussion with my supervisor. We were discussing the mandatory PD sessions that staff had to attend each week. My supervisor voiced frustration that most of the other staff members were not learning much from the sessions. I suggested that she make the sessions optional as a first step. Based on her tone and facial reaction, my supervisor appeared to be shocked by this suggestion. She replied, “But, if the sessions weren’t mandatory, no one would come!” If one sentence could capture the PoP around which this study is organized, that quote would be it.

Introducing Lesson Study: The Intervention

In writing this study up, I have hesitated to launch directly into a technical description of LS. I don’t want to squeeze myself into the written version of leading the kind of PD that I am trying to take issue with. Of course, eventually, you need to know the technical details of LS in order to understand what is happening in this study, but to understand the spirit in which these technical aspects are enacted, I believe it is necessary to understand something of the history of the Japanese society in which LS grew up. Lesson Study is not a single technical approach to professional development. Instead, it is a family of action-oriented inquiry processes that have been modulated to different purposes over the course of history (Inoue, 2015; Ishii, 2017).

A Brief History of LS

In the mid-1800s, Japan's Edo Era ended. During the Edo Era, a warlord called the Shogun held political power, and the samurai class were enfranchised as the decision makers of society (Kazui & Videen, 1982). The Emperor of Japan had been sidelined as a kind of spiritual figurehead without effective political power, and the country of Japan was closed to outside influences. Then, Commodore Perry of the United States Navy arrived on the coast of Japan in warships that carried modern weaponry by the standard of the colonial West, demanding that Japan open itself to trade with the United States in a show of gunboat diplomacy. This event, which highlighted the need for Japan to contend with foreign powers on equal footing, empowered a political faction in Japan that sought to restore the emperor to political power. This faction ultimately ended the Edo Era of closed borders and initiated the rapid modernization of Japan during the Meiji Era (Odanaka, 2020), transforming Japan into a colonizing imperial power mirroring the Western naval powers of the 19th century.

The Meiji government in Japan sent emissaries all over the world to learn about potential modern practices that might be compatible with the Japanese ethic (Duke, 2008). During the Edo Era, Japan had had no public system of mass education. One of the priorities of the Meiji government was to cultivate the education of its entire population. During the Edo Era, members of the elite had the means to educate their children through the temples, but this education system followed an individualized approach and could not be scaled directly into a public education system (Duke, 2009). Japan needed a system to educate the mass majority of its population. One of the emissaries sent abroad to explore how other nations were constructing such systems,

Takamine Hideo, attended the Oswego Normal School in New York, USA (Ahagon, 1995). At the time, the Oswego Normal School was using a Pestalozzian system to educate its teachers, and this system was carried back to Japan (Boyle, 1972). In Pestalozzian practice, abstracted knowledge is never taught directly; instead, students are taught to develop abstract principles for themselves through the direct observation of the concrete world. At Oswego, this was done through the structure of *model lessons* in which students of teaching learned from observing the example of others in order to emulate that example in their own teaching, and through the structure of *criticism lessons* where students of teaching learned to discern the structure and import of lessons through the collaborative observation and discussion of lessons taught by their peers (Sheldon, Krusi & Jones, 1870). These structures became the basis upon which LS would develop (Makinae, 2019).

In its earliest form, LS was a way of disseminating the concepts of mass education to a growing corps of teachers through model lessons taught in normal schools that were then reproduced across the country. Around the turn of the 20th century, progressive education in Japan transformed LS into a process of learning to understand how children think and learn. The influence of the progressive movement in Japan lasted into the middle of the 1920s (Yamasaki, 2017). Around this time, militaristic elements of the Japanese government began to assert more and more control over Japanese education. Japan had become a colonial power and, after World War I concluded, the tension between Japan and the colonial powers in the West began to grow (Ishii, 2017). Ishii notes that the form of LS that has become popular in the United States since 2001 most

closely resembles the technical form of LS employed in Japan at the height of its colonial power.

As the militaristic elements of the Japanese government grew in power, child-centered education in Japan was disenfranchised and LS reverted to the technical form of dissemination of standard practices; this time the practices aimed to militarize the Japanese population (Duke, 2019). In the lead up to World War II, teachers lost almost all influence over the ends toward which the national curriculum was aimed. The government increasingly began to step in to decisions about what content was acceptable for schools and what was not, and education was repurposed towards creating servants of the state (Duke, 2019). LS at this time was a shell of its former progressive nature, but the progressive element that had given LS such life up through the early 1920s didn't disappear. Instead, it went underground.

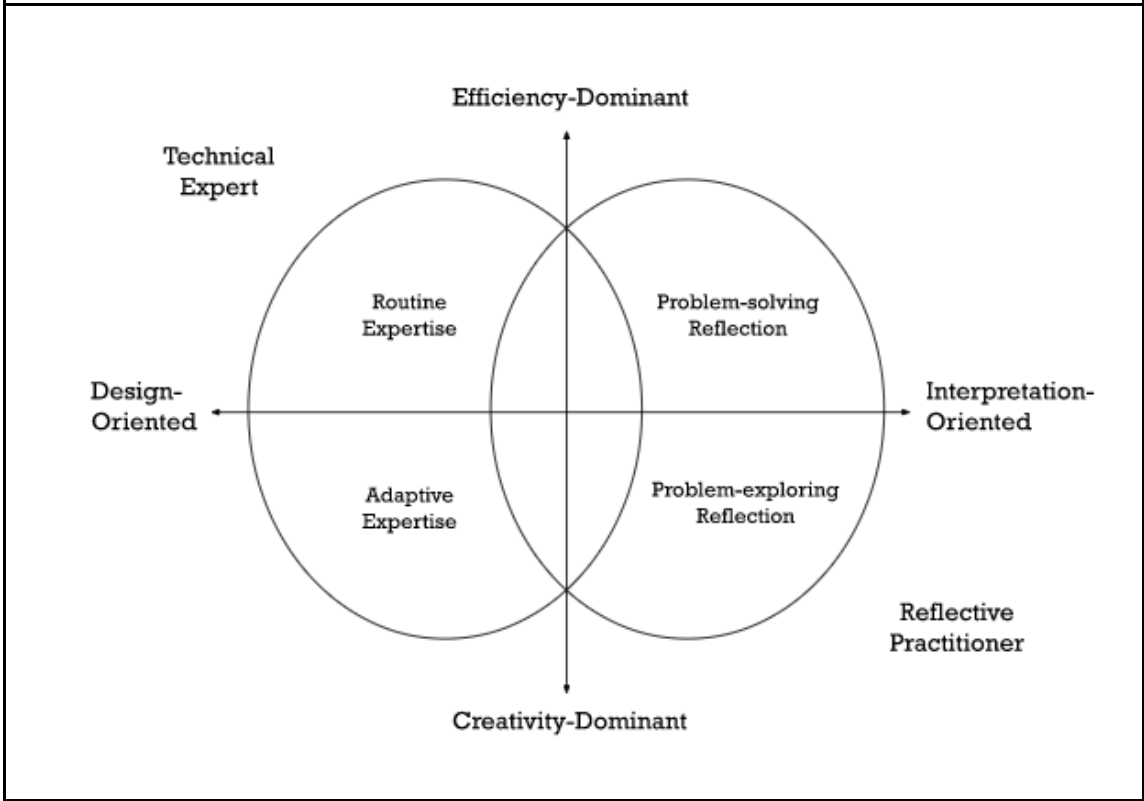
Following the surrender of the military government in Japan at the end of World War II, Japan faced an uncertain future. It was at this moment that the progressive proponents of Japanese education re-asserted themselves (Passin, 1965). The American occupation forces purged education of educators and administrators deemed loyal to the wartime Japanese regime and seemed set to impose American values on Japanese education. In some ways, these values were imposed, but the progressive proponents of Japanese education stood up for the unique heritage of Japanese culture (Yoshishige, 1946), and LS became once again a powerful tool for Japan to reinvent itself around strong democratic values in the years following the American occupation.

The University system in Japan began to expand rapidly in the post-war years. A collaboration between leaders of LS in Japan's normal schools and leaders of academic

research in Japan's Universities afforded the emergence of the principles of action-oriented inquiry in Japanese LS during the 1970s and 1980s (Ishii, 2017). As various issues emerged in Japanese education, LS became a standard way to innovate responses. LS retained a strong grassroots element, but also began to receive institutional support (Ishii, 2017). University researchers began to establish working relationships with local schools, serving in the capacity of knowledgeable partners, advising LS teams by offering the perspective of academic knowledge about education. Thus, LS became a conduit for the translation of academic knowledge into practical knowledge as well as a window for academic researchers to understand the practical realities of the school system. It also took on the function of informing revisions to the national curriculum.

Ishii (2017) relied on an analysis of the history of LS to identify four common purposes for which LS has been used. As noted above, in the years leading up to the Second World War, LS shifted away from reflective practice toward the development of technical expertise in state-sponsored curriculum. In the post-war years, LS flourished into a different form amenable to reflective practice. Ishii's diagram (Figure 1.1) below demonstrates the possibilities of purpose in the conduct of LS. In addition to facilitating your understanding of the multiplicity of form and purpose possible in LS, I hope also to break through the exoticism that characterized the practice of LS in the United States. LS owes its rich history to the context of Japanese education but infused throughout the history of its development are continual and deep connections to the movements of American education.

Figure 1.1: Ishii's Various Purposes of Lesson Study



Source: Ishii, 2017

A Brief Technical Overview of the Lesson Study Process

Lesson Study is an inquiry-driven professional learning model designed for the adaptive challenge of learning to teach in new and/or more efficient ways. In this model, educational practitioners collaborate to select a setting and instructional focus for improvement. Then, teachers explore what works through collaboratively planning and observing an inquiry lesson over several weeks. In this exploration phase, there is a strong focus on concrete observations of students and materials (Takahashi & McDougal, 2016). The flow of knowledge in Lesson Study is Pestalozzian in that it flows from direct experiential engagement to intellectual clarification through discussion and reading

(Pestalozzi, 1915). This is opposite how PD in the United States is often structured (Wang, 2020). In the United States, PD sessions for teachers often begin with reading or listening about an expected procedure, then practicing it, then employing it.

By contrast, the inquiry lesson of LS is collaboratively planned by teachers engaged in inquiry, and showcases what was learned, allowing others to observe and learn. After observing, the LS group reflects together, sharing perspectives, affirming solid practices and learning from the unexpected. Lesson Study is designed to empower teachers to learn from each other, as well as from the communities we serve, the broader school and district community, and other networked lesson study communities (Ermeling & Graff-Ermeling, 2014). To accomplish this, LS groups collaborate with knowledgeable partners from these communities throughout the lesson study cycle to exchange insights and perspectives (Takahashi & McDougal, 2016).

In collaboration with knowledgeable partners, the lesson study group builds community around exploring various approaches, materials and activities that can support the act of bringing education to life. You'll note that this inquiry setting differs from the controlled inquiry setting I have concerns about in the legitimization of EBPs. The inquiry lesson is intended to be a community feedback event in which the lesson study group and knowledgeable partners can explore how instruction can be responsive to the needs of the community. Additionally, LS serves as a platform for generating practice-based evidence, which deepens collaboration between teachers, educational researchers and curriculum developers (Lewis, 2003).

A defined focus area for each cycle keeps things manageable in the collaborative planning process, and the use of a single lesson as a concrete window allows for a

concise, collaborative inquiry into the underlying structure of education. While one teacher volunteers to host the inquiry lesson in their own practice, the focus of lesson study is not on that teacher's performance (Wiburg & Brown, 2007). Instead, the focus is on how the various instructional approaches, materials and activities used in the inquiry lesson interact to shape student learning.

As noted at the end of the previous section, there are various forms and purposes to which LS can be put. When creativity and interpretation are fostered, a focus on reflective practice can emerge. When a focus on efficiency and design are fostered, a focus on technical expertise can emerge. Other combinations are possible as well and, depending on the role that practitioners take within the structures of LS, different purposes can unfold simultaneously for different people within the group. How LS is fostered in the institutional culture, however, can also truncate its possibilities, as Ishii (2017) notes occurred in pre-WWII Japan, and has occurred in the United States since LS was popularized by Stigler and Hiebert (1999) in their book *The Teaching Gap*.

Introducing Action-Oriented Inquiry

When I set out to address the problem-of-practice of this study through LS, applying an educational intervention did not seem to be enough; I wanted to break out of the situation in which researchers create knowledge and practitioners apply it, and to do so required substantial consideration regarding how I designed the current study. I believe that I held the working hypothesis that the structure of educational research in the United States was, itself, contributing to the truncated form of LS that was being enacted following Stigler and Hiebert's (1999) introduction of it into the American educational landscape of practice. I wanted to engage in research as a practitioner and practice as a

researcher in an integrated way. This desire led me first to a literature review of practitioner research, which I then expanded into a literature review of action research. As an outcome of my literature review, I have come to conceptualize the activities of practitioner research and action research as being largely synonymous. As described in the literature, both practitioner research and action research aim to “generate research findings in the same settings in which they will be utilized” (Jacobson, 1998, p. 125). Jacobson (1998) notes that “practitioner research is the “name given to action research implemented in educational settings” (p. 125). Where the two terms differ is in the breadth of who is legitimized within the community of inquiry practice: practitioner research is conducted by practitioners themselves, whereas action research is “done *by* or *with* insiders to an organization or community but is never done *to* or *on* them” (Herr & Anderson, 2015, p. 3). I prefer the broader scope of the term *action* for my purposes in this dissertation-in-practice, and so, from here on out, I have decided to refer to insights from practitioner research and action research under the common term *action*.

Three Paradigms of Inquiry

The orientation to action separates action research from what McNiff and Whitehead (2011) refer to as *traditional academic research*. Guba and Lincoln (1989) use the term *paradigm* to further break down traditional academic research into studies that are conducted in the conventional paradigm (read: positivist and post-positivist epistemologies) and studies that are conducted in the constructivist paradigm (read: interpretivist and constructivist epistemologies). Jacobson (1998) extends the use of the term *paradigm*, identifying what he calls the practitioner paradigm as a third alternative; as noted above, I will substitute the term *action* for the term *practitioner*, thus rendering

my references to the paradigm outlined by Jacobson (1998) as the action-oriented paradigm (or alternatively, the paradigm of action) rather than the practitioner paradigm. In Figure 1.2, I synthesize Jacobson’s outline of the differences between the paradigms of convention, construction and what I choose to call action. The Descriptions of Activity in my Figure 1. below are quoted almost directly from Jacobson (1998, p. 131, Table 2). In line with my intent to expand the scope of who is legitimized in action-oriented communities of inquiry practice from practitioners to all stakeholders, I make one alteration in the action-oriented column (Figure 1.2: Action (-oriented)), substituting the term *contextualized actor* where Jacobson (1998) uses the term *educator*. The Aims of Activity in Figure 1.2 below are quoted directly from Jacobson (1998, p. 134, Table 3).

Figure 1.2: Three Paradigms of Inquiry			
Paradigm of Inquiry	Convention (al)	Construction (ist)	Action (-oriented)
Terms For Knowledge Produce	Positive Post-Positive	Interpretive Constructive	Enactive Reflective
Knowledge Interest	Technical	Provocative	Transformative
Positionality of Investigator	Relational Detachment	Etic Engagement	Emic Engagement
Description of Activity	The investigator uses an instrument to identify effects of an educational treatment.	The investigator becomes an instrument to explore meanings associated with an educational experience	The investigator becomes an instrument to examine his or her own actions as a contextualized actor.
Aims Of Activity	Rigorous, precise, elegant, objective, and verifiable.	Responsive, rich, emergent, subjective, and creative.	Useful, reflective-in-action, explicit, interactive, and intentional.
Considerations Of Quality	Validity Reliability Verifiability	Authenticity Trustworthiness Referential Adequacy	Improvement Discernment Iterative Continuity
Sources: Guba & Lincoln (1989), Jacobson (1998)			

Four Methodologies of Inquiry

I found that the paradigm shift from convention and construction to action was a step in the right direction in terms of breaking out of the situation in which researchers create knowledge and practitioners apply it, but this shift alone did not go far enough. The structure of the knowledge produced by research remained problematic for my purposes. The US Department of Health and Human Services (HHS) defines research as “a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge” (Common Rule, 2018, 45 CFR 46.102(l)). I needed a methodology that is emergently responsive rather than systematic. Additionally, I needed a methodology that generated contextualized rather than generalized knowledge. To make knowledge generalizable, it is necessary to strip away the context of the setting in which the study was conducted (Inoue, 2015).

I found myself confronted with the question of whether or not knowledge is still practically viable when the context in which it was generated is stripped away. For my purposes in this study, I found that the answer to this question is no, but I am also able to imagine inquiry designed in the paradigm of action where the answer would be yes; to be exact, I imagine this to be the case for inquiry oriented to action at scale.

Rather than asserting a global yes or no that I would then expect others to abide by, I choose to recognize that there is a substantial amount of diversity in the kinds of inquiry that can be designed in the paradigm of action. For example, Herr and Anderson (2015) note that action research (to use their superordinate term) is comprised of traditions that encompass, at a minimum: organizational development/learning, action science, participatory research, participatory evaluation, action research in education, the

teacher-as-researcher movement, practitioner research, participatory action research with youth or YPAR, self-study, autoethnography, feminist action research, and arts-based action research. Each of these traditions operates within its own assumptions, structures and goals. Some of these activities meet the HSS definition of research as being designed to contribute to generalizable knowledge and others do not.

Considering the broad diversity of what goes by action research, Tripp (2003) disagrees with the use of *action research* as a superordinate term for all these constituent activities, noting the absurd situation in which “we have the nonsense that there is a kind of action research called action research” (p. 3). Specifically, Tripp (2003) instead suggests the term *research* is misleading, proposing the superordinate term *inquiry* instead. I have decided to adopt this superordinate term, though in integrating it with the grammar of the paradigms described above, the term I use becomes *action-oriented inquiry*.

Tripp’s (2003) use of the term *inquiry* as a superordinate containing research is identical to Guba and Lincoln’s (1989) use of the term *inquiry* in their development of the concept of paradigms introduced in the previous section. Specifically, Guba and Lincoln (1989) and Lincoln and Guba (1986) envision three different methodologies of disciplined inquiry: policy analysis, research, and evaluation. While I find these three methodologies of inquiry useful to my interests, these three methodologies of inquiry are not quite sufficient for my purposes. The US Department of Health and Human Services (2018), for example, identifies several other methodologies of disciplined inquiry that are specifically deemed not to be research; these methodologies include “oral history,

journalism, biography, literary criticism, legal research, and historical scholarship”
(Common Rule, 2018, 45 CFR 46.102(1)(1)).

In the current study, I have engaged deeply with an adapted mode of literary criticism proposed by Elliot Eisner as a form of educational evaluation, and then later, reconceptualized as a form of educational research. Eisner (1991) retains the basic meaning of the way the term *criticism* is used in literary criticism but orients the focus of what he terms *educational criticism and connoisseurship* to the appreciation of enacted educational practice rather than literature. Educational criticism and connoisseurship is often referenced in research papers that use it as a *method* of inquiry, but a careful reading of Eisner’s (1991) exegesis of educational criticism indicates that educational criticism and connoisseurship is not specific enough in terms of data collection and analysis to be a method of inquiry. At least, this seems to be accurate when one adopts (as I have in this dissertation-in-practice) the meaning ascribed to the term *method* by McNiff and Whitehead (2011) as a specific technique for collecting and analyzing data. McNiff and Whitehead’s (2011) definition is laid out and integrated into the inquiry framework I am developing here in the next section.

Eisner (1991) intentionally leaves the form and process of educational criticism up to the individual critics who engage in it themselves. I have found it useful to consider criticism in general as a methodology of inquiry that represents an alternative to the three methodologies identified by Guba and Lincoln (1989) and Lincoln and Guba (1986). As I explain in the section on communities of inquiry practice below, I see Eisner’s articulation of educational criticism and connoisseurship specifically as a tradition or discipline within the broader methodology of criticism in general. Given the legacy that

literary criticism plays in the development of educational criticism, there are grounds to see this conceptualization corroborated by the US Department of HHS Common Rule, which exempts literary criticism from the definition of research (Common Rule, 2018, 45 CFR 46.102(l)(1))

In Figure 1.3 below, I outline *criticism* as a methodology of inquiry alongside the three methodologies identified by Guba and Lincoln (1989) and Lincoln and Guba (1986). These four methodologies happen to be most relevant to my interests, but as noted above, there is nothing magic about the number four. Others with interests different from my own might wish to outline five methodologies or two; the Common Rule of the HSS (2018) cited above seems to invite a comparison of research methodology in contrast to six other methodologies: oral history, literary criticism, journalism, biography, legal research and historical scholarship.

From the perspective of terminological clarity, it is frustrating that Guba and Lincoln (1989) consider evaluation and research as separate methodologies of disciplined inquiry whereas the Common Rule of the HSS (2018) lists evaluation within the scope of research – similarly frustrating, the Common Rule of the HSS identifies legal research as a form of non-research. These two examples should stand as a caution against using Figure 1.3 or Figure 1.4 too cavalierly when deciding whether or not to apply for IRB oversight; despite my best efforts, that which appears to *not* be research may *be* research and that which appears to *be* research may *not* be research. It is also important to consider that, given the cyclical nature of inquiry (especially in the paradigm of action), an inquiry that begins in a non-research methodology may shift into a cycle that uses a research methodology, so close collaboration with an IRB is necessary.

Figure 1.3 above is written in my own words, with the ideas informing the policy analysis, research and evaluation columns reference Lincoln and Guba (1986) while the ideas informing the criticism column reference Eisner (1991). Despite worries that the narrow definition of research proposed by the Common Rule of the HHS restricts innovation in research methods, I have adopted this narrow definition in the inquiry framework I am developing here; I solve the problem of restricted innovation by exploring inquiry outside the methodology of research.

Figure 1.3: Four Methodologies of Inquiry				
Methodology of Inquiry	Policy Analysis	Research	Evaluation	Criticism
Terms For Investigators	Analyst	Researcher	Evaluator	Critic
Purpose	Deliberative	Predictive	Interpretive	Transformational
Intended Outcome	intended to deliberate between alternative policy interpretations and choices in order to decide what shall or shall not occur in a given regulatory setting.	intended to systematically investigate and predict what is likely to occur or not occur in a given set of generalized circumstances.	intended to interpretively describe what does and does not occur in a specific case with reference to the value those occurrences or non-occurrences obtain within the setting.	intended to disclose the unique aspects of a specific situation in a way that transforms perceptions of the meaning of what occurs or does not occur in that situation.
Type of Knowledge	Applicable	Generalizable	Transferrable	Specifiable
Value	Establishes conditions necessary for collective and collaborative action	Establishes a knowledge base that allows us to better predict the effects of our actions.	Establishes a basis for diagnosing past problems and successes according to set and/or emergent criteria and planning for the future.	Establishes a form of representation that allows for the vicarious development of connoisseurship.
Sources: Lincoln & Guba (1986); Eisner (1991)				

Modulating Inquiry Along Two Dimensions of Inquiry

Figure 1.4: Modulating Inquiry Through Paradigm and Methodology				
	Policy Analysis	Research	Evaluation	Criticism
Convention (al)	Conventional policy analysis examines policy-in-intention to clarify the implications of the language used.	Conventional research engages in the contribution to generalizable knowledge through the empirical verification of a set academic theory. Quantitative methods are common.	Conventional evaluation provides a client with summative information about the ways in which improvement is being made or blocked toward set goals.	Conventional criticism accepts the institutional framework within which practice is defined and focuses primarily on disclosing criticism aimed to facilitate improvement within that framework.
Construction (ist)	Constructionist policy analysis examines how policies construct the lived experience of various demographic populations.	Constructionist research explores how the activity of human theorizing constructs the empirical world in which generalized populations of people live and act at societal and climatological scales. Qualitative methods are common.	Constructionist evaluation is led by an outsider to the setting of practice who facilitates stakeholders in a hermeneutic dialectic that structures the goals of practice and formative feedback about the actions being taken in pursuit of these goals.	Constructionist criticism discloses an outsider's perspective on the ends towards which the actions of stakeholders in a situation contribute in order to provoke a greater awareness of identified themes.
Action (-oriented)	Action-oriented policy analysis examines policy-in-implementation led by those who are implementing or impacted by the policy themselves.	Action-oriented research explores how actions taken by specific individuals and communities fit into a theory of action in terms of contributions, detractions and transformations.	Action-oriented evaluation is a hermeneutic dialectic about the goals of practice and the actions being taken in pursuit of those goals organized by stakeholders themselves.	Action-oriented criticism discloses an insider's perspective on their own experience and primarily focuses on discernment while facilitating integrity between intentionality and action.
Sources: Lincoln & Guba (1986), Eisner (1991), Guba & Lincoln (1989), Jacobson (1998)				

In Figure 1.4 above, I provide a brief description of how the three paradigms introduced above can modulate the four methodologies of practice that I've examined

here. I've shaded in the intersection between action and criticism to indicate the location of the current study. There is nothing to say that others might not articulate four or more paradigms rather than three or five or more methodologies rather than four. Alternatively, there is nothing to say that others might not collapse the divisions I've set up here down from three paradigms to one or two or from four methodologies down to one, two or three. For the purposes of this study, however, I find that articulating the paradigms of convention, construction and action and the methodologies of policy analysis, research, evaluation, and criticism are sufficient.

Looking Ahead to a Third Dimension of Modulation: Method

In addition to paradigm and methodology, I imagine a third dimension can be overlaid on the framework of inquiry I've described above. This third dimension is that of method. Whitehead and McNiff (2011) distinguish between the terms *methodology* and *method*. They argue that action-oriented inquiry (or *action research* using the superordinate term of their choice) is a methodology, referring to the logic underlying and informing the use of method, or an "overall approach to a research programme" (p. 48). Similarly, Herr and Anderson (2015) describe action-oriented inquiry (or using their preferred term *action research*) as an "orientation or stance toward the research process" (p. 48). I modify this assertion only slightly in that I see action-oriented inquiry as a *set of* methodologies *modulated by* the paradigm of action. I see inquiry as what Inoue (2015) calls a meta-framework, one ordinal level superior to the concept of methodology. While arguing for the plurality of methodology (cf. the methodologies outlined in Figure 1.3 for a start) within the meta-framework of inquiry, I accept Whitehead and McNiff's (2011) definition of methodology. Whitehead and McNiff (2011) contrast their definition of

methodology as “an overall approach to a research programme” with their definition of a method as a “specific technique for gathering and analyzing data” (p. 48). In modifying *action research* to become *action-oriented inquiry*, I hope to capture the idea that methods are specific procedural tools that can be used in the multiple methodologies through which inquiry (whether conducted in the paradigm of convention, construction or action) is carried out.

I conceptualize the specific *methods* of data collection and analysis by which these methodologies are realized as a third dimension of modulating inquiry. Guba and Lincoln (1989) note that the method used by the investigator does not define the methodology of the study; to clarify their point, Guba and Lincoln (1989) offer the analogy of the plumber and the carpenter who share an overlapping set of tools in their toolboxes, yet nevertheless engage in different practices. On the other hand, Guba and Lincoln (1989) take issue with the idea that method and methodology vary independently, which led me to the idea of multi-dimensional modulation. It is in the dimension of method that we, the investigators, choose whether to proceed on the basis of science and/or art. It is in this dimension that we decide what data to collect and analyze and whether to do so through qualitative and/or quantitative procedures. It is here that we decide to engage with or to detach from the settings we study, to limit the scope of what we include in our study design and to reflect upon the implications of what we know we have excluded; depending on our choices, it is here that we choose to collect data from participants and/or discipline our study around first-, second- or third-person inquiry (Torbert, 2004). I have chosen to represent the modulation of inquiry within my framework using a dimensional model rather than a linear model of steps because I have

found that methodologies, paradigms and methods (despite the order in which I've presented them here in this section) cannot be ordered first, second, and third. Instead, each decision we make in each dimension of modulation has an impact on every decision we make in the other dimensions.

Communities of Inquiry Practice

Over time, investigators bound together by common inquiry interests follow the example of other investigators and communities of inquiry practice emerge. In the academic paradigm of convention, these communities of inquiry practice are called *disciplines* (examples include ethnography, anthropology, biology, and chemistry). In the practical paradigm of action, these communities of inquiry practice are called *traditions* (See McNiff & Whitehead (2011) and Herr and Anderson (2015) for a discussion of the various traditions of inquiry within the paradigm of action).

When it comes to the paradigm of construction, however, I find that I am at a loss to easily identify an emic term for communities of inquiry practice. These communities exist, to be sure, but as a categorical class, they are perhaps nameless. Viewed from the etic perspective of academic convention, the cross-disciplinary nature of constructionist inquiry makes its communities of inquiry practice appear to be traditions. Viewed from the etic perspective of practical action, the academic nature of constructionist inquiry makes its communities of inquiry practice appear to be emergent, remodulated disciplines. I imagine that this might arise from the role the paradigm of construction takes in critiquing how the disciplines of the university construct our social reality. When I've adopted the paradigm of construction, I find that I often prefer to think of these communities of inquiry practice as traditions when I am distinguishing their purpose from

the disciplines of the academy and to think of them as disciplines when I am trying to legitimize my activity within them in the structures of the academy.

In Chapter 2, I will introduce Wenger-Trayner and Wenger-Trayner's (2015) conceptual framework entitled *Learning in Landscapes of Practice* and clarify the concept of community of practice (COP) within this framework. In their framework, Wenger-Trayner and Wenger-Trayner (2015) note that because each community of practice develops its own language for discussing its practice, crossing boundaries between COPs (which I do almost constantly in this dissertation) can be linguistically disorienting. My experience writing this dissertation-in-practice strongly suggests that linguistic boundaries between communities of inquiry practice are marked by paradigms, methodologies and methods, and I've tried to transcend these boundaries in my writing. I hope that the inquiry framework that I introduce around action-oriented inquiry in this section will help me to place the various communities of inquiry practice (be they disciplines or traditions or some other form altogether) into dialogue with each other.

Introducing The Infinity Mirror of This Study

Lesson Study (LS) has represented a learning ground for me beyond just the solution to the problem-of-practice of this study. As is apparent in the inquiry framework articulated above, it has also shaped how I have conducted this study. You see, LS is a form of action-oriented inquiry itself (Inoue, 2015), encompassing elements of research, evaluation, policy analysis and criticism in its various modes of enactment, and there are even a variety of different traditions of inquiry within the practice of LS. Given that I set out to study how to lead LS using action-oriented inquiry, this has meant that I have been doing action-oriented inquiry about doing action-oriented inquiry. Both practices (Lesson

Study and the Self-Study that I describe as my method in this study in the Chapter 3) have the reflective element characteristic of the paradigm of action, and so I have chosen to name this study after an infinity mirror to capture the idea of two mirrors reflecting each other in infinite regress. Each time I have learned something new about LS in this study, it has taught me something new about action-oriented inquiry and each time I have learned something new about action-oriented inquiry, it has taught me something new about LS. Much of what I have learned through leading LS has been reflected in how I have structured and conducted this study. Conversely, much of what I have learned through structuring and conducting this study has been reflected in how I have led LS. In the midst of all this, I have seen myself reflected in both LS and Self-Study ad infinitum.

It has been difficult to linearize the infinite regress of being caught in an infinity mirror into a form that can be shared through writing. Sitting down to work on this study has altered my understanding of what I am studying. Similarly, going out and engaging in the world of my practice, leading LS has altered my understanding of how I should study it. I write about action-oriented inquiry drawing off the lessons I've learned from leading LS, and I write about LS drawing off the lessons I've learned from engaging in action-oriented inquiry. Ultimately, I've found that the linearity of written language is insufficient to the task of representing the infinite regress of scholarly practice. In conventional or constructionist inquiry, the publication of a peer reviewed paper is the preferred form of dissemination over a conference presentation. In action-oriented inquiry, however, I think that a live conversation is my preferred form of disclosure over a written paper such as what you are currently reading. While one may think of a conference presentation of a conventional or constructionist inquiry as an invitation to

read the presenter's paper, I encourage readers of this dissertation-in-practice to think of it as an invitation to collaborative conversation.

Chapter-by-Chapter Overview

This is my first foray into the writing of action-oriented inquiry, and I've needed the training wheels of comparing what I am about here to a traditional 5-chapter dissertation. You, as the reader, may note the similarity of this first chapter to the introductory chapter in a traditional 5-chapter dissertation. The second chapter is largely analogous to the second chapter of a 5-chapter dissertation in that I communicate my conceptual framework and review the literature on LS. Chapter 3 largely corresponds to Chapter 3 of a traditional 5-chapter dissertation in that I lay out the paradigm, methodology and method of my inquiry. Chapters 4, 5 and 6 correspond loosely to Chapter 4 in a traditional 5-chapter dissertation. In these chapters I present the results of my efforts. I split what would be the fourth chapter in a 5-chapter dissertation into three chapters in order to realize the process integrity (see Chapter 3: Process Integrity) of the inquiry of this study - namely, process integrity requires continuity, discernment and improvement over multiple iterations of action. Chapters 4, 5, and 6 each focus on one cycle of my iterative action-oriented inquiry into my leadership of LS. Chapter 7 corresponds loosely with the fifth chapter of a traditional dissertation in that I discuss what my efforts have meant to me.

In this first chapter, I've set the tone, introduced you to the problem-of-practice as I see it, and provided you with a glimpse into my prior experiences that led me to explore LS as a potential solution to the PoP. I've also given you a brief overview of my methodological approach in this study. In the subsequent chapters, I will situate my work

in existing research literature (Chapter 2), and go into more detail into the paradigm, methodology and method that I've used to organize this action-oriented inquiry study (Chapter 3). I will also disclose my experience over several cycles of iterative action-oriented inquiry efforts and share my answers to the guiding questions that have organized my reflections on those cycles (Chapters 4-6). At the end of the study, I will summarize the overall themes I have taken away from my iterative efforts to lead LS in an American context, and I will explore how those themes lead on to guiding questions that will organize my next cycles of action-oriented inquiry (Chapter 7). I hope that as a reader you will take the critical questions I pursue in this action-oriented inquiry and use the experience they allow me to disclose to inform and discuss your own experiences in turn.

Critical Questions

Because I have situated this study in the paradigmatic methodology of action-oriented criticism, I have decided to forgo the use of research questions that might make it seem as if I am contributing directly to an academic research base. In line with the program design of my CPED-informed Ed.D. program, my goal in this dissertation-in-practice is to engage in the quasi-practical disclosure of integral, referentially adequate reflections rather than the theoretic dissemination of valid, reliable scientific results. Ideally, academic researchers could engage in a kind of meta-analysis of the kind of quasi-practical reflections shared through this study in order to, as Lee Shulman puts it, mine the wisdom of practice for research insights, but such activity is beyond the scope of my current intentions - depending on the purposes of those engaged in that meta-

analysis, such an endeavor might be considered as a third-person method of action-oriented research.

In this study, however, my purpose is intentionally limited to a first-person method (self-study) of action-oriented criticism. My hope is that the distinctions that I lay out in the inquiry framework outlined earlier in this chapter will allow for a broad collaboration between educational investigators across paradigm, methodology and method. While I recognize the risk of linguistically fragmenting the field by introducing distinctions between critics versus researchers, criticism versus research, and critiques versus results, I follow Lincoln and Guba (1986) in asserting that this risk is far preferable to the absence of such distinctions and the resultant linguistic fusion of multiple distinct and separate activities into one muddled enterprise; far from creating unity, I worry that linguistic conflation by sharing terms of inquiry broadly across the field is creating a state of incoherency in the broader community of investigators, which then isolates us into protected conclaves of like-mindedness for fear of the inevitable struggle for legitimacy that occurs when multiple communities of inquiry practice fight over who owns the definition of this term or that. Therefore, instead of research questions, I chose to name my questions after the activity of criticism that I intend to pursue in this study, adopting the term *critical questions*. Unlike research questions, which guide investigations intended to inductively identify or deductively corroborate a proposition about the nature of the empirical world, I imagine that critical questions guide investigations intended to abductively appreciate the quality of an experience in order to render the practical knowledge gleaned from that experience useful to others.

Figure 1.5: Critical Questions

RQ: How has my perspective on what it means to be a teacher leader been transformed through my engagement with lesson study in the context of an American community of educational practice?

SRQ1: In what ways did my engagement with lesson study transform the processes I enacted?

SRQ2: In what ways did these processes support or conflict with the ends to which I am accountable?

SRQ3: In what ways did these processes lead me to re-imagine the ends to which I am accountable?

SRQ4: In what ways did my engagement with lesson study transform my identity as a teacher?

Chapter Two: Lesson Study As Professional Learning

Welcome to the infinity mirror. As mentioned earlier, I titled this dissertation-in-practice after the idea of two mirrors reflecting each other because leading LS has allowed me to critique my engagement in action-oriented inquiry while engaging in action-oriented inquiry has allowed me to critique my engagement in leading LS. LS represents one reflective lens in the infinity mirror of this dissertation-in-practice, while action-oriented inquiry represents the other. I'm afraid that the next two chapters may become something like a house of mirrors. I hope I will be able to guide you through without leading you smack into a collision with the face of a mirror that appears to be a doorway!

When you move on to the next chapter, I expect (at least if I have done my job as a writer as well as I hope to) that you will notice that the *Learning in Landscapes of Practice* conceptual framework introduced in this chapter can be used to understand the method of this study in the same way I've used it to understand LS. Again, this is because both LS (the intervention) and Self-Study (the method) are forms of action-oriented inquiry; I selected the conceptual framework that I use for this study because it allows me to better understand what happens in the midst of action-oriented inquiry.

The Conceptual Framework: Learning in Landscapes of Practice

I situate this study in a form of social learning theory (Bandura, 1963) articulated by Lave and Wenger (1991) in which they introduce the idea of a community of practice.

These communities lend their members a sense of shared identity around a common practice (Lave & Wenger, 1991). For example, teaching is not just something I do, it is a part of who I am, and the community of practice in which I teach offers both affirmation of my identity as well as the potential for transformation. In a worst-case scenario that tends to keep me up at night around the time of my annual performance review, there is also the possibility of ex-communication. While my annual performance reviews have always turned out satisfactorily, the anxiety that I sometimes experience about them confirms the deep situation of the practice of teaching near the core of who I consider myself to be as a person. The activity of teaching that I engage in to sustain my identity can be legitimized or delegitimized through the judgment of other members of my community of practice.

Regimes of Competence

Central to the idea of the *Learning in Landscapes of Practice* conceptual framework is the idea of a regime of competence (Wenger-Trayner & Wenger-Trayner 2015). Within the framework, competence is thought to be a dynamic concept that is negotiated over time through the asserted experiential claims of the individual members of the community within the context of a consensus around a definition of competent practice that is held within the community of practice as a whole. In the terms of the framework, the conserving effect of consensus (the regime) provides stability to the community of practice, reifying the collective practice around which members establish and maintain their identities into a set form through the curation of the artifacts and social reproduction of patterns of discussion around which the discourse of the community coalesces. At the same time, though, the community-held consensus of what competence

means is in a constant state of gradual revision as community members disclose their experiences to each other and learn more effective ways of accomplishing the ends towards which the practice aims. Blending the terminology of the *Learning in Landscapes of Practice* framework with the inquiry framework introduced in Chapter 1, increases in effectiveness towards stable ends are referred to in this dissertation-in-practice as *improvement* (McNiff & Whitehead, 2011). The disclosures that lead to improvements are referred to as claims to competence. Over time, the negotiation of these claims within the dialogue of the community can clarify or even transform the ends toward which the practice aims and the measure by which effectiveness is judged. The clarification and transformation of the ends toward which practice is aimed is referred to in this dissertation-in-practice as discernment (P. Michalec, personal communication, June 8, 2022). The disclosures that lead to discernment are referred to as claims to knowledgeableability. I discuss the difference between competence and knowledgeableability in subsequent paragraphs.

The Praxi-Ecological Organization of Learning in Landscapes of Practice

Making the situation more complex, Wenger-Trayner and Wenger-Trayner (2015) note that professions do not unfold in solitary communities of practice. Instead, professions unfold across multiple, overlapping communities of practice, each organized around its own particular regime of competence. Wenger-Trayner and Wenger-Trayner (2015) refer to this broader context in which communities of practice are situated as a landscape of practice. While the regime of competence of each community of practice is ultimately maintained by the members of that particular community of practice, outside influences from other communities of practice are exerted as well because the

communities of practice within a profession rely on each other. Extending Wenger-Trayner and Wenger-Trayner's use of the ecological terms community and landscape, I have chosen to refer to the situation where communities of practice rely on each other, with one community of practice exerting influence on the other's regime of competence and vice versa as praxi-ecological interaction. I append the term praxi- to indicate that praxis (the language of practice) organizes the interaction at play in the ecological analogy that Wenger-Trayner and Wenger-Trayner's (2015) set up when they adopt the terms community and landscape. Here, I'll pause and make Wenger-Trayner and Wenger-Trayner's (2015) analogy explicit. Then, I'll define what I mean by praxi-ecological interaction using the concepts introduced in Wenger-Trayner and Wenger-Trayner's (2015) framework.

In ecology, the view of the empirical world is split into analytical levels, with each level becoming a component unit of the next level (Pavé, 2006). A collection of organisms of a single type living together is called a population, while a collection of populations in interaction with each other is called a community. An ecosystem is a view of a community that emerges when the organisms that comprise the community (i.e., all the biotic elements in a system of interaction) are considered within the context of the abiotic elements of their physical environment. A landscape, by contrast, is a view of the system of interaction that emerges when *multiple* communities of interacting biotic elements are considered in the context of a shared physical environment of abiotic elements. In Wenger-Trayner and Wenger-Trayner's (2015) framework, it appears to me that the shift from ecology to a praxi-ecological analogy occurs by appending the words *of practice*: community of practice, landscape of practice. I interpret the significance of

appending the words *of practice* as a substitution of the basic unit of analysis away from the concept of an individual organism (as in the organically structured view of interaction found in ecology) toward the concept of a role (as in the linguistically structured view of interaction found in *Learning in Landscapes of Practice*). This shift is important because a single role may be carried out by a single individual, but it is also possible that a single individual might carry out multiple roles or that one role might be shared amongst multiple individuals.

In my thinking, a collection of individuals engaged in the same role becomes a population of practice, a collection of individuals engaged in various interrelated roles forms a community of practice. An ecosystem of practice is a view of a community of practice that emerges when the role-based activities of its members are considered in the context of their organizational environment of reified structures and artifacts of practice. A landscape of practice, by contrast, is a view of the system of interaction that emerges when *multiple* communities of practice are considered in the context of a shared organizational environment of reified structures and artifacts of practice. The distinction between community and ecosystem is useful because a single community may be spread across two ecosystems of practice. For example, two special education teams located in two different schools could be considered a single community of practice spread across two ecosystems of practice. Alternatively, a collection of communities of practice could be considered within the scope of a single physical field of reified structures defined at the level of a landscape of practice. For example, a special education team representing one community of practice and an administrative team representing a second community

of practice could be considered within the shared landscape of practice of their school, district, region or nation (to name several scales of landscape).

Applying Praxi-Ecological Levels of Analysis

Knowing when to make a distinction between populations and communities, between communities and ecosystems, and between ecosystems and landscapes is dependent on the nature of inquiry one is engaged in. At one time, it may be useful to consider educators as a population all engaged in the same role while at another it may be useful to consider them as a community of populations (math teachers, literacy teachers, special education teachers, etc.). Similarly, it may be useful in some inquiries to consider a school as the ecosystem of a single community of practice while in other inquiries, it may be useful to consider the school as a landscape of interacting communities of practice. The praxi-ecological levels of analysis outlined here correspond to levels of analysis rather than physical entities found in the empirical world; the distinguishing feature that sets human communities of practice apart from the meaning traditionally assigned to ecological communities is the abstract construction of role using praxis (read: language).

Scales of Practice

Returning to the concept of praxi-ecological interaction that I promised to define in the concepts of Wenger-Trayner and Wenger-Trayner's (2015) framework: my understanding of praxi-ecological interaction is based on an idea of power articulated by Michel Foucault. Wenger-Trayner and Wenger-Trayner (2015) note that various members of the community of practice in various positions draw on various forms of power in order to negotiate their claims to competence and knowledgeability (two central

concepts in Wenger-Trayner and Wenger-Trayner's framework that I define in the next paragraph) both within their own community of practice and across the broader landscape of practice.

One of the strategies that members of communities of practice have in modulating their identification to different scales of practice. This idea refers to the situation in which a practitioner opens or closes their practice (and the construction of identity that flows from engagement in that practice) to intersubjective communication with others at various scales (role, population, community, landscape). In some cases, educators may choose a small scale of practice, modulating their identification with others to the closed space of their own classrooms. In other cases, educators may choose a larger scale of practice, modulating their identification to collaboration with a set of peers within a building or a network. In other cases, educators may choose yet larger scales of practice, collaborating with community members or administrators or other groups outside their immediate peer-group, school or network. Scales of practice could also refer to the choice to engage at the level of an individual in a role, a population, a community, an ecosystem or landscape of practice. It could also refer to a group or classroom, a department or a school, a district or a region, or even a nation.

Competence and Knowledgeability

Zooming in on praxi-ecological interactions within and between communities of practice co-existing in a shared landscape, I want to take a moment to characterize the difference between claims to competence and claims to knowledgeability. These two terms are central to Wenger-Trayner and Wenger-Trayner's framework. A claim to competence is asserted by a member of a community of practice to other members of the

same community; it characterizes how the actions taken by that member of the community constitute a competent approach to the practice that defines the community. A claim to knowledgeability, by contrast, is asserted across the boundaries between communities of practice by a knowledgeable partner; it characterizes how the perspective of one community of practice can inform the ends and means of the practice of another community. One way to look at the problem-of-practice organizing this study is that the claims to competence asserted by educational researchers are implemented in the community of educational practice without sufficient knowledgeability to make this implementation meaningful. EPBs are identified in a community of inquiry practice that defines its competence around reducing the complexity of a situation in order to isolate variables and understand the relationships between those variables one at a time. These EPBs are then expected to be implemented in a community of educational practice without sufficient account being taken for the transition from a situation of reduced complexity to a situation of full complexity. Failing to take this account represents a lack of knowledgeability.

Language Barriers Between Communities of Practice

A key point in Wenger-Trayner and Wenger-Trayner's (2015) framework is that the language practitioners use to discuss practice is germane to the community of practice in which they participate. Thus, for claims to knowledgeability to be meaningful, not only must the situational difference be taken into account, the language gap between communities of practice through which that account is given must also be overcome; a requirement that I have grappled with intensely as I've written this study up. There are so many different communities of practice to be navigated in both of the lenses of the

infinity mirror. In the practical lens, there are the communities of professional practice (administration, special education teachers, general education teachers, social workers, psychologists, speech language pathologists, etc.). In the inquiry lens, there are the communities of inquiry practice (the various traditions and disciplines found across the paradigms and methodologies described in Chapter 1).

Professional Development, Lesson Study and Professional Learning

This dissertation-in-practice is replete with examples of my attempts to navigate linguistically between the terminologies of various communities of inquiry practice as well as various communities of professional practice. In addition to the linguistic gymnastics I needed to do in situating the inquiry of this study, I have also had some work to do in situating the terminology I use to refer to PD in relation to LS. For LS, I adopt the definition provided in Chapter 1, which reads that LS is a family of action-oriented inquiry processes that have been modulated to different purposes over the course of history (Inoue, 2015; Ishii, 2017). This definition caused me to consider about whether LS is a form of PD. According to some definitions, LS could definitely be considered as a form of PD, but these definitions of PD conflict with how PD is understood and used in the teacher discourse of the school where I work. Scherff (2018) captures the understanding of PD that is in play in the school where I work in the definition: “Professional development, which “happens to” teachers, is often associated with one-time workshops, seminars, or lectures, and is typically a one-size-fits all approach” (para. 3). According to this definition of PD, LS is not a form of PD, but rather a contrasting practice. I needed a different superordinate term to place PD and LS into comparison.

For this, I turned again to Scherff (2018) who states that “[t]here is a useful distinction between traditional “professional development” and professional learning, which is intended to result in system-wide changes in student outcomes.... professional learning, when designed well, is typically interactive, sustained, and customized to teachers' needs. It encourages teachers to take responsibility for their own learning and to practice what they are learning in their own teaching contexts" (para. 3). Thus, for the purposes of this dissertation-in-practice, I consider PD and LS two contrasting forms of organized professional learning, with PD being marked out in the explanation of the problem-of-practice organizing the current study as a deficient form. To be clear, one-time workshops, seminars, lectures and one-size-fits all (read: the application generalized knowledge) approaches are not antithetical to professional learning, nor is the technical practice of LS sufficient in and of itself to be synonymous with professional learning. I hold open the possibility that both PD and LS can afford professional learning when integrated into certain contexts as well as the possibility that, when implemented technically, can fail to afford professional learning; I enact LS, in part, as a way to shine light on how professional learning might be better realized in both PD and LS contexts. A quick note to the reader, the distinction between professional development and professional learning did not occur to me until after my cycles were complete, and so in the cycles, you will find that I sometimes referred to LS as a form of professional development.

Lesson Study as Viewed Through Landscapes of Practice

In organizing this study, I consider each classroom to be a community of practice as a baseline scale of practice. Within the classroom, there are a variety of roles, both formal

and informal that are carried out by both students and faculty. The classroom has a dynamic norm that shifts through various stages of group development over the year. A classroom culture develops and with this classroom culture a language gap arises between members of one class vs. members of another class. There are degrees of separation. The language gap between two sections of a grade is substantially narrower than the language gap between a second-grade class and an eighth-grade class. At the secondary level, similarities and differences in subject matter (i.e., Language Arts, Math, Science, Social Studies, etc.) between two classes can also narrow or broaden the language gap. Of course, these language gaps between teachers are often rather minuscule to the language gaps that tend to exist between teachers and educational investigators (analysts, researchers, evaluators, and critics, to name a few specific investigative roles).

LS is designed to bridge these language gaps by giving teachers (and educational investigators acting in the role of knowledgeable partner) shared experiences in each other's planning processes and classroom instruction. By bridging these language gaps, the landscape of practice that is the school is opened to the possibility of claims of knowledgeable and inter-communal dialogue about what ends and means contribute to whole school coherence. At a larger scale of practice, bridging the language gap between educators and educational investigators can bring about coherence to the larger endeavor of education generally. The alternative to this inter-communal dialogue is power struggle. This occurs when one community of practice attempts to subsume the regime of competence of another by setting out reified principles of practice to which members of one community of practice are held accountable by another. For example, a licensing agency might seek to subsume the regime of competence of elementary teachers by

mandating that all elementary teachers engage in a required PD session about the science of reading. The mechanism by which compliance is achieved is the threat of losing one's license or of the district losing funding. This is a very different way of learning about reading instruction compared to practitioners and researchers exchanging claims to knowledgeability across the boundaries between classroom communities of practice. As Wenger-Trayner and Wenger-Trayner (2015) note in their framework, the exertion of outside influence on a regime of competence within a community of practice is possible (if unpredictable), but the subsumption of the regime of competence of one community of practice by another is not.

In addition to educational investigators, administrators and classroom teachers, there are other non-classroom communities of practice also present in the landscape of practice of a school. Teachers and special service providers in educational support positions (interventionists, special education teachers, speech language therapists, social workers, school psychologists, etc.) can join LS as well. Depending on how their participation is structured, these professionals may join either as core members of the LS group or as knowledgeable partners (Takahashi & McDougal, 2016). If they join as core members of the LS group, it is expected that the scope of inquiry that the LS group adopts would encompass their settings of practice as well as the classroom setting of practice. Alternatively, if these professionals join as knowledgeable partners, they can provide insights to the LS group from the perspective of their own practice that might be useful within the classroom setting. In the role of knowledgeable partner, there is no expectation that the scope of inquiry of the LS group would extend to settings of practice beyond the classroom.

Collaborations between classroom teachers and supporting teachers and special service providers in educational support positions are marked by power parity. Institutionally, these participants are assumed to have equal power status. A second type of collaboration involves power imbalances. Paraprofessionals might join LS groups. Institutionally, teachers hold more power than paraprofessionals. It is expected that the institutional power distance between teachers and paraprofessionals are minimized within the context of the LS group. As a forum for establishing inter-communal dialogue, LS groups are places where all participants have an equal voice (Horide, 2009).

In an alternative situation of power imbalance, administrators might join LS groups. Institutionally, administrators hold more power than teachers. The minimization of power distance between administrators and teachers is expected within the discussions of the LS group. A third common type of collaboration involves people who have no institutionally defined role within the landscape of practice; by institutionally defined professional role, I mean people who are under contract to perform a set of tasks in return for monetary remuneration. Under this definition, parents and other community members, while members of the school community, do not have an institutionally defined role within the landscape of practice. Also, researchers at universities and experts in various fields do not have institutionally defined roles unless they are contracted by the school to provide a specific service. Parents, community members, researchers, and experts in various fields can all join LS groups in the role of knowledgeable partners. The relationship between the core LS group members and knowledgeable partners is characterized by the extension of hospitality by the core LS group to the knowledgeable partners (Ikeda, 2013).

Lesson Study in The United States

Lesson Study (LS) as it is enacted in the United States is a professional development practice that was imported from Japan during the early 2000s. Interest in LS peaked after a comparison of teaching practices was conducted and published by (Stigler & Hiebert, 1999) in a volume entitled *The Teaching Gap*. Stigler and Hiebert's study relied on the collection of video samples of math lessons collected from teachers in Japan, Germany and the United States. Substantial differences in the way math was being taught across the three countries were identified, and Stigler and Hiebert made the case that while Japanese math lessons had looked very similar to those in the United States earlier in the century, they had been transformed over time through the practice of Japanese Lesson Study. A main plank in the argument that Hiebert and Stigler put forward for importing the practice of LS was that the transformations in the math lesson plans used in Japan as a result had raised test scores. Thus, their argument was that the importation of LS to the United States had potential to increase test scores.

A snapshot of the purposes and procedures of LS popular in Japan around the end of the 20th century became available to English speaking audiences through the ethnographic work of Catherine Lewis. Lewis' focus in her ethnography was on describing the practice of education in Japan (Lewis, 2000). Lewis identified LS as a key component of Japanese education and published handbooks and studies of LS groups operating in the United States (Lewis, 2002). Following Lewis' lead several authors published handbooks on learning lesson study, with a focus on adapting LS to American practice (Lewis et al., 2006; Fernandez, 2002; Fernandez & Yoshida, 2004). Early on,

researchers noted that LS was being enacted in the US quite differently from how it is enacted in Japan (Mathematics & Science, 2001).

Soon after, the structural and cultural differences between educational practice in Japan and the United States became the focal point of research on LS in the US (Lewis, 2002; Perry & Lewis, 2009; Akiba & Wilkinson, 2016). While there was emerging evidence that LS deepened teachers' understanding of their educational practice (Lewis, 2003), a consensus had yet to emerge about what purposes LS was effective for. A common misconception in the US was that LS is a structure for creating well-honed lesson plans (Lewis, 2002). The understanding that the lesson study lesson plan was a quasi-experiment in an action-oriented inquiry cycle was not obvious to many early practitioners of LS in the United States. This misconception has persisted well into the second decade of LS' enactment in the United States (Fujii, 2016).

Researchers began to realize that translating LS from Japanese practice to American practice was not as simple as outlining and implementing its technical features (Perry, & Lewis, 2003; Masami, 2005). Research began to focus on the cultural and structural barriers that prevent LS from being enacted meaningfully in the US. The systemic supports that LS enjoys in Japan came into focus as researchers began to take note of how LS is used in Japan to reform curriculum and meet adaptive challenges (Lee & Ling, 2013).

As research on LS in the United States matured, there was a growing consensus that the structures of Japanese education support LS in ways that the structures of American education do not (Perry & Lewis, 2009). Analyses of how power is distributed amongst

teachers and how these power distributions affect lesson study began to come to the fore (Corcoran, 2011; Saito & Atencio, 2013; Druken, 2015).

Between 1999, when Hiebert and Stigler popularized LS in the US by linking to the production of higher test scores and the mid-2010s, the purposes towards which LS was directed shifted. The capacity of LS to promote reflective practice, deepening of teacher pedagogical knowledge, and increasing collaboration became valued ends in and of themselves rather than simply means to higher test scores (Ermeling & Graff-Ermeling, 2014; Myers, 2013; Suratno & Iskandar, 2010; Jhang, 2019) By the late 2010s, there was a growing body of evidence that LS didn't just have the potential toward these purposes, but that it was effective towards these purposes (Willems & Van den Bossche, 2019).

At the same time, however, the problems associated with adapting LS to non-Japanese educational environments persist as a theme in the research literature. There is a tension between adapting LS to fit within new cultures and weakening it into unrecognizable forms (Dudley, 2015a; Kratzer, 2007). These concerns have been heightened by the integration of LS into state level accountability systems in the US (Akiba & Wilkinson, 2016), teacher training programs (Caroline & Wayne, 2009; Cajkler & Wood, 2015; Larssen et al., 2018) and its increasing globalization as it is adopted in more and more countries (Dudley, 2015b; Chen & Zhang, 2019).

As a result, the period spanning from the mid-2010s to early 2020s have seen the field of research on LS move from a focus on reproducing Japanese practices abroad to search for a transnational identity for LS. Calls for finding this identity in the transnational history of LS have been persistent throughout this time period (Aki et al., 2012; Dudley, 2015b; Makinae, 2019; Paine, 2019). Another focus of the late 2010s has

been on how participation in LS transforms teacher's identities, what they notice in their practice and the discourse they use to discuss education (Dudley, 2013; Alamri, 2020; Pedder, 2015; Restani, Hunter & Hunter, 2019).

Chapter Three: Self-Study as Action-Oriented Criticism

I'd like to revisit the idea of the infinity mirror that I introduced in the last two chapters. One of the reflective lenses of the infinity mirror is the view we get of Lesson Study (LS) through the *Learning in Landscapes of Practice* conceptual framework. In action-oriented inquiry, however, a second reflective lens is necessary. I've already introduced this lens when I introduced action-oriented inquiry in Chapter 1, but here, I would like to expand on and name this second reflective lens. Herr and Anderson (2015) describe the need for two reflective lenses in what they call action research (and I call action-oriented inquiry) in the following terms:

In action research, there is a conceptual framework that guides the data gathering and analysis, as well as a conceptual framework embedded in one's particular approach to action research. The former is guided by the literature that has been reviewed and the latter by the knowledge interests of the research" (p. 105).

I choose to reserve the term conceptual framework for the framework guided by the literature. I introduced the conceptual framework for the current study (*Learning in Landscapes of Practice*) at the beginning of Chapter 2. I choose to call the second framework an *inquiry framework*. I introduced the inquiry framework for the current study at the end of Chapter 1 - the inquiry framework builds upon what Guba and Lincoln (1989) call *Fourth Generation Evaluation*, so I'll call it the *Fourth Generation Inquiry Framework*.

To borrow a term *meta-framework* from Inoue (2015), I imagine the inquiry framework as a kind of meta-framework that allows action-oriented investigators to follow the process of iterative inquiry through multiple different aspects of our roles of action and our roles of inquiry, placing the inquiry we do in dialogue with what I identified as conventional and constructionist inquiry in Chapter 1. At one moment in the cycle of action-oriented inquiry, we might find ourselves in the role of critic, at other moments, we might re-imagine our role in terms of being an evaluator, researcher or analyst. At yet other moments, we might re-imagine our role as being a historian or biographer. In the paradigm of action, the *process integrity* of our inquiry flows not from a methodological commitment to a particular mode of investigation, but rather from following that iterative cycle of our inquiry wherever it leads. The inquiry framework (what Herr and Anderson (2015) call a second conceptual framework) is necessary for investigators working in the paradigm of action because we are engaged in the settings we study, and we have to be able to identify how we move through the various roles available to us as action-oriented investigators. Above all, when we are engaged at the level of a landscape of practice, we have to make our work meaningful across the boundaries of many communities of inquiry and professional practice.

Locating The Current Study in the Fourth Generation Inquiry Framework

In the current study, I have adopted the paradigm of action in order to examine my own actions as a leader of LS. This means that I am engaged as a participant in the setting in which I am studying; in my case, I am an insider to the setting in my role as Senior Team Lead. It also means that the focus of my study is on my own actions rather than the actions of others. I aim to generate enactive knowledge that allows me to

improve the actions I am oriented to as well as reflective knowledge that will allow me to discern the ends towards which I am aiming in my improvement efforts more clearly. This knowledge is generated through iterative cycles of inquiry. Done successfully, inquiry conducted in the paradigm of action will transform my practice locally and will be useful to others beyond my local context who might learn from the example of my experience in my setting. Setting my work in the paradigm of action means that I evaluate the quality of my work through the lens of integrity (Jacobson, 1998).

To discipline the inquiry of this examination, I have adopted the methodology of criticism. This means that my work is intended to disclose the unique aspects of a specific situation in a way that transforms perceptions of the meaning of what occurs or does not occur in that situation. My understanding of criticism is heavily influenced by the work of Elliot Eisner (1991), but most examples of Eisner's educational criticism and connoisseurship are rooted in the paradigm of construction rather than action.

Having situated this study in the paradigm of action, I surveyed the field to find a community of inquiry practice in the paradigm of action that parallels Eisner's educational criticism and connoisseurship. Jack Whitehead (1989) outlines a tradition in the paradigm of action very similar to what Eisner has outlined in the paradigm of construction. Both Eisner and Whitehead borrow methods from the discipline of ethnography in order to describe educational practice. They are also both influenced by John Dewey's concept of theory of experience. Eisner refers to theories of experience in their unarticulated privately held form as *connoisseurship* and in their publicly disclosed form as *criticism*. Whitehead doesn't have a specific term for theories of experience in

their unarticulated privately form but refers to them in their publicly disclosed form as *living educational theories*.

Whitehead (2011) refers to the method of developing a living educational theory as self-study. An analogous method taken from the community of inquiry practice that has sprung up around Eisner's work is called auto-criticism (Uhrmacher, Moroye McConnell & Flinders, 2017). Note that even the way these methods are named is parallel: *self* is a rough cognate for *auto* and *study* is a rough cognate for *criticism*. Because I have situated my work in the paradigm of action, I adopt Whitehead's name for the method, but I also draw on the insights to be gleaned from educational criticism and connoisseurship. For one, geopolitically, I am much more engaged in the community of inquiry practice around educational criticism and connoisseurship than I am in the community of inquiry practice around living educational theory. My geopolitical distance from the center of Whitehead's community of inquiry practice at the University of Bath makes me sensitive to a particular issue in self-study that I attempt to overcome through insights taken from educational criticism and connoisseurship.

As invigorating as I find self-study action-oriented inquiry to be, I have found that, when reading research literature in the self-study genre, it is easy to feel a bit left out. I read the practitioner accounts of the genre, often written by practitioners working in a British educational context, and I am left with a feeling that they have generated substantial and important insights. At the same time, I often find that I don't have quite enough context to fully understand the import of the insights being shared. When reading these accounts, I find that I often substitute in the experience of my own practice to give

the insights being shared some context. Sometimes my experience fits and it feels as if the insights have been illuminated, but at other times, I struggle to connect the dots.

Uhmacher, Moroye McConnell and Flinders (2017) envision a way to use educational criticism and connoisseurship across the boundaries of paradigm, methodology and method in the form of a complementary method. The form of educational criticism and connoisseurship that Uhmacher, Moroye McConnell and Flinders (2017) call *auto-criticism* in particular complements the self-study I've engaged in here with an arts-based description (or *portraiture*) that vicariously transports the reader into the setting in which the insights generated through self-study action-oriented inquiry have been generated through a form of representation (Lawrence-Lightfoot & Hoffman Davis, 1997). The specific purpose of portraiture in auto-criticism is to allow the reader to vicariously share in the critic's Ie of taking action in a particular kind of situation.

There is, of course, some loss in the vicarious nature of the transportation; as Eisner notes, forms of representation both reveal some aspect of that which they represent (highlighting it), but they also conceal other aspects (Eisner, 1994). The purpose of representation in portraiture (Lawrence-Lightfoot & Hoffman Davis, 1997), however, is not to represent reality in lossless fidelity. That is neither possible nor desirable. Instead, in each portraiture, the form of representation is intentionally chosen to give context to the insights that are shared. An important point here is that while the study is still being conducted, the form of representation (already tentatively in the mind of the researcher) allows the researcher to uncover particular insights through reflection on data collected as well as to disclose those insights along with their context to others (Eisner, 1991). My

hope is that by using the portraiture of auto-criticism to complement self-study, I will render the context of my work more approachable to a wider audience.

The Method: Self-Study

In McNiff and Whitehead's (2011) method of Self-Study, practitioners examine their own practice using a mode of inquiry similar to auto-ethnography in order to reflect on how they might improve their practice, and towards which ends. A key concept in the method Self-Study is the documentation of self as a living contradiction of practice. The idea that teachers are involved in defining the ends toward which we aim in our actions is encompassed by the idea of a living educational theory, but we don't always fully discern our own living educational theory and our actions as practitioners, when examined, often reveal contradictions. These living educational theories can be informed by conventional academic theories on a shallow level, but living educational theories are personally held guides to action and the act of identifying living contradictions is a key way of developing living educational theories more deeply. Living educational theories are based on the values that the individual teachers who develop them hold. Living educational theories are also communal in the sense that they are public and facilitate collaborative action. A living educational theory is not simply the unexamined schema that motivates teacher actions, it is an attempt to provide a coherent account of that schema in its praxi-ecological interaction with others in a way that promotes professional learning and discernment of what is important in practice.

In engaging in self-study complemented by auto-criticism, I have sought to describe, interpret, evaluate and thematize my experience leading LS over the course of three iterative cycles in order to understand how the living contradictions of practice that

I encountered can help me better discern my living educational theory and improve my practice.

Data Collection

Throughout each cycle reported in this study, I kept an action reflection journal of my actions and reflections upon the leadership of LS. In this action reflection journal, I also engaged in continual analysis of what I observed, eventually utilizing the conceptual framework introduced in Chapter 2. To supplement this journal, I also examined artifacts of practice that I produced in my leadership of LS in each cycle. These artifacts include emails written to my team, mentors and administrators, handouts created for my team, as well as video recordings. In order to select these artifacts, I considered how they had influenced my actions in practice in my reflections in my action reflection journal.

Data Analysis

When analyzing my data, I revisited my experience narratively. First, I went through my action research journal and identified key dates in order to create a timeline of events. Then I revisited my email on those key dates and collected a variety of emails I'd sent to my team, my administrators and my mentors about my thinking at that time. Following this, I synthesized these data sources into a day-by-day narrative. I placed artifacts of practice in a section preceding the day-by-day narrative. After reading the synthesized day-by-day narratives, I began to identify themes in my experience of the cycle. I reduced the day-by-day narrative to a shorter description that is reported in Chapters 4-6. I also selected key artifacts of practice to retain in the chapters. As I wrote the condensed descriptions, I tried to keep my level of inference low. Having presented the key artifacts of practice and then, having written out condensed narrative descriptions

for each cycle, I read through each and then began to interpret my experience. I wrote my interpretations up into the sections presented in Chapters 4-6. My next task was to read through my interpretations of each cycle to understand how each cycle became valuable to the formation of the next cycle. I wrote these evaluations up in the Evaluations sections of Chapter 4-6. Following this, I went through the evaluation sections in Chapter 4-6, and I addressed my reflection questions. Finally, I indicated how my findings from each cycle informed the next cycle.

Stakeholders

Guba and Lincoln (1989) define a stakeholder as someone who is put at risk by an evaluation. I extend the concept of stakeholder to all modes of inquiry. Participants are one form of stakeholders, but investigators, partners who share the context of practice with the investigator may also be stakeholders, and clients who are served by investigators and their partners may also be stakeholders. In the current study, I identify myself and the members of the team I lead as primary stakeholders. The disclosure of the current criticism could put the primary stakeholders in this inquiry at risk by revealing private or confidential information. Peripheral stakeholders include the administration of my school, the students and families that we serve and the faculty advisors who served on the committee for this dissertation-in-practice. The risks to these members are minimal because the actions I took in the study were directly aligned to the policies that govern the operations of the school where I work, and the purposes were to enhance the quality of services that are written by mutual agreement into the IEPs of the student our team serves. My alignment with school policy and the oversight of my actions as a Senior Team Lead provided by my direct report enfranchised my school administration with due

process to protect their stake and the IEP process provided the families and students my team serves with due process to protect their stake. The dissertation process gives due process to my faculty advisors to protect their stake.

Because this study was not conducted as a research study designed to contribute to generalizable knowledge, an application for oversight by the University of Denver's Institutional Review Board was not required. However, the IRB at the University of Denver highly recommends submitting a human subject research determination form in order to confirm that the study does not require IRB oversight. I submitted this form, and it was determined that the current project is not research and does not contain any human subjects. Even without IRB oversight, ethical inquiry is the core responsibility of any investigator, and so I have carefully considered how to manage the risk that my inquiry might pose for others. To manage my own risk, I carefully considered my own situation in the context of my practice when deciding upon the actions I wished to disclose to a broader audience. To minimize the risk to the members of the team I led, I have carefully considered how I will represent others in the narrative of my self-study.

Representation of Others Captured in The Data

As a first-person form of action-oriented inquiry, my focus in this study is on an auto-ethnographic examination of myself. Because I work in the context of others, I need to consider how I will ethically treat the appearance of others in the context of this auto-ethnographically oriented work. I have set the focus of this study on my own leadership of LS. This leadership involved reacting to other people such as students, the teachers I led, administrators who supervised me and knowledgeable partners. I have made the choice to refer to each of these others only by the role in which they serve. While I could

make the presentation of my data more engaging as a narrative by characterizing these individuals, I have chosen not to do so because they are outside the scope of this study. Ethically, I am obligated to leave them in silhouette.

Where it is necessary to report on some input that I received from one of these people, I have used language that situated their actions through the lens of my own interpretations. Instead of interpreting what these individuals were thinking in my role as a researcher, I have reported the interpretations I made in my role of practitioner. Thus, instead of stating that some other person was thinking this or that, I report that they “seemed to me” to be thinking this or that. While this point may seem semantic, I believe it is important. I am reporting on my own perceptions of what was happening around me rather than attempting to characterize what was happening around me itself.

When reading Chapters 4-6, please consider my fallibility as an observer. Please recall that action-oriented inquiry can serve as a catalyst to inform further iterative inquiry, but it would not be valid to use it as a justification for advocacy. I was not in a detached role of observing scientifically and corroborating my observations with interviews. I was in a political role of leading a team and making decisions based on my perceptions of what was happening around me. The results reported below therefore reflect me and my perceptions rather than reflecting others and their held intents. While it may be stylistically awkward to refer to others by their role rather than their name and to preface every observation or interpretation of their actions with tentative language such as “seems to me”, please allow this awkwardness of form to serve as a constant reminder that what you are reading is a window into to the mind of the current author rather than a valid, reliable characterization of the actions of others in practice.

At the end of this dissertation-in-practice, I discuss the possibility of second person and third person action-oriented inquiry as a way to expand the field of representation beyond my own subjective interpretations into the intersubjective representation of a shared experience. For now, though, this study is conducted as first-person action-oriented inquiry, and the form of representation I've chosen for disclosure reflects the nature of the study.

Evaluating Action Inquiry Quality

Because action-oriented inquiry is subjective, the quality of action-oriented inquiry projects has to be evaluated from the perspective of criteria that differ from the criteria used in conventional research. In conventional inquiry, studies need to be designed and conducted in valid ways. Two of the major types of validity are external and internal validity. Of the two, only internal validity applies to action-oriented inquiry. Action-oriented inquiry does not treat its participant pool as a sample from which to infer generalizable patterns about a larger population. Because external validity is concerned with the inferencing of generalizable patterns, it is not relevant to action-oriented inquiry. Internal validity transfers somewhat better from its origins as a means to evaluate conventional research to a relevant application for action-oriented inquiry. Still, even here the transfer is limited.

Validity refers to the production and dissemination of durable, objective, propositional knowledge that represents what it purports to. That is not what action-oriented inquiry produces. As a result, internal validity is applicable to action-oriented inquiry mainly as a bridge between action-oriented inquiry and conventional research. Investigators working in the traditions of academic (conventional and constructionist)

research can evaluate action-oriented inquiry study designs using the criteria of internal validity in order to translate an action-oriented inquiry study into a conventional study. Additionally, investigators working in the traditions of action-oriented inquiry can use the concepts of internal validity to understand the limits of what can be known with certainty as an outcome of their inquiry efforts.

Due to the subjective nature of action-oriented inquiry, outcomes of studies conducted within this paradigm are never fully certain. In studies conducted within a conventional paradigm, the detachment of the investigator, the control which is applied to the setting of the study, and the pursuit of objectivity allows for reliability of the results obtained to be established through replication of the study under similar conditions. That is not possible for studies conducted in the paradigm of action-oriented inquiry. Instead of building a solid foundation of Ryle's *knowledge that* (Ryle, 2009), action-oriented inquiry studies seek to build an iteration of working hypotheses that are tuned and retuned to the environment in which they are of use; Ryle calls this kind of knowledge *knowledge-how*, and it might also be considered a form of what Phenix (1964) calls *synnoesis*. When evaluating outcomes of a study according to an action-oriented inquiry paradigm, the question is not whether the findings are reliable, but rather, to borrow a term from Elliot Eisner, whether the outcomes are edifying (Eisner, 1991; Lather, 1986). By edifying I mean that the outcomes (the disclosure of a person's experience) somehow edify the connoisseurship of the reader, allowing them to see their own practice in a new way that is useful to them.

Scholarly practitioners working in the field of action-oriented inquiry propose three aims toward which our efforts might be evaluated (Torbert, 2004). In the first-person

form of action-oriented inquiry, wherein practitioners study themselves, integrity is the primary aim through which an inquiry might be evaluated (Torbert, 2004; Jacobson, 1998). In the second-person form of action-oriented inquiry, wherein a group of practitioners establish an intersubjective group to study their own actions, mutuality is the primary aim through which an inquiry might be evaluated. In the third-person form of action-oriented inquiry, wherein the professional conversation generated by networked study between multiple action-oriented inquiry groups extends beyond the scope of interpersonal connections, approaching societal and climatic scales, sustainability is the primary aim through which an inquiry might be evaluated.

As this study is conducted in the first-person form of action-oriented inquiry, I have thought carefully about what integrity means. I have adopted 5 categories from Herr & Anderson (2015) and Inoue (2015) by which to evaluate the integrity of my inquiry (process, democratic, catalytic, ironic, and dialogic). Herr & Anderson (2015) and Inoue (2015) both seek to situate action-oriented study in the rubric of research and use the term validity rather than integrity as the superordinate term. Lather (1986) also uses the term validity in developing the idea of catalytic validity.

As described above, I find that distinguishing criticism from the concept of research allows for a clearer understanding of the type of knowledge produced. I use the term Jacobson's (1998) term *integrity* rather than *validity* to capture the idea that the knowledge generated through action-oriented inquiry exists in an iterative cycle of generation that includes both authors and audience in an active co-creative relationship. Where needed, I substitute *inquiry* where other authors have described a form of what I consider to be integrity using the term *validity*. As with all my terminological

substitutions, I do not intend to modify the meaning by substituting one term for another (though I may unintentionally end up doing so, for which I offer my apologies); instead, my intent is to clarify the relationship of ideas to each other by shifting how I refer to them so that my meaning is clear.

Process Integrity

Process integrity refers to what extent problems are framed and solved in a manner that permits ongoing learning of the individual and the system” (Herr & Anderson, 2015, p. 68). Herr and Anderson (2015) provide further clarification of the definition of process integrity, stating:

Are the ‘findings’ a result of a series of reflective cycles that include the ongoing problematization of the practices under study? Such a process of reflection should include looping back to reexamine underlying assumptions behind problem definition” (Herr & Anderson, 2015, p. 68).

Process integrity is evident in this study both through the humility that I have attempted to make evident throughout this study and through the structure of chapters that I have employed to disclose my experience. As I engaged in each cycle, I engaged in continual reflection and sought ways to modify the process in order to better afford the experience I had hoped to provide for the members of the team I led. At each step, I considered divergences from my expectations as issues to solve through process modification rather than as deficiencies in the actions of the members of my team in having fidelity to the process I’d planned.

Democratic Integrity

Democratic integrity “refers to the extent to which research is done in collaboration with all partners who have a stake in the problem under investigation”

(Herr & Anderson, 2015, p. 69). Maintaining democratic integrity was difficult in this study. I had originally assumed that because I was interested in action-oriented inquiry, my team would be as well. It required critical reflection and a commitment to process integrity to recognize that my assumption about a collective engagement in action-oriented inquiry was wrong. The members of the team I led were not universally enthusiastic about engaging in action-oriented inquiry. In order to preserve the democratic integrity, I had to narrow my focus. Instead of studying my team's experience of lesson study, I had to refocus on my leadership of LS so that all participants involved in the action-oriented inquiry study were also engaged in its design. I was the one engaged in the design, and so I had to limit the scope of my study to the study of myself.

As I engaged in my study, I also sought to preserve democratic integrity by always extending the invitation to other members of my team to join me in designing the process of our work together. Over time, I was able to build capacity in my team for the future engagement in second person action-oriented inquiry in which we all collaborate to engage in the design and enactment of the study. For this study, however, adopting a first-person action-oriented inquiry stance allowed me to preserve democratic integrity.

Catalytic Integrity

Catalytic integrity refers to “the degree to which the research process reorients, focuses and energizes participants toward knowing reality in order to transform it” (Lather, 1986, p. 272). I began each cycle with a working hypothesis generated from my previous experience. As I went through the cycle, I had an eye toward evaluating what I needed to change moving forward to enact my leadership of LS in more inclusive and responsive ways. I began the study with an understanding of LS as a set of technical steps

that had produced a positive experience for me in the past. I ended the study with an idea of how LS empowers teachers to learn from each other and contribute to the knowledgebase of their own profession; as a part of this idea, I also came to an understanding of how the institutional structures of public schools and universities often inhibits the potential for practitioners and researchers to work closely in a complementary relationship with each other.

Ironic Integrity

Ironic integrity refers to the degree to which the study challenged the initial unexamined assumptions that the researcher held going into the inquiry (Inoue, 2015). The current study challenged two major assumptions that I had held going into my inquiry. The first assumption was that teachers would be eager to engage in a new organizational structure for professional learning that was designed to empower us to learn from each other. What I hadn't realized was that teachers have developed substantial protective mechanisms that they can employ in navigating the status quo. Abandoning the status quo, as undesirable as it may be to a teacher, also deprives them of their protective mechanisms and leaves them vulnerable. I explore this realization more in Chapter 7. The second assumption was that because I had participated in LS in Japan, that I would know how to lead it. What I hadn't realized was that my own leadership style was far more rooted in advocacy and the exercise of institutional power than I had realized. Over the course of this study, I had to relearn how to lead through inquiry and the exercise of mutual power. I also discuss this realization more in Chapter 7.

Dialogic Integrity

Dialogic integrity refers to the integration of the study into the discourse of the setting of practice itself (Herr & Anderson, 2015). Are the findings communicated in a way that allows members of the setting of practice to engage in a more nuanced and insightful dialogue around the problem-of-practice addressed? To preserve dialogic integrity, I have adopted educational criticism and connoisseurship in order to make the nature of my inquiry accessible to all the stakeholders in the dialogue to which this study contributes. At times, my thinking in this study has had to become highly technical and theoretical in order for me to comprehend what I was encountering. In writing this study up, I have had to consider how much of that thinking can be disclosed.

Structural Corroboration

Structural corroboration refers to the use of multiple data sources to create a coherent narrative (Eisner, 1979). In the current study, I have deliberately omitted some forms of data in order to maintain integrity with the action-oriented inquiry methodology in which I have conducted this study. Thick descriptions (Geertz, 1973) of the setting and the personalities of the other people could render the disclosure of my experience more vivid for the audience of this study. I intentionally chose a minimalist approach to the setting descriptions of the first two cycles in order to highlight the shifts in the relationships I was responding to in my leadership of LS. Readers will find my reactions to the body language of the people I led highlighted as a prominent feature of the setting through the use of this minimalist approach.

In terms of describing others, I have chosen to write them into my study in what I refer to in my mind as silhouette form. I include just enough detail to raise general

questions, giving the sense that there is more to explore than can be described in the first-person form of action-oriented inquiry, highlighting the potential for a continuation of this study in the second person form of action-oriented inquiry. One form of data collection that will become possible in second person action-oriented inquiry will be interviews between participant-researchers to help establish an intersubjective understanding of the situation. Because I accessed an institutional form of power (i.e., my role as an STL with its associated responsibility to engage in professional evaluations of my team members through the structures of a district accountability tool called LEAP, which stands for Leading Effective Academic Practice) to engage in this study that turned out to conflict with the principle of mutuality, I decided to omit interview data in the design of this study.

The structure that I am Corroborating in the data of this study is the development of my own living educational theory (Whitehead, 1989) in response to the setting of my practice and its emerging expression through the artifacts of my practice over the course of three cycles of inquiry. Using Eisner's concept of structural corroboration in tandem with the concepts of integrity and mutuality helped me think through what forms of data to include and what forms to omit. This, in turn, helped me imagine the three cycles reported in this study as part of a longer iterative arc of inquiry that will hopefully be carried forward in second and third person forms of action-oriented inquiry.

Referential Adequacy

Eisner's concept of referential adequacy is especially pertinent to the use I make of educational criticism in this study. To quote Eisner (1979) at some length:

For educational criticism, the end-in-view is the education of the perception of the educational event or object. We can determine the referential adequacy of criticism by checking the relationship between what the critic has to say and the subject matter of his or her criticism. What the critic does, whether in painting, drama, or schooling, is to write or talk about the object or event he or she has seen. If the talk or writing is useful, we should be able to experience the object or situation in a new more adequate way. We use the critic's work as a set of cues that enable us to perceive what has been neglected. When the critic's work is referentially adequate, we will be able to find in the object, event, or situation what the cues point to (p. 239).

Earlier in this dissertation-in-practice, I had identified what I experienced as a lack of referential adequacy in the exemplar publications in the genre of self-study inquiry. I was able to understand what was being said, but not in a way that allowed for me to use a "set of cues... [to] perceive what had been neglected" and thereby pick up the inquiry where the critic had left off. Of course, there is variety in the genre of self-study writing, with some attaining more referential adequacy than others, but I believe that an explicit focus on referential adequacy in self-study writing will be of use to educational critics. Specifically, due to the similarities between Jack Whitehead's self-study approach to action-oriented inquiry and Elliot Eisner's educational criticism approach to qualitative inquiry, I felt that Eisner's focus on referential adequacy would improve the disclosure of self-study action-oriented inquiry, rendering the insights arrived at more vivid for the readers. On the opposite side, I felt that Whitehead's methodological focus on developing living educational theories rather than contributing directly to the propositional knowledge of conventional research would have an epistemological resonance with educational criticism and connoisseurship

In pursuit of referential adequacy, I have been highly focused on limiting this inquiry to the first-person form in which it was conducted. You'll find that my attention

to referential adequacy shapes what I omitted in the structural corroboration of this study. You'll find that referential adequacy shapes my decision to report my interpretations in the tentative voice of reflecting on my own decisions in practice rather than the more authoritative voice of a researcher laying the groundwork for propositional claims. You'll find that referential adequacy shapes what I include and omit in my descriptions in Chapters 4-6. In each of these ways, I have tried to establish my own familiarity with the educational situation at hand yet leave open the ambiguity of my own perceptions of that situation. My goal is not to assert that the meaning I made from the experience is the only meaning. As Eisner (1979) writes: "What is sought is not the creation of one final definitive criticism of a work: rather, the goal is to have our perception and understanding expanded by the criticism we read" (p. 240).

Looking Ahead: How Findings Will Be Reported

In the four chapters (Chapters 4-6) that follow immediately after this chapter, I use Ed Crit to describe, interpret, evaluate and thematize one of the action-oriented inquiry cycles I engaged in as I learned to lead LS in an American context. To provide an initial connection framing for each of these cycles, I introduce each chapter by reproducing the guiding artifacts of practice that guided the cycle. Each of these cycles took place within the phase of my action-oriented inquiry when I was employed as a Senior Team Lead of a special education team. I've revisited my critical questions in each chapter. Each of these critical questions have emerged from an initial reading of the memos I took in my action research journal. As I revisited these memos, I was able to notice my inquiry took on more and more depth with each cycle. In the first cycle, my inquiry was largely organized around the question of how to feel my way through the technical aspects of enacting LS.

In the second cycle, my inquiry was more focused on being responsive to others and co-constructing the meaning of the actions we chose to take together. In the third cycle, my inquiry became structured around my own identity, and I became aware of how my actions were serving as an example for those I was leading.

In the final chapter of this dissertation-in-practice, I organize my writing as a summary of the themes that emerged from the three cycles represented and analyzed in this dissertation-in-practice. In this chapter, I try to make what I've learned accessible to teachers who might be in the same position I had been in when I began this action-oriented inquiry. Namely, I want the *knowledge how* developed here to be accessible to those who would like to transition away from the hierarchical structure of pushing new technical ideas down the implementation line by setting expectations along with consequences for not meeting the expectations and (possibly) rewards for meeting them.

Chapter Four: Self-Study of the First Cycle

Guiding Artifacts of Practice

During this cycle, I had yet to develop any artifacts of my own. I was relying primarily on a copy of *Lesson Study: A Handbook of Teacher-Led Instructional Change* (Lewis, 2002). In particular, I relied heavily on Chapter 4 in Lewis (2002) that sets out the following criteria for reflecting on whether LS has been successfully enacted:

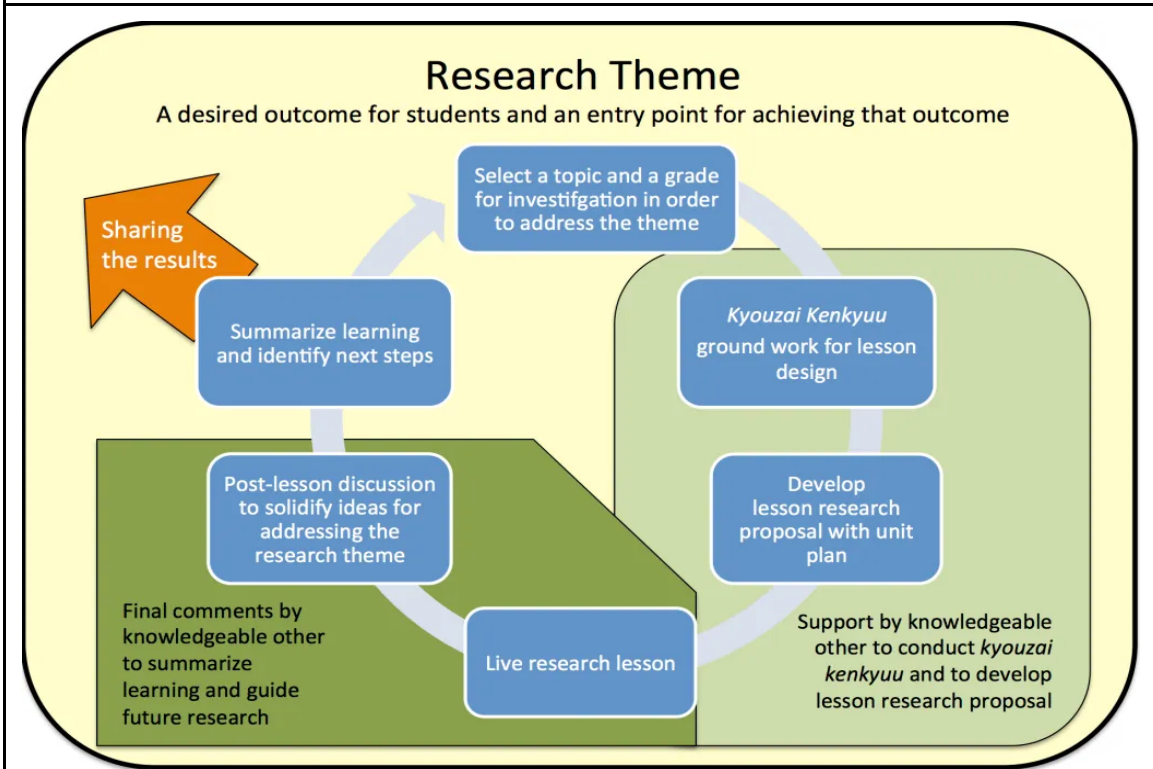
Has lesson study enabled us to:

- think carefully about the goals of particular lesson, unit, and subject area?
- study and improve the best available lessons?
- deepen our subject-matter knowledge?
- think deeply about our long-term goals for students?
- collaboratively plan lessons?
- carefully study student learning and behavior?
- develop powerful instructional knowledge?
- see [our] own teaching through the eyes of students and colleagues? (p. 27).

I also relied on a model developed by Takahashi & McDougal (2016) describing Collaborative Lesson Research (CLR). In this model, Takahashi and McDougal (2016) represent Lesson Study as a cycle of inquiry designed around a research theme. One of the features that I particularly liked about Takahashi and McDougal's CLR model was the inclusion of the *kyouzai kenkyuu*, which translates roughly to *materials study*. Ironically, later cycles would reveal that the very thing I liked about this stage (i.e., beginning from concrete materials rather than abstract models) was in direct opposition to how I chose to structure this cycle (i.e., beginning from Takahashi and McDougal's

abstract model and then trying to organize the concrete materials of our professional learning around this mode.

Figure 4.1: Takahashi and McDougal's CLR Diagram



Source: Takahashi & McDougal (2016)

Description

For me, the school year usually begins with a carton of milk at the grocery store. The sell-by date is always prominently printed on these cartons, and there comes that day when I realize that the milk I am buying will expire after the school year has begun again. In the days that follow, opening my refrigerator serves as a continual reminder that summer is almost over, and my thoughts begin to organize themselves around the year ahead of me. In my mind, there are the lessons I'd learned from the previous years that

come flooding back to me with vivid reality, and then there are those thoughts about the differences I expect in the upcoming year.

When I bought that first carton of milk in 2018, I knew I was headed into a new phase of my career. I'd accepted a new position the previous spring. In the new school year, I would be serving as the Senior Team Lead for the special education team at my school. I would have half of each of my days to provide leadership and coaching for the team. When I accepted the position, I already knew what I wanted to do with it, and as that milk carton kept reminding me of the coming school year each morning, my plans came flooding back to me.

I wanted to move my team away from (no, beyond) the constant grind of trying to keep our paperwork in compliance with the Individuals with Disabilities Education Act (IDEA). Regarding special education, IDEA defines what shall be done, who it shall be done by, and broadly speaking, how it shall be done. I wanted to move my team forward into thinking about why the work was being done. As my reflections from the previous year came flooding back to me, I remembered how we had spent our time as a team constantly problem solving how to overcome the gap between a curriculum written from students performing within the average range and the students with disabilities whom we served who, by definition, had one or more area in which they were performing significantly below the average range. This constant chase for solutions against problems that had been designed into the curriculum for our students was exhausting and disheartening.

I already knew I wanted to utilize LS as the professional development model for my team, and I wanted to do so in order to shift our focus away from chasing the curriculum

as it was written towards instructional design. I wanted to turn our attention towards the principles of Universal Design for Learning, planning the curriculum from the start to engage all learners and then using LS to examine the results of our efforts and make improvements over time.

Already, our IEPs involved making classroom observations, meeting as a team to plan for the special design of instruction, writing and updating IEPs, building in progress monitoring measures, and leveraging evidence-based practices to make the curriculum accessible for our students in their least restrictive environment. Yet somehow, each of those pieces weren't forming a whole. Our conversations were shattered, and our meetings focused on what had gone wrong and how to address problems that had arisen in the past rather than on what was going right and how to plan for opportunities in the future.

The date printed on my milk carton eventually arrived, and the school year began. With it, my hopes of being an agent of change were swept away by a million pressing needs that required my immediate attention. For several months, I found myself in situations that I didn't know how to handle well, and I found myself falling back on the hierarchical system of power endemic to the US educational system. There were so many activities that needed to be accomplished and so few hours available to accomplish them. There were power struggles with teachers who wished to continue operating according to the way they were used to. There was one teacher whose conduct was generating complaints from many of the other teachers with whom she had to collaborate in her job as well as from many parents. From August to November, I was unable to begin my action-oriented inquiry cycle.

As the complaints about the performance of that teacher continued, the traditional tools of teacher performance management ceased to function positively. The teacher's supervision passed from me to the principal of the school. I was still involved as a professional support, and having been released from my role as supervisor, I was able to switch to the principles of LS. I organized a trip for that teacher to visit another school to observe a functioning classroom along with several supportive colleagues. When that group returned, we organized the pictures of classroom resources into several categories of classroom practice using an affinity mapping strategy. The discussion of how those resources could be implemented into practice within our team began to flourish, and the team began to co-plan instruction.

As we gathered to plan the lesson, I encouraged the members of the group (a school psychologist, a social worker, a speech-language pathologist, myself and the teacher whose classroom we were planning for) to share their self-reflections about their orientation to the planning process. I discovered that this was not a task that these teachers and special service providers were accustomed to or comfortable with in the context of our work together. The collaborative lesson planning took on a rather confrontational aspect. Despite the shift of supervision from me to the school principal, my situation in a position of institutional power still seemed salient to my interactions with others. I was filled with the sense that my presence in the room was something like a threat to some of the less experienced members of the group. Only one member of the group displayed the vulnerability to admit to feeling anything less than fully competent.

When it was time to observe the lesson we'd planned together, I used the categories of the district-provided LEAP rubric for the evaluation of teacher practice to organize my

commentary. That LEAP rubric is divided into 12 categories of teaching practice, and each category is broken down into descriptions for a Not Meeting level, an Approaching level, a Meeting level and a Distinguished level. I thought this would help the teacher I was supporting align her practice to the expectations that she was accountable for upholding. As we began to debrief the lesson, the conversation was strained. The conversation never moved beyond the content of the LEAP rubric. I tried to resituate the conversation on defining the end toward which we were aiming as a group but was unable to do so. The conversation came to a close and the cycle was over.

Interpretations

This was the only cycle of LS that I was able to complete in my first year as Senior Team Lead. You may notice from the brevity of the description provided that it was not a deep engagement with LS. I was still finding my way. I was surprised when I stepped into my role by how much the role expectations shaped the nature of the tasks I completed on a daily basis. In my previous attempts to lead LS, I had thought that time was an essential element. In taking the Senior Team Lead position, I had imagined that being released from teaching duties would take care of the problem of time that I had identified. What I had not expected was that, when I stepped into the role of Senior Team Lead, there was a change in how my team interacted with me. I interpret the change as relating to the new institutional power that I held, it changed the scale of practice within which our praxi-ecological interaction was taking place. When I advocated for an idea as a teacher, I was met with debate from my peers. When I moved into a supervisory position, I found that the debate was muted. I am not entirely sure if the debate was muted because I was uncomfortable with my institutional authority and advocated my

ideas differently or because the teachers on the team, I was leading treated me differently. My working hypothesis is that it was a combination of both. I believe that I was worried about carrying myself in a way befitting a Senior Team Lead and that the members of my team were carrying themselves in a way that gave deference to my institutional authority.

These role expectations fit neatly into the idea of scripts of interaction outlined by Murray-Garcia and Ngo's (2020). A script of interaction is a communally held idea of how an interaction might go that can be entered into by any of the "actors" reading out a line from the script. Upon encountering a script of interaction, we often respond by reading out the next line from the script, but if we recognize the script, we can disrupt it by going off-script. At the time of this first cycle, however, I hadn't yet recognized the scripts of interaction associated with the role expectations of a Senior Team Lead. I sometimes initiated the scripts of interaction as I tried to fit into my role, and even after my role was removed from the situation when supervision shifted to my principal, I struggled to go off-script.

I struggled with the institutional authority associated with my role and the scripts of interaction that go along with that authority. I found that it made getting feedback from the team I was leading far more difficult. Additionally, the district-provided LEAP rubric measuring teacher performance seemed to hold an outsized influence over my interactions with others. I imagined that my team was carefully sharing the most flattering aspects of their practice with me in a kind of preparation for when I would enter their settings to conduct performance evaluation reviews; the scope of this study to confirm or disconfirm the reality in the actions of my team behind this imagination,

instead this imagination was suggested by my own tendencies towards supervisors who use the district-provided rubric to evaluate my practice.

I struggled with the role I had been assigned in terms of rating the performance of the teachers I led using the LEAP rubric. I notice that I often thought about LEAP in the memos I kept as data for this study. I am unable to say whether the sense that LEAP overshadowed every interaction I had with the teachers I led was held by me, by the teachers I led or by both of us, but I can report that I perceived that it was a continuous presence in my interactions with my team. During this first cycle, I tried to negotiate its influence on my leadership of LS by integrating LEAP into the LS process, but the results were less than I had hoped for.

Despite my intention to use the rubric to help the teacher who led the lesson see how to align her *own* practice with district expectations, that is not the conversation that it afforded. Instead, our discussion mainly involved detailing “good” aspects of the lesson and aspects of the lesson that “needed improvement”. I tried to steer the conversation toward questioning the nature of the “good” towards which the lesson might be “improved”, but my efforts fell flat because the ends were already defined clearly in the rubric. In a way, the rubric shifted the activity of what we were doing in our activity of practice from an active negotiation of the regime of competence that defined our shared practice into a passive reaction to a reified element of our environment.

Evaluations

One of the values I had found in LS when I was working in Japan was the excitement of collaboratively defining our own ends as teachers within the context of the framework of our district. I really wanted to bring this aspect of LS to life in my practice

here in the United States, but in this first cycle, I was unable to do so. I had intended to use the LEAP rubric as a framework within which to build an intersubjective understanding of the ends towards which we aim as teachers. Despite this intention, I was unable to use the LEAP rubric to help the teacher who led the lesson see how to align her *own* practice with district expectations. The way the LEAP rubric is situated, the conversation it affords, is very different from what I'd hoped.

By rating teachers on a scale from not meeting to distinguished, the rubric transforms the activity of a classroom as a community of practice into something that is generated by the teacher's performance. Instead of affording a conversation that delved into how students were learning and how different aspects of the classroom were functioning together to afford that learning, my decision to center our LS debrief of the LEAP rubric afforded a conversation about "good" aspects of the lesson and aspects of the lesson that "needed improvement".

Regarding providing support for the teacher who ended up hosting the inquiry lesson of this cycle, I found that LEAP was most valuable in its early stages, when the group took a trip to observe another classroom at another school. By breaking the barrier between classroom (and even school) boundaries, LS afforded a conversation in the co-planning stage focused on organizing materials around supporting the classroom environment the team wished to create. Taking pictures of that classroom helped the group remember what they had seen. By labeling the pictures and placing them on an affinity map, the group was able to set some themes for what they wanted to draw out in their co-planning of the lesson.

As the LS stages progressed, however, the focus shifted from materials to actions. It was much easier for the group to reflect on the usage and arrangement of materials than it was for the group to do so for actions. The difficulty shifting from a focus on performance and accountability to a focus on interaction and affordance that Wiburg & Brown (2007) discuss really characterized this stage.

Addressing the Inquiry of The Cycle

SRQ1: In what ways did my engagement with lesson study transform the processes I enacted?

LS allowed me to step out of the process of evaluation as a tool of coercing change in the teacher's I supported. When I began the cycle, I was very much wrapped up in the power structures of my new role as I tried to align my competence in that role to the expectations of the school and district for which I worked. LS created a conflict for me in this alignment, as I realized that it was difficult to both engage in the administrative role that had been laid out for me by the artifacts of practice I was expected to use and the institutional role expectations that I was expected to conform to. I began a process of stepping out of those role expectations when formal supervision of the teacher who I was most focused on supporting shifted from me to my principal. Being released from the official responsibilities of my role when supervision of the hosting teacher of this cycle was shifted from me to my principal was something that happened to me rather than something that I did. It was after this shift that I became able to engage in LS, and this experience helped me begin to recognize the scripts of interaction associated with being a Senior Team Lead.

SRQ2: In what ways did these processes support or conflict with the ends to which I am accountable?

LS allowed me, to a certain extent, to build a collaboration around examining materials that would support my team in the special design of instruction for students with disabilities. At the same time, though, the LS processes and the LEAP rubric conflicted with each other. I interpret this conflict to arise from the co-constructive nature of professional knowledge in the structures of LS as opposed to the pre-defined nature of professional knowledge in the structures of LEAP.

SRQ3: In what ways did these processes lead me to re-imagine the ends to which I am accountable?

This cycle increased my awareness of the need to teach students (be those students adults or children) rather than standards or subjects or skills.

SRQ4: In what ways did my engagement with lesson study transform my identity as a teacher?

I realized on a deeper level during this cycle that my role involved coordinating multiple communities of practice in the support of students. I also became highly aware that I had stepped out of one community of practice (in which I was a teacher) and stepped into another community of practice (in which I was an administrator) when I took on my new role as a Senior Team Lead. I don't think I would have been quite so aware of this if I had been operating solely within the institutional structures of my role. The need for open debate about what it means to be a teacher that I assigned to LS meant that I engaged a boundary that I would not have otherwise engaged if I was looking for

compliance with district initiatives, coerced through the administrative tools (such as LEAP) that afford my institutionally recognized role as an STL.

Forward Directions for Inquiry

An understanding that LEAP and LS were in some way in tension with each other emerged during this cycle. I was unprepared for the change that my status within the school would bring. In the next cycle, I realized that I would need to focus on finding ways to allow others to lead conversations so that the debate won't be muted.

Performance evaluation tools such as LEAP and action-oriented inquiry tools such as the affinity mapping took on the character of two contrasting, and even conflicting approaches to examining educational practice. The LEAP rubric was structured by distant negotiations between the district and the teacher's union. It was not open to our interpretation as a group. When I was in a supervisory role, my use of LEAP was stipulated by a negotiated contract. After supervision passed from me to my principal, the relationship between the school leader and teacher did not change, as I had assumed they would. By contrast, the affinity mapping activity was focused on materials, which distanced the conversation it afforded from teacher performance. Also, the meaning of the activity was entirely open to the interpretation of the team. In the next cycle, I realized I needed to move away from district accountability tools. I realized I needed to situate my actions in artifacts whose meaning is open to the interpretation of the team.

I realized that entering into a role is dynamic. It is not possible to simply make a clean break from the past in order to pursue a new direction. The roles that have emerged over time persist even as new people, such as me, step into the role. These roles define what is possible and what is not, and they carry a momentum towards maintaining the

status quo. Instead of immediately attempting to integrate a new practice into existing structures, I realized that it is important to develop a separate protected space in which a new dynamic can emerge. If I try to push that dynamic out from my imagination onto teachers by shaping their behaviors, I will simply reproduce the same dynamic that I am trying to disrupt.

Chapter Five: Self-Study of the Second Cycle

Guiding Artifacts of Practice

Based on the forward directions that I set for myself in the last stage, I used summer vacation to plan out a set of artifacts to afford Lesson Study. I attempted to frame Lesson Study in flexible terms in order to focus the team's attention on learning from experience. This framing is reproduced in Figure 5.1.

Figure 5.1: Framing Lesson Study
<p style="text-align: center;">The Key to Lesson Study</p> <p>The key to making lesson study meaningful is to approach the year-long focus with a sense of inquiry. You will inevitably begin with an initial understanding of what each word in the focus means, but it is suggested you treat that initial understanding as tentative and incomplete.</p> <p>Your initial understanding will lead you to ideas to test, but instead of seeking to confirm your understanding in the ideas you test, seek to allow the ideas you test to modify your understanding.</p> <p>The ultimate goal of lesson study is to come to a deeper and more communal understanding of the year-long focus. Our inquiry is not just a question of how we achieve leadership, collaboration, trust and reflection, but also a question of what these four terms mean in our context.</p>
Source: Authored by current investigator in 2019

I also wrote out a list of stages based on Lewis (2002) and Takahashi and McDougal (2016). This is reproduced below in Figure 5.2. I felt it was important to write these stages out because I was then able to share the document I created with my team. When I presented this artifact to the team, I noted that I'd used two sources because each had its strengths and weaknesses. I hoped this would encourage the team to make their own modifications to the process.

Figure 5.2: Lesson Study Overview

Lesson Study Overview 2019-2020

Welcome back! This year, we will be using lesson study as the foundation of our professional development. Here is a very basic overview of how a lesson study cycle works. The following stages will unfold over the course of the cycle. Each cycle will last six weeks (three bi-weekly meetings).

The Stages of Lesson Study

Stage 1: Discuss the year-long focus and come to a common initial understanding of it. The year-long focus tends to be very simple, often just three words. Our year-long focus this year will be: Leadership, Collaboration, Trust, Reflection.

Stage 2: As a team, identify a "focal" instructional practice that connects with the year-long focus. (i.e. unit plans, station-teaching, Orton Gillingham instructional practices, text-first instruction, etc.)

Stage 3: Identify one teacher to serve as the "host" for a research lesson. This teacher will present the research lesson while the rest of us observe.

Stage 4: Collaboratively learn about the focal instructional practice and work together to plan the research lesson.

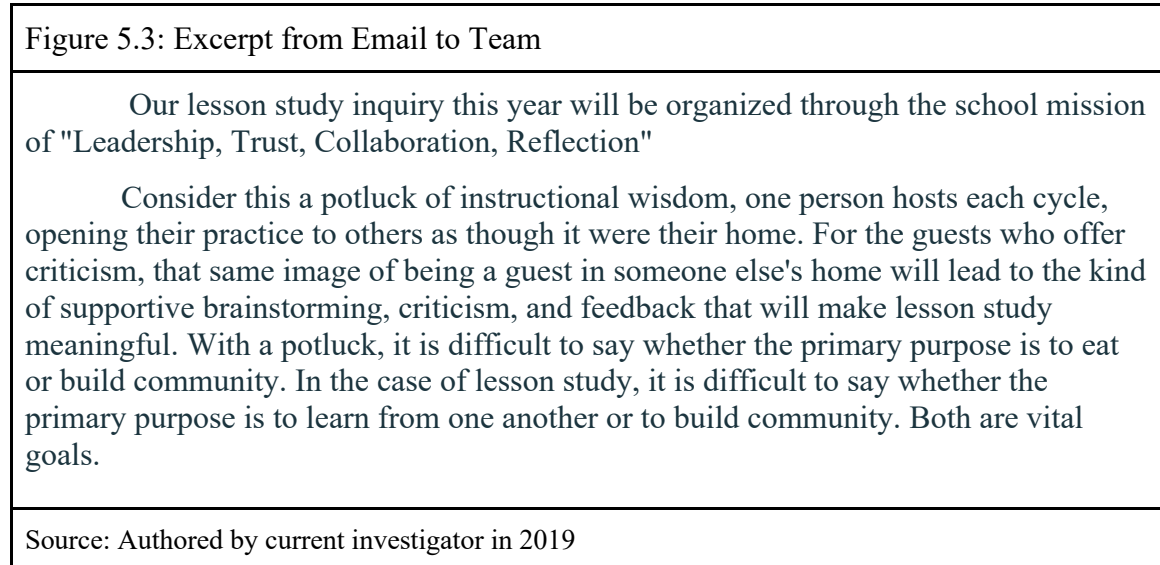
Stage 5: The host teacher will present the research lesson to his/her students while the rest of the team observes the lesson. The focus of the observation is on the lesson, not the host teacher's performance.

Stage 6: We will meet to discuss our observations of the lesson. The host teacher begins with reflections on the easiness/difficulty of teaching the lesson, & how the teaching did/didn't go according to plan. Then we will collectively consider what we learned from observing the lesson.

Source: Authored by current investigator in 2019

I also began the year by suggesting that LS was potluck, except that instead of each person bringing food to make the meal, each person brought their own practical wisdom.

I wanted to capture in this metaphor the idea that we are co-constructing our own ends as a group within a collaborative framework. This email is reproduced in Figure 5.3.



Description

I learned a lot from 2018-2019. I started the 2019-2020 school year by having a conversation with my principal. I told her I wanted to narrow my leadership focus. I shared that I had been pulled away from what I wanted to do in the context of the special education team by taking on broader leadership roles through the school in the 2018-2019 school year. Part of this request was my realization that the relationships between people have a lot more to do with the perception of what role a person serves in the building rather than the specific text of their technical responsibilities. I needed to project the role I'd defined for myself (see Figure 5.1, 5.2, and 5.3). In my consideration at the time of this cycle, having a broad role within the school made projecting the role I'd defined for myself difficult. My principal agreed with the role I'd defined for myself. Having learned from the first cycle, I realized that instead of reacting to whatever the latest crisis around

the school seemed to be, I needed to embed my actions in a stronger foundation that offered a deeper meaning to our work. My working hypothesis was that without this effort to move beyond thinking in technical terms of what to do in order to focus on why I am doing what I am doing, the underlying organizational pattern would redefine my efforts in the reproduction of the status quo.

I realized this in my own work, but the Instructional Leadership Team recognized it as well. The school began the year by building an intentional school culture around a staff created school mission. As I planned out my LS efforts for the 2019-2020 school year, I thought carefully about how to put inquiry into the school mission at the heart of my work. I also realized the importance of using my institutional power to frame a space for collaboration rather than to motivate compliance towards my own wishes (see Figure 5.3). This was particularly difficult in the context of LS because LS represents an alternative framework within which to work.

Upon reflecting on how I used LS in the 2018-2019 school year, I realized that I used it in the case where my institutional power was not gaining the results I was hoping (i.e., in a situation where a teacher's actions were mis-aligned to the regime of competent practice as held by our school's faculty (functioning as a community of practice). I had gained experience in a situation where a teacher's actions had generated complaints from peers and triggered very formal processes in a power struggle. I noted that sometimes teachers wish the school to re-align to their idea of what represented competent practice, and it is possible to largely resist opportunities to align to the school community's collective idea of what represented competent practice. I reflected that when that kind of mismatch of alignment exists, the LEAP rubric becomes more salient as a tool to bring

the teacher in line, activating certain scripts of interaction that I wanted to avoid. Based on these reflections, as I began to plan for how I could use my institutional power to frame a space for collaboration around LS, I decided to identify teachers on the team who were already exhibiting many of the qualities I associated with the successful practice of LS in a way that was compatible with the LEAP framework.

I convinced one teacher on the team who fit these criteria to step forward to lead LS. One of the qualities I was looking for was someone interested in collaborative lesson planning. The teacher who stepped forward (this teacher is referred to as the hosting teacher hereafter) was collaborating with a second teacher on the team, and I was able to convince that second teacher (referred to hereafter as the collaborating teacher) to participate in LS as well. Based on the work I did in the first cycle, I wrote out a template of stages that LS progresses through. I sent these stages out in my beginning of year email along with a description of the purpose I hoped to set for LS.

As Cycle 2 progressed, the members of my team modified their participation in a number of ways. First, I noticed a difference in how the team showed up in my room for team meetings. In Cycle 1, the teachers and special service providers who I considered most compliance-oriented had always sat around the half circle table in my classroom, closest to me. Meanwhile, the teachers who gave me the impression that they liked to develop their own way of doing things through an inquiry-orientation typically sat in the desks behind the half-circle table, furthest from me. It was also brought to my attention (by the special service provider who I considered most compliance-oriented) that one of the teachers on the team always positioned himself at the rear, closest to the door. His example was memorable because after this comment I began to take note of how he

participated in the meeting; he typically spent his time brushing his teeth with a toothbrush.

The hosting teacher had typically sat at the back of the room prior to this cycle. He moved to the front of the meeting. He seemed to be comfortable in a position where he was offering his own work up as an exemplar for others to learn from. Other teachers and special service providers on the team with what I perceived to be creative rather than compliant tendencies also moved to the front of the room and took seats around the half round table. Meanwhile, the members of the team that I perceived to be compliance-oriented moved to the back table. The members of the team I perceived to be inquiry-oriented began to display other signs of increased engagement with the meetings. They came with ideas they were eager to discuss, they talked more often during the meetings, and they lingered after the meeting to debrief with me. The compliance-oriented members of the team demonstrated other signs of decreased engagement (when prompted they oriented to the stages I had laid out and tried to compliantly follow them, they shared feedback with me that the process seemed too vague, they offered only short non-committal answers when asked their opinion during meetings).

As Cycle 2 progressed, the collaborating teacher hosted an examination of how a variety of materials could be used to teach math. I attended and learned a lot from her, but I noted that she had planned her examination in terms of answers rather than questions. She demonstrated and explained how to use the materials most effectively. Her audience members (myself included) were asked to role play as students. As I observed the collaborative lesson planning between the collaborating teacher and the hosting teacher, I observed that both were motivated by the desire to create something novel.

They often joked about becoming rich and famous as a result of selling the lessons they were co-planning together. When I asked them which would be willing to host the inquiry lesson for the cycle, the collaborating teacher declined. I tried to convince the collaborating teacher to co-host, but I sensed a level of discomfort and became aware of the institutional power I held in my role as Senior Team Lead and discontinued the conversation, accepting her wish to decline hosting the LS lesson.

When I set the process of hosting an Inquiry Lesson, the hosting teacher asked if he could combine it with his LEAP observation to get that out of the way. I highlighted what I had learned about LEAP and LS from Cycle 1, noting that combining LEAP with LS seemed to shift the focus away from the interactions of the lesson towards an appraisal of the teacher's performance. The teacher stuck with his request, and I agreed. Later, in the cycle, when I asked him to present his lesson plan to the larger group for feedback, I noted the presence of a performance-focus. He mentioned that he saw no need to present his lesson for feedback because he had thought it through very carefully with the collaborating teacher over the course of several weeks. He noted that he and the collaborating teacher had spent a lot of time reflecting on how to structure mathematical concepts. He shared his conclusion that because the other team members were not specialized in mathematics, he did not see the potential for constructive feedback through sharing his lesson with them. I decided to accept his stance and encouraged him to share the details with others so they could get a better insight into his thinking for the lesson. Shifting the purpose from getting feedback to providing instruction for others seemed to positively influence his orientation to sharing his lesson planning.

Because of difficulties in coordinating schedules, we adopted video recording for capturing the inquiry lesson for the observation by the extended team. I observed directly and video recorded the lesson. I provided the hosting teacher with his LEAP scores as he had requested in a meeting scheduled prior to the LS debriefing session with the whole group. Providing these LEAP scores seemed to make both LEAP and my institutional power less salient to the interactions that immediately followed. It is beyond the scope of this study to determine if this was because I was able to relax, the hosting teacher was able to relax, or we were both able to relax. Prior to the lesson observation, several members of the team approached me with concerns about providing feedback to another teacher. They noted that the teacher presenting clearly knew a lot about what he was doing. One of the special service providers mentioned that because his role was not oriented toward academic instruction, he believed he would have no useful comments to make.

In response to this feedback, I held a session in which I asked each observing member of the team to adopt a lens through which to view the lesson. I provided an exemplar lens by stating that I would be adopting executive functioning skills as my lens. I noted how I would look for evidence of teacher talk versus student talk to see how the lesson was being organized.

When we observed the lesson and began to debrief it, I asked the hosting teacher to provide a brief self-reflection on the lesson prior to opening the floor to comments by everyone. The hosting teacher stated the reason for several of the decisions he had made during the lesson, identifying how each decision had successfully led to the outcome he'd hoped for. Then, I opened the floor for the rest of the team to comment. It was awkwardly

silent for a while. I shared a comment on how the lesson contained ample time and support for students to form answers. I noted how they initially struggled to find the words to represent their thinking but were able to use the resources of the lesson to find the words. The next comment was given by a multi-intensive teacher working in a self-contained classroom with students who demonstrate substantial cognitive impairment. She noted how the lesson didn't apply to her students because they couldn't access the level of language required. Then, another teacher repeated my comments, noting that he agreed with them.

The next comment was offered by the speech-language pathologist. She noted that the lesson included the idea of numbers that come before other numbers and numbers that come after other numbers. She noted that one of the students on her caseload seemed to struggle with the concept of numbers coming "before" as numbers represented to the left of the number in question on a number line while the numbers coming "after" are represented to the right. I took note of how the hosting teacher changed his body language in this comment. He had been sitting back in his chair, and now he sat forward and made a note on his lesson plan. I decided to step into the conversation and narrated that I had noticed the hosting teacher appeared interested in the speech-language pathologist's comment. The hosting teacher shared that he is very interested in how students perceive the language he uses to teach math concepts. I noted aloud for the group that this was the kind of exchange of perspectives and expertise I was hoping that LS could afford. The social worker, who had been among those concerned about being qualified to comment on academic instruction, then offered his comment. He noted that one of the students in the lesson didn't speak the entirety of the lesson. At one point in

the lesson, the hosting teacher asked students to stand up if they agreed with something he'd written on the board. The social worker noted that the silent student sprang to his feet at this point, offering a correct response. The social worker then shared that he had been working with that student on anxiety about speaking to adults in the school building. This comment seemed to capture the interest of most people in the room. The social worker looked to me. In many of our meetings, he had offered several jokes about how I was overly academic with my graduate schoolwork for the year. He prompted me to supply the fancy academic name for asking students to respond with their bodies. I replied, "I think we could call that a total physical response or TPR strategy." It seemed to me that the mood lightened for a bit, but then turned tense again as the collective attention of the group began to shift to those sitting near the back who had not commented. After waiting for a time for those at the back to comment, I decided to end the debriefing session and Cycle 2. Later, as I began typing the cycle up for my team, I received feedback from the team about the double-spaced report that I produced. The feedback I received led me to believe that this double-spaced format was not appreciated. One member of the team asked for something more colorful and easier to understand quickly.

Interpretations

In this second cycle, I was engaging in what Torbert (2004) calls framing and advocacy. I framed the situation and advocated for how I hoped things would go, but I intentionally left the process open to revision based on the advocacy of my team to encourage it as a site for praxi-ecological interaction. Unlike the first cycle, where the LEAP rubric was treated as a reified aspect of the environment, it seemed to me that the

framework for LS that I proposed in this cycle was treated as a ground for the active negotiation of a regime of competence specific to my team's enactment of LS.

I noticed that there was a hesitance in many of the members of my team. Unlike Cycle 1, all the members of the team in Cycle 2 were in a collaborative context with me, and there was no sense of power struggle. Instead, I noticed a tendency to stick to a defined niche role within the team, as though moving from the scale of practice in which members of a single population interact with each other around defining the tasks of their own role to the broader engagement within an emergent community discussion represented a threat. It reminded me of Foucault's panopticon (Shore & Roberts, 1993). No one was ever quite sure if I was watching from the perspective of performance evaluations or from leading LS, despite my best efforts to signal that LS was intended to be a safe space outside the realm of LEAP. I had wanted to keep LEAP and LS separate for the hosting teacher, but ironically, the act of giving him LEAP scores on his inquiry lesson prior to opening that lesson to observation by others was the one effective way that I was able to abdicate my perch in the performance observation tower of the panopticon and indicate that the observation tower was empty. Of course, this signal was communicated only to the hosting teacher, and the other teachers still had to wonder if the panopticon observation tower was occupied.

I also noted that within one's niche role, there was a strong desire to project competence to everyone else. The unpredictable nature of having others observe the live observation of children seemed to threaten the projection of this competence. The teachers involved appeared to cope in several ways. One way was to establish themselves as experts, opening their practice only to those willing to accept the role of learner.

Another way was to simply avoid tasks that opened their practice altogether. In terms of those in the role of observer, there was a palpable nervousness about making a claim to knowledgeable ability outside of one's niche role. The members of my team seemed to be most at ease when they were in the role of learner (with learner meaning that they took notes on the example provided by an expert). Overall, the praxi-ecological interaction of the team during this cycle was marked by an increasing willingness to engage in making claims of knowledgeable ability at a somewhat more expansive scale of practice. This engagement involved risk and the threats of engaging at a more expansive scale of practice weren't clear, which seemed to inspire a sense of hesitancy.

Evaluations

I found ironically that LEAP was an aid to removing its own threat. By providing LEAP scores to the hosting teacher ahead of the observation session, it seemed to me that I was able to set the hosting teacher at ease, so that he was finally able to accept the feedback offered from the perspective of others. Of course, this was also partly due to his stance regarding the scores. He had asked for them.

I also found that being explicit about the lens each observer planned to take helped reduce the anxiety around peer observation by allowing the observer to frame their comments in the expertise of their chosen niche role. The idea that each educational task is separate from the other educational tasks was a barrier to where I wanted to go with LS. It manifested itself in the hosting teacher's reported feeling that other teachers couldn't offer constructive feedback because his expertise in math was greater than theirs. In my interpretation, it manifested itself in the collaborating teacher's leadership of the materials study as a one-way flow of information from her to the audience. In my

interpretation, it manifested in the nervousness that members of the team displayed when asked to observe and provide constructive feedback on their peer's inquiry lesson. LS is valuable because education is complex. A math lesson isn't just about math, it is also about social emotional learning, reading, writing, speech and language, critical thinking, creativity, and so many other things. The idea of each member giving a perspective was an important outcome in this cycle.

Addressing The Inquiry of The Cycle

SRQ1: In what ways did my engagement with lesson study transform the processes I enacted?

My focus on LS meant that I chose to engage at a smaller scale of practice in order to better manage the role expectations that my team held me accountable to. This meant that I was more focused on leading my team in its processes of IEP development and less focused on whole school initiatives. I also chose to focus on working with members of my team who were already aligned to the curriculum I was trying to draw out through LS in their daily practice. This represented a change from my first cycle in which I tried to use LS to support those who were struggling most.

SRQ2: In what ways did these processes support or conflict with the ends to which I am accountable?

LS allowed me, to a certain extent, to build a collaboration around examining materials that would support my team in the special design of instruction for students with disabilities. At the same time, though, the LS processes and the LEAP rubric conflicted with each other. I interpret this conflict to arise from the co-constructive nature

of professional knowledge in the structures of LS as opposed to the pre-defined nature of professional knowledge in the structures of LEAP.

SRQ3: In what ways did these processes lead me to re-imagine the ends to which I am accountable?

In this cycle, I began to shift the end I aimed at away from instilling a set of technical steps into the actions of my team. I opened myself to a variety of outcomes, and I began to accept input from my team members. I believe that the framing I used in this cycle led to an increase in the mutuality of power, though it is beyond the scope of the current study to corroborate whether other members of the team held this impression as well.

SRQ4: In what ways did my engagement with lesson study transform my identity as a teacher?

I began to rely on other sources of authority other than institutional power in this cycle. I began to see myself as a facilitator of a forum in which others could share their thoughts. Instead of making decisions unilaterally, trying to advocate for my own preconceived image of what should happen, I began to engage in inquiry more and more often. I attempted to use my institutional power to make room for others to be creative. I came to see myself as a kind of translator between various communities of practice, helping to establish the common understandings necessary for communication to flow more freely across the boundaries of these communities of practice in the form of exchanging knowledgeabilities.

Forward Directions for Inquiry

In this cycle, I realized that I need to find a way to flip the situation, so that teachers are responding to the needs of their students instead of the needs of their supervisors. I realized that I need to diffuse this idea that everyone is in an egg carton, alone in their teaching. I realized that I need to diffuse the idea that expertise is isolated. I set out with the idea that education is a profession that occurs in a landscape of practice. I wanted LS to afford a conversation between the various communities of practice represented within that landscape. For this to happen, attention must be drawn to the grounding aspect of the landscape, the part that ties it all together; that grounding aspect is service to our students.

In the language of *Learning in Landscapes of Practice*, I need to continue shifting the focus of LS away from an evaluation of the competence of the hosting member and towards an exchange of knowledgeability between the perspectives of the various professionals who collaborate to afford education for our students.

Chapter Six: Self-Study of the Third Cycle

Guiding Artifacts of Practice

In updating the guiding artifacts for this cycle, my conversations with the social worker near the end of Cycle 2 gave me some ideas about revising the artifacts to bring in more of a focus on the arts. I returned to the work of Proefriedt (1994), who suggests that the analogy we use for how teachers learn is important. Proefriedt (1994) notes that there is a tendency to compare the education field to the medical field, with educators considered as analogs to doctors. In this analogy, educators diagnose a problem-of-practice and prescribe an intervention to treat that problem in the way doctors diagnose a disease and then prescribe a medication to treat that disease. This analogy is pervasive in the educational world. In fact, it even informs the structure of dissertations-in-practice such as the one I am currently in the process of writing.

Proefriedt (1994) suggests a different analogy. He suggests that teaching is like writing. It is possible for writers to attend workshops in order to improve their craft, studying the examples of others and how the techniques of those others were received by audiences. Reproducing the techniques of others, however, is not enough to establish an identity as an author. Instead, what matters is the unique mixture of a variety of techniques within a dynamic situation between the artistic creation of the author and the reception that creation receives in the audience. Writers write with purpose, and so it is important to study and understand how various techniques can afford certain experiences

for audiences, but these techniques should be thought of like a checklist of options that might be brought together into the artistic creation.

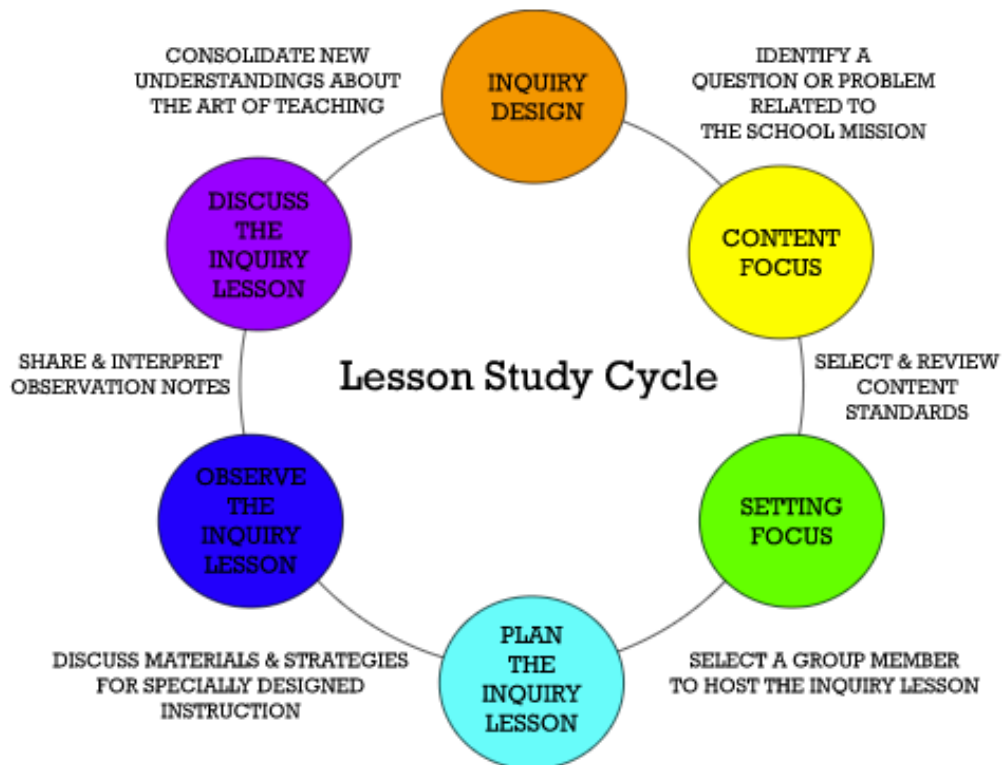
I did decide to take the social worker's suggestion to change out my double-spaced report of our activities for something more engaging for teachers. I also thought about a comment I had received after Cycle 1 that LS had felt like a set of steps that didn't really add up to much. I wanted to move away from the idea that each cycle has a beginning and an ending. I wanted to promote the idea of iterative improvement, with each cycle setting the stage for the next. As a result, I designed a cycle of color-coded stages (see Figures 6.1 – 6.8). I wrote a brief description for each stage in a color matching the color assigned to that stage on the cycle. Then, I included a prominent image of the cycle on each color-coded stage description. These are reproduced below. On each stage description, I provided a checklist of activities that the team could consider engaging in to realize the cycle.

Figure 6.1: A Brief Introduction to Lesson Study

Lesson study is an inquiry-driven professional development model. In this model, educational practitioners collaborate to select a topic to explore through the planning and observation of an inquiry lesson. In order to select the topic, the lesson study group references aspects of the school mission that need attention.

After selecting a topic, the lesson study group then explores the topic and materials that can be used to bring the topic to life in educational practice. To do this, the team collaborates to plan an inquiry lesson. The inquiry lesson is intended to be a public event in which the lesson study group can explore how their predictions about what will happen intersect with what actually happens in practice.

While one teacher volunteers to host the inquiry lesson in their own practice, **the focus of lesson study is not on the performance of the teacher who delivers the lesson.** Instead, it is on how the lesson and the activities and materials it contains bring the topic of study to life in educational practice.



Source: Authored by current investigator in 2020

Figure 6.2: Breaking Down the Stages of Lesson Study

Stage 1: *Inquiry Design*: Discuss the school mission and come to a common initial understanding of it. Based on this understanding, identify an inquiry question to guide the cycle.

Stage 2: *Content Focus*: As a team, identify a focal instructional practice that either 1) helps us enact the school mission in daily life or 2) represents a practice that might be more deeply informed by the school mission. This practice should be something that the team can come to consensus on as being an area where additional learning is needed, possible, and timely.

Stage 3: *Setting Focus*: Identify one group member to serve as the host for a research lesson showcasing the focal instructional practice. This hosting group member should be selected based on the connection between the class they teach and the focal instructional practice rather than based on their perceived skill.

Stage 4: *Plan the Inquiry Lesson*: As a team, engage in learning about the focal instructional practice in order to identify potential instructional approaches, useful materials, and anticipated student responses. Following this, the team will collaboratively plan the research lesson, producing a sketch articulating the lay-out of the room, planned teacher actions, the planned use of materials and anticipated student responses.

Stage 5: *Observe the Inquiry Lesson*: The hosting group member presents the research lesson to his/her students while the rest of the lesson study group observes the lesson. The focus of the observation is on the capacity of the lesson design to draw out the intended learning, not on the host teacher's performance. It may be useful to decide on specific observational foci prior to engaging in the research lesson.

Stage 6: *Discuss the Inquiry Lesson*: The lesson study group will meet to discuss our observations of the lesson. The hosting group member begins with reflections on the easiness/difficulty of teaching the lesson, & how the teaching did/didn't go according to plan. We will then collectively consider what we learned from observing the lesson, organizing our discussion around the question of "What lived experience did the lesson design afford those who enacted it?"

Source: Authored by current investigator in 2020

Figure 6.3: Stage 1 Description

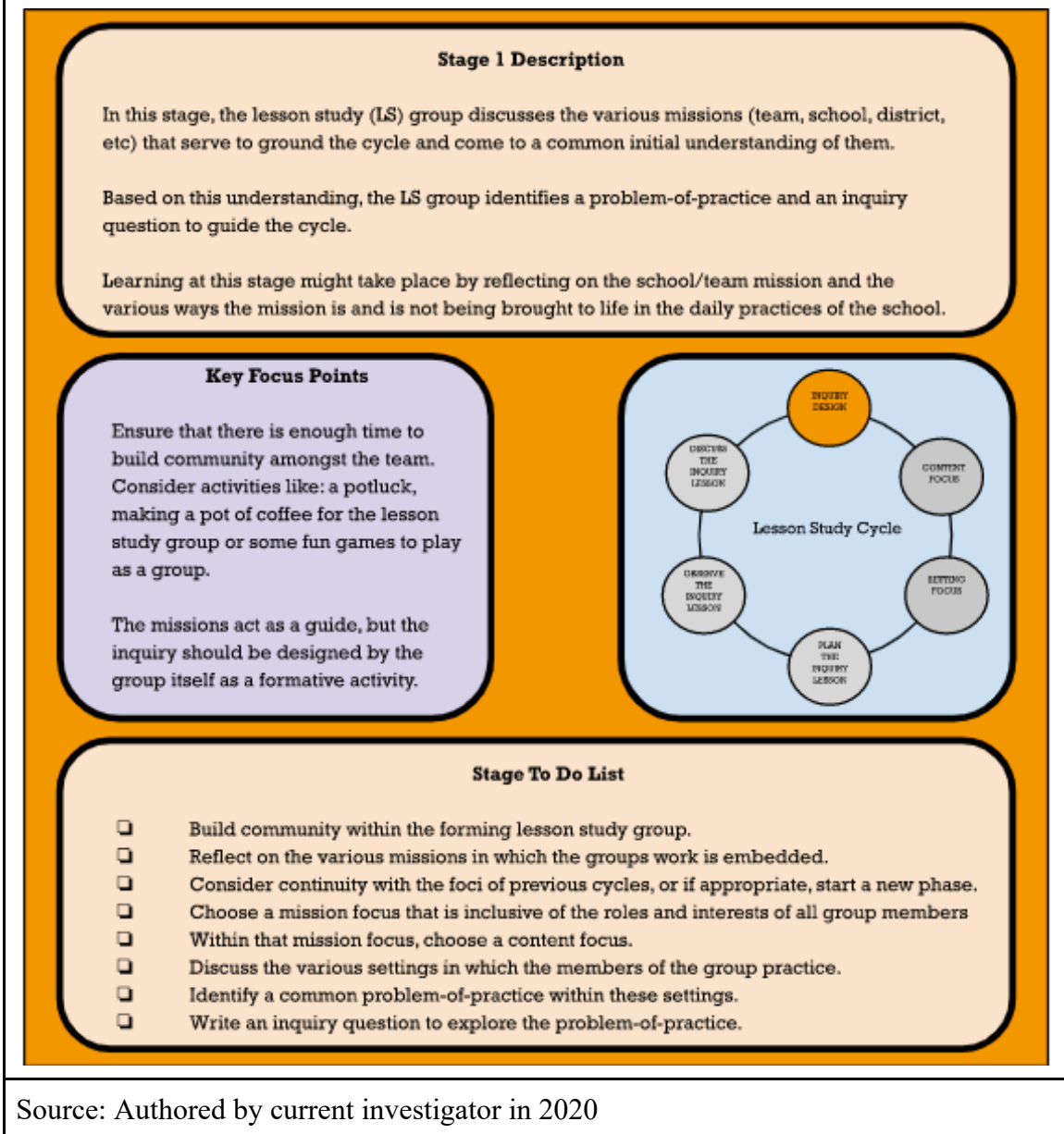


Figure 6.4: Stage 2 Description

Stage 2 Description

As a group, identify a focal instructional practice (this is the content focus). The content focus should either 1) help us enact the school mission in daily life or 2) represent a practice that might need to be more deeply informed by the school mission.

This practice should be something that the team can come to consensus on as being an area where additional learning is both possible and connected to the problem-of-practice.

Learning at this stage might take place by learning from team members and knowledgeable others.

Key Focus Points

The content focus is not the same as a subject area like math or literacy or wellness. It should be a specific skill or set of skills that can be taught with a concrete set of activities, materials and approaches.

Content foci involve many different subject areas as students represent, comprehend, communicate & reflect.

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graph TD; A[INQUIRY DESIGN] --> B[CONTENT FOCUS]; B --> C[SETTING FOCUS]; C --> D[PLAN THE INQUIRY MESSAGE]; D --> E[OBSERVE THE INQUIRY MESSAGE]; E --> F[DISCUSS THE INQUIRY LESSON]; F --> A;
```

Lesson Study Cycle

Stage To Do List

- Gather information about the content focus (videos, articles, podcasts, experiences, etc.)
- Reflect on how the content focus is connected to the missions grounding the cycle.
- Consider how the content focus connects to various subject areas (i.e. math, literacy, etc.)
- Identify how the content focus connects to the problem-of-practice.
- Return to consider the content focus again once the setting focus of the cycle is decided.

Source: Authored by current investigator in 2020

Figure 6.5: Stage 3 Description

Stage 3 Description

As a group, explore the setting of the focal instructional practice in depth. This includes both the physical setting of the classroom and the educational setting of the unit and curriculum. Create a visual and written inventory of materials and activities used in the setting that might interact with the content focus.

Learning at this stage might take place by visiting each other's educational settings and exploring the materials, activities and approaches that can be used in or introduced to the setting of the Inquiry Lesson.

At some point over the course of Stage 2 and 3, it will become appropriate to identify one group member to serve as the host for the Inquiry Lesson. LS Groups will probably need to cycle between the Setting and Content Focus stages in order to complete them.

Key Focus Points

By discussing the various settings in which group members work, the group can become more knowledgeable about the settings and practices of others. Increased knowledgeability opens the door for more coherent and extensive collaboration.

Lesson study approaches abstract concepts by examining concrete objects. The deep consideration of materials/activities in the inventory will help set this process in motion.

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graph TD; A[INQUIRY LESSON] --- B[CONTENT FOCUS]; B --- C[SETTING FOCUS]; C --- D[PLAY THE INQUIRY LESSON]; D --- E[DISCUSS THE INQUIRY LESSON]; E --- A;
```

Lesson Study Cycle

Stage To Do List

- Describe, compare, and contrast the settings of all members of the LS group.
- Discuss how the problem-of-practice and grounding missions connect to these settings..
- Identify the grade level and subject area in which the Inquiry Lesson will be conducted.
- Describe/diagram the physical setting in which the Inquiry Lesson will take place.
- Describe the unit in which the Inquiry Lesson is embedded.
- Create an inventory of all materials, activities and approaches that may be relevant.

Source: Authored by current investigator in 2020

Figure 6.6: Stage 4 Description

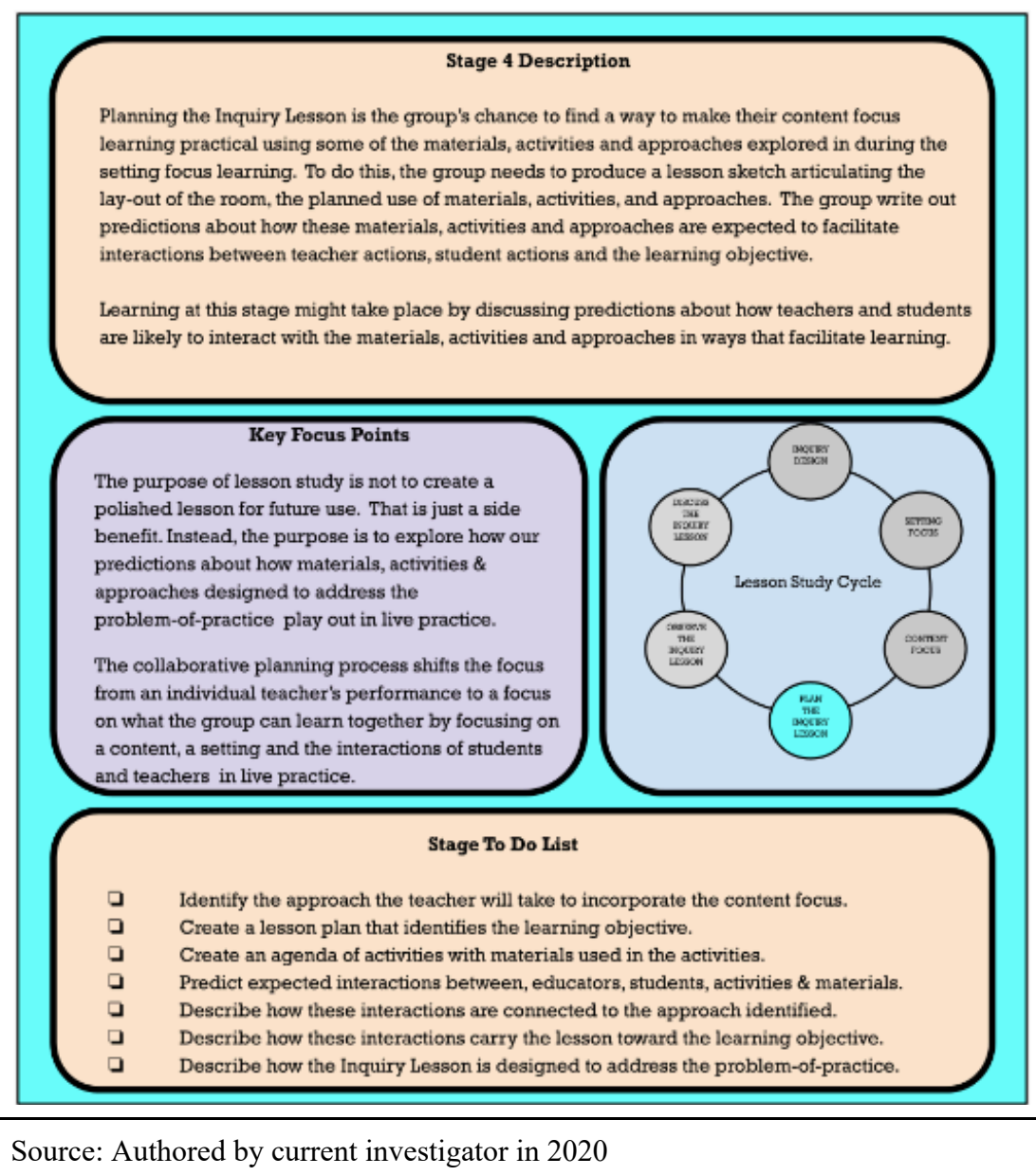


Figure 6.7: Stage 5 Description

Stage 5 Description

The hosting group member engages in the inquiry lesson with his/her students while the rest of the lesson study group observes the lesson.

The focus of the observation is on the capacity of the lesson design to draw out the intended learning (i.e. were the LS groups predictions about materials, activities and approaches confirmed). More broadly, the focus of the observation is to explore what it is that the students learned from the lesson (whether that learning was intended or not).

Learning at this stage might take place by observing students carefully using a variety of observational lenses

Key Focus Points

Observing group members may organize their observations in a number of ways, but observations should generally be low-inference.

The focus of a lesson study observation is not on the hosting teacher's performance according to a pre-determined set of criteria

Sometimes it is necessary to videotape the inquiry lesson so the rest of the lesson study group can observe at a later time. Photos of materials, activities, and people may also be useful to collect.

Lesson Study Cycle

```
graph TD; A[INQUIRY DESIGN] --- B[CONTENT FOCUS]; B --- C[SETTING FOCUS]; C --- D[PLAN THE INQUIRY LESSON]; D --- E[OBSERVE THE INQUIRY LESSON]; E --- F[DECIDE THE INQUIRY LESSON]; F --- A;
```

Stage To Do List

- Create a plan for how to organize observations (observational lenses, protocols, etc.)
- Create a plan for how to record observations (i.e. sticky notes, notes on lesson plan, etc.)
- Decide if it is possible to observe the lesson live or if the lesson needs to be recorded.
- If the lesson is recorded, consider what needs to be captured on film (i.e. student actions may be more interesting than teacher actions, more than one recording angle may be helpful, etc.)
- Decide if it would be valuable to take photos during the Inquiry Lesson to capture student action and reactions, student work, white board usage, etc.

Source: Authored by current investigator in 2020

Figure 6.8: Stage 6 Description

Stage 6 Description

The lesson study group meets to discuss inquiry lesson observations. The hosting group member begins with reflections on the easiness/difficulty of teaching the lesson, and how the teaching did and didn't go according to plan. The LS Group then share their observations and the collected evidence (photos, student work, etc.) in order to interpret and evaluate what was observed during the Inquiry Lesson. The LS group should reference the problem-of-practice, the inquiry questions and the grounding missions, in their interpretation and evaluation of the observation.

The learning at this stage might result in themes that can be taken away from the cycle as a whole organized around the question: "What was lived experience of the Inquiry Lesson for those who enacted it?"

Key Focus Points

The Lesson Study cycle is a place to learn about the art of teaching. Taking the time to build community is especially important in the discussion stage.

Aspects of the Inquiry Lesson plan that were difficult to teach represent valuable learning for the group - the focus is on the experience afforded to all involved by the Inquiry Lesson plan, not on the hosting teacher's performance. Observing members should focus on what happened, not on what they might've done if they had hosted instead.

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graph TD
    A[DESIGN THE INQUIRY LESSON] --> B[CONTENT FOCUS]
    B --> C[SET THE INQUIRY LESSON]
    C --> D[PLAN THE INQUIRY LESSON]
    D --> E[DISCUSS THE INQUIRY LESSON]
    E --> A
            
```

Lesson Study Cycle

Stage To Do List

- Meet as a full LS Group to discuss the Inquiry Lesson after the observation.
- Allow some informal time to build community at the beginning of the discussion.
- Review the grounding missions, problem-of-practice, and inquiry question.
- Allow the hosting teacher a chance to share reflections on the enactment of the Inquiry Lesson.
- Share low-inference notes and review any photo evidence, student work, etc. collected.
- Interpret the lived experience of the Inquiry Lesson as a group by adding inferences to notes.
- Evaluate aspects of the lesson that contributed to student learning (expected and unexpected)
- Draw out some themes that emerged from the inquiry in relation to the content and setting foci.

Source: Authored by current investigator in 2020

Description

Cycle 3 began very differently from how it ended. It began in January after we returned from winter vacation. I had revised the stages of my LS template as described in the final section of the previous chapter. One working hypothesis that had emerged from Cycle 3 is that the team needed a common overarching theme to transcend the niche roles we serve in to form a common identity around the inquiry practice of LS itself. We went through several bi-weekly meetings brainstorming ideas that might involve all members of the team. We settled on executive functioning skills as a key component to living out the school mission of growing a family of leaders. Then March 13th, 2020, arrived. We were all sent home due to concerns about the spread of the COVID-19 virus.

The next several weeks involved a series of adjustments. LEAP was suspended. Our superintendent sent out an uncharacteristically unbranded and personal email. Instead of telling us next steps, she asked us (the entire faculty of the district) simply to email her with our ideas about how we might move forward in unprecedented times. We learned to connect remotely using video conferencing software and we began teaching remotely via this same software. Our students learned to connect to us using laptops from their homes. Most of our manifest curriculum was in the school building, which we were not allowed to enter, and so we began to rebuild curriculum from the ground up using a variety of online learning platforms. The team I led reconnected via video conferencing with a good sense of humor. I enjoyed watching the team build community with each other in the virtual environment. Then I announced that it was time to move forward with our LS cycle.

The context in which we were working had shifted. The pandemic had jolted us out of our niche roles, throwing us into a state of wondering what to do. Even outside of the structures of LS, conversations between teachers focused to a much greater extent than before on learning from each other how to teach remotely. The pathways through which we had managed our relationship with each other were gone. The assertion of expectation was replaced with the extension of grace. The focus on performance was replaced with a focus on inquiry (panicked, stressful inquiry, but inquiry). As a leader, the key message running through my discussions with other leaders was about the importance of modelling what we hoped to see.

In this spirit, I volunteered to host the lesson for the cycle, allowing myself to step into a vulnerable role. In my role, I was still teaching for half of my time. I encountered a number of problems in getting connected to my students. Families didn't know how to connect to my services. Students were feeling overwhelmed by trying to meet their teachers' expectations. I could often hear three teachers teaching siblings on other computers in the room when I worked with families with four and five school age children. Some parents were in contact with me more than their children, calling and texting me continuously throughout the day for support with how to do this assignment or that assignment. Other parents were essential workers and were unable to be present. Some of the children in families where both family members were essential workers spent the day with extended family, with neighbors, at study centers run through the local recreation centers. Other students were in charge of supervising their younger siblings or being supervised by their older siblings.

I was in a room in my house, sitting next to my daughter who was learning how to attend 2nd grade online like many of my own students. I was often helping her to figure out what to do as I taught my groups. If I wasn't helping her, my wife was helping her while my 3-year-old was in my lap. I was trying to figure out how to project content onto my computer screen. I was searching for online resources. I was trying to create strategies that would engage my students. I was trying to find a rhythm in my schedule so that students would log in at the right time. I was trying to connect with other teachers in the building to discover what they were teaching in their classes so I could provide support for the students with disabilities on my caseload. I was in touch with the teachers on my caseload, offering support on how to set up their online teaching platforms. One of the teachers on my team taught me to stack canned food and then sandwich my cellphone between the two top cans so I could use it as a document camera, and we worked to share this knowledge with other members.

I had always used a second monitor, and I worked to demonstrate how this second monitor could be used to combine video conferencing with the observation of student work. I scanned books from the library of children's books I had for my own children. I began making videos. They were long. Another member of my team showed me how he was discovering that videos about 5 minutes in length were optimal for holding students' attention. Our conversation extended into the rapidly expanding number of long videos showing tired teachers showing how to complete expected procedures. We noted the need for examples introduced by children.

Slowly, the crisis and exhilaration of those first few weeks began to subside into routine and exhaustion. My 3-year-old moved off my lap and sat at the edge of my 2nd

grader's screen. My 2nd grader enjoyed teaching my 3-year-old to do a version of the schoolwork she was being assigned. Both my girls enjoyed learning how to draw by watching YouTube videos. The videos my daughters liked best were short, focused, and included children drawing either as the teacher or alongside an adult teacher. I watched how my children reacted and began to introduce videos with these qualities into my instruction. I used my cellphone to add movement and variety to my instruction, and I showed my students how to find household materials that would enrich their education. I gave my students a chance to demonstrate it back to me. Recalling Cycle 2, I began to experiment with total physical responses to engage my students in responding to my instruction. Rock, paper scissors became a source of a variety of TPR interactions between me and my students. My children joined my lessons with my students at times. I discovered that Google docs were a key platform for encouraging interaction between students as they could edit the same document simultaneously. My conversations with most parents and teachers shifted into efficient communication by text. My conversations with a few parents expanded into daily support sessions that seemed to rehash the same frustrations each day. Sometimes these parents were angry with me as though I was the one who had decided to close the school system down. Sometimes these parents were appreciative of a listening ear. Sometimes these parents took a step forward in resolving the issues they were facing.

The end of the school year loomed large. I wanted to invite my supervisors as knowledgeable partners to model opening one's practice to non-judgmental collaboration with people in positions of power. I got permission to record one of my sessions with students. Only one student ended up logging in for the session. As had been the habit

with this student, her middle school aged sister appeared on the screen first, said hello to me, walked into my student's bedroom, shook her awake, and placed the computer on the bed in front of her. My role in this emergent relationship was then to convince this student to wake up and begin to engage in the lesson. I recorded my efforts. My lesson focused on reading a book I scanned in from my children's bookshelf. I had identified several spelling patterns in the book and tried to draw these patterns out for the student to notice. The student was sleepy. The effort that had gone into preparing the lesson was massive on just the technical side of trying to figure out how to make what I wanted to show up on her screen show up. I tried various ways of interacting with my student. I adopted the role I take with my own children when convincing them to wake up.

On the day of the collaborative lesson observation, my support partner had a crisis and was unable to attend in the role of knowledgeable partner, but the Director of Special Education for the district logged into our weekly meeting. Several team members had known him for many years and appeared happy to see him. For other team members, they became quite nervous (I know because they shared their feelings of nervousness with me later) that the Director of Special Education for the district was taking part in our LS cycle. I played the video of my lesson, and then gave a brief self-reflection. I mentioned the struggles I'd had managing my content materials in the online format. I mentioned my difficulties meeting the needs of students who were participating in remote learning without the active support of an adult sitting near them. I noted the highlights of my lesson when the student had engaged with the objective as I'd hoped. I noted how pleased I was to have found ways of interacting actively with my students.

Then I opened the discussion to the team. One of my team members noted that I must have chosen the vowel teams I focused on in the lesson from the sequence of grade level skills I had written out using the common core in a previous cycle. That was not the case. The vowel teams I'd chosen were the ones that repeated most often in the book. The book I'd chosen was the only one on my bookshelf at home with large print letters. I had been so focused on just trying to get the basics of my instruction working, that I had not referenced any of the curriculum sequencing materials. The comment reminded me of this wider instructional planning scope. I stated what had happened in reply to the comment I was given. The team member who provided the comment seemed surprised by my reply. She reframed my answer stating that I'd probably drawn on those resources without realizing it. I replied that her comment made me realize that I needed to pay more attention to sequencing because the lesson would probably have gone better if I'd designed the lesson around her current readiness rather than around the materials I had had at hand. Again, there seemed to be a moment of tension that I was revealing a gap in my competence.

The Director of Special Education made a comment at this point. He was already familiar with the structures of Lesson Study and had taken several notes while watching the video. He read from these notes in a way that reminded me of knowledgeable partners delivering notes on a lesson in LS as I'd participated in it in Japan. The notes were focused on the design of the lesson rather than my performance. He noted that I was attempting to lead the student towards noticing the vowel patterns in the words rather than pointing them out to her. He inquired if I was structuring my lesson intentionally using an inquiry basis. I replied that I was. He suggested that the team think of inquiry

learning as a sandwich, with a slice of “inquiry” bread introducing the topic, followed by direct instruction drawing out the intended objective as the fixings of the sandwich, with a final slice of inquiry bread concluding the lesson. He suggested reversing that sandwich for leading instruction in the area of a students’ disability. In this reversed sandwich, a slice of direct instruction bread comes first, then an inquiry activity as the fixings of the sandwich, with a final slice of direct instruction bread concluding the lesson.

After these comments were delivered, the rest of the team was rather quiet about my lesson, so I suggested that we discuss the Direct of Special Education’s comments instead. The conversation then came to life, and the idea of an inquiry sandwich and its reverse lived on in our post discussion conversations for quite some time.

Interpretations

This cycle really highlighted the depth to which power relationships of praxi-ecological interaction are embedded in the organizational structure of the school system. The pandemic disrupted the organizational structure of the school system and offered a brief moment of collective inquiry. A variety of interactions became possible because the daily content of our interactions with each other was on a basis of openly not knowing what best to do. The reified threats were removed, and the unknown threats were unavoidable. This was so different from the normal context in which expectations are abundant and deficiencies in relation to those expectations are minimized in conversations. This cycle was characterized by a community of practice disrupted in its ecosystem amidst a landscape of practice thrust into praxi-ecological succession.

Evaluations

This cycle also highlighted the importance of the setting. One of the outcomes of earlier cycles of LS was a collaboration between the school psychologist and the social worker. They had visited each other's settings during a learning exchange suggested in the Setting Focus and had continued on afterwards. When the social worker moved on at the end of the 2018-2019 school year, the school psychologist continued the practice, partnering with the speech-language pathologist. Similarly, I had partnered with the hosting teacher of Cycle 2 for many years and was partnering with another teacher in the LS group prior to the school being shut down for the pandemic. Meanwhile, the hosting teacher of Cycle 2 had partnered for several years with the collaborating teacher who ran the materials study in Cycle 2. This underlying pattern of collaboration was emerging between us so gradually that I had barely noticed the change, much less thought to wonder if it was a result of LS. Then, it was gone.

On March 13th, we were all told to go home. There was no preparation for it. No space given to clean out our offices or take home materials with us. We went home that afternoon, and by Monday, we were in a different situation. We reappeared to each other later, disembodied, as little faces on a tiled screen, each of us in our homes. We continued to meet for LS each week. It was a time of turmoil for all of us. There were many meetings held, and I often turned off my camera as I was tending to my children while trying to do my job. Yet, for those LS meetings, I always had my camera on, often with my children in the frame. There was a community that I felt with my team that made those meetings valuable to me. It is beyond the scope of this study to answer whether the other members of my team assigned the same value, but I was able to notice two things.

First, the team was punctual in logging in to our meetings, and, second, those who had sat at the inner-table during the physical LS meetings now made a habit of keeping their cameras on.

I missed being able to ground our work in the physical settings of our classrooms. When I raised this topic in our group meeting, our discussion was lively. Much of our co-planning of the Inquiry Lesson involved trading ideas for utilizing our new virtual settings as we traded ideas for how to do basic instructional tasks, we'd taken for granted in the past.

Addressing the Inquiry of the Cycle

SRQ1: In what ways did my engagement with lesson study transform the processes I enacted?

In this cycle, I was really able to move away from leadership through institutional power in my enactment of LS. I placed myself in the most vulnerable position in the LS structure, and I was able to model opening my practice to the observation of others. During this cycle, I no longer had to contend with the tension between LEAP and LS because the focus of the cycle was on my practice. I experienced some moments of hesitation as I opened my practice to others, but I overcame them.

SRQ2: In what ways did these processes support or conflict with the ends to which I am accountable?

I experienced a unity between the processes of LS and LEAP during this cycle. Because of my commitment to open my practice and to distance myself from my own actions through the eyes of others, I was able to see myself and my practice in a way that opened possibilities for me. I found that it was especially difficult to open my practice to

the observation of the Director of Special Education because I wanted him to hold a certain image of me, and my inquiry lesson seemed to betray that image in part. Doing this, however, helped me notice my ego as something separate from who I am. I was also able to recognize my ego as an end to which I had been accountable. By distancing myself from my own ego, I was able to clarify the ends toward which I was holding myself accountable. I was able to see my own actions as if at a kind of distance, and from that distance, I was able to examine how I might change my own actions. I discovered that accountability to my own ego is something that directs my attention upwards along the hierarchy of power within the district. By letting go of my ego, I was able to direct my attention downward towards those within my care (i.e., my students).

SRQ3: In what ways did these processes lead me to re-imagine the ends to which I am accountable?

An idea of the experience of those within my care has emerged over the cycles of this inquiry and I was able to let go of the idea of standards as ends toward which to aim. Instead, I was able to recognize service to those within my care as the end toward which I am accountable.

SRQ4: In what ways did my engagement with lesson study transform my identity as a teacher?

As I was surrounded by a community of others who were engaged in collaboratively planning for and understanding my students as people, I was able to see myself as a leader of a community rather than a technician of instruction. I was able to let go of something within myself that had shielded me from self-criticism in the past, and my thinking became very grounded in the concrete understanding that was afforded by

observing the inquiry lesson I led and hearing the feedback from the other LS group members and the Director of Special Education in his role as a knowledgeable partner. I think this cycle opened me to being more responsive in general as well as across community and cultural lines.

Forward Directions for Inquiry

This was the final cycle that I've decided to include in the current study. I had a double job of leading LS and documenting my leadership for the purposes of data collection, and as the pandemic stretched into the second instructional year, I was unable to continue both jobs. I did lead LS, but as I reviewed the data for the cycles I led after Cycle 3, I found that it was too sparse to allow me to engage in the process of data analysis that I've engaged in for Cycles 1-3. Instead of representing those cycles, in a chapter of their own, I've decided to collapse them into the forward directions for inquiry reported here.

First, I will begin with the directions gleaned from the cycle itself, and then I will report on how subsequent events deepened these directions into an ethical dimension related to using LS as a forum for disrupting racism. In this cycle, I realized that I use my body and the familiar materials within my setting of practice with such facility that I barely even recognize what I am doing. When I was teaching online, my inability to reach through the camera to help a student find the right page, or to arrange a math manipulative on the student's desk in the pattern that would help them understand a math concept, called my attention to how my body and the physical materials of my setting of practice define what happens in my instruction on a more basic level than the abstract content I address. This was a realization that had begun much earlier in my career when I

experienced LS in Japan. It was reinforced by my understanding of Pestalozzi's idea of object lessons. Even within these cycles, this understanding was further brought to my attention by the impact of the observation trip to another classroom taken by the core LS group of Cycle 1 and in the materials exploration led by the collaborating teacher in Cycle 2. In the current cycle, I truly experienced this understanding by being placed in an entirely alien instructional setting that rendered even the most basic instructional task challenging.

Just prior to the pandemic, I had been taking a class on the History of Education at my University. My professor was a dynamic Black scholar who also worked in my district in the area of equity and multicultural instruction. In her class, I was brought to an abrupt introduction to the idea of discussing racism through the lens of *black bodies*. My first reaction to this discourse was negative. I'd been taught all my life to see the person inside the body rather than focusing on the body as an object. I was really struggling with this discourse about black bodies. Then, the pandemic emerged and the freedom that I have experienced in my white body was cut off. I was unable to go where I wanted to go, and I was unable to do what I wanted to do because my body might be carrying COVID-19. Then the events of 2020 unfolded. George Floyd was murdered on the sidewalk, and the protests of the summer of 2020 began to unfold all around me. As this was happening, I was struggling to understand my own life in terms of my body and my physical setting. The abstract notions of racism and even color blindness were jolted into a sudden recognition of physical reality. All summer, I watched the news and struggled deeply with what I was seeing and how it connected to my own experience of suddenly being restricted because of concern for my body. I was distressed in a way that I knew many

other white people must have been because the news was full of white people reacting similarly to me. The news was also full of people of color writing advice and etiquette columns for white people such as me experiencing our embodiment in a new and restrictive way for the first time. I needed those etiquette lessons because soon after I read those columns, I recognized the actions being discussed in my own behavior.

As I examined my emerging model of LS, I noticed that I had placed the content focus first, and then assumed that the setting could be modified at will to support the content focus. My experience in planning and hosting the inquiry lesson of Cycle 3 changed my perception. I realized that the setting focus must come first. The setting affords instruction. During the pandemic, I presented my LS model in a class I was taking at the University online. I shared some of the realizations I was having about how the setting focus needs to precede the content focus. My professor challenged me to crystallize my meaning for the rest of the class. I thought over how to do this during the following week and was reminded of a pre-pandemic moment when I'd caught another professor on his way to a meeting. I'd asked him for advice, and he told me to walk with him. As I walked with him, he encouraged me to look around and notice what I saw. He encouraged me to take note of how some male students were standing in relation to female students; how a professor we saw talking was expressing body language to a student. My professor challenged me to state how I knew that one member was a professor and the other a student. It was a brief conversation, but an important one for me. That conversation was the reason I took note of where people sat in my LS meetings.

Now, I was being challenged to discuss how a focus on the physical setting (our bodies and the materials within that setting) connected to racism. I had a realization.

Every teacher on my team was white. Every paraprofessional on my team was either Black or Hispanic, and I had never noticed this before. I'd chosen not to see it or to think about what it meant in terms of how opportunity is distributed in society or how the deficiencies of the privileged are compensated for by the labor of the underprivileged. It was a shocking moment for me, and one that was afforded by my intense focus on materials study. It made me realize that my model needed to be resequenced to place the Setting Focus earlier in the cycle. I also realized that I needed to modify my description of the setting cycle to include an explicit focus on race.

Chapter Seven: Summary of the Critique

In preparation to write this chapter, I have revisited the four reflection questions that I addressed at the end of each of the three cycles disclosed in Chapters 4-6. In this chapter, I synthesize the themes that emerged through those reflection questions into four emergent themes that were salient to my leadership of LS in various ways over the course of this study. The first theme is entitled Power Structures, and it captures the idea of praxi-ecological context. This theme refers to the underlying organizational structure of my role within my school and district, and my increasing awareness that this organizational structure conflicts with the underlying organizational structure of LS. The second theme is entitled Embodiment. This theme refers to my growing realization that the physical setting in which we practice, including its living artifacts (such as our bodies, and the bodies of all the other plants and animals that inhabit our setting) and its nonliving artifacts (such as emails, curricular materials, etc.), is at the very heart of what we do. This realization shifts my analysis away from exploring a community of practice isolated from its physical environment towards exploring ecosystems and landscapes of practice. I came to realize that the setting is not an afterthought that is shaped to our intellectual purposes; instead, it structures our intellectual purposes in ways that are so tacit that we barely even notice it is occurring. The third theme is entitled Co-construction. This refers to the growing awareness of intersubjectivity that occurred as I conducted this study. This theme relates to the concept of praxi-ecological interaction.

I learned to limit my inferences about what was happening, and I learned to listen to how others were constructing their experience. The final theme is entitled Openness. This theme refers to the risks and rewards that I encountered as I established the conditions for the members of my team to open our practice to each other.

Emergent Themes

Power Structures

In each of the cycles I led, I found that LS conflicted with the underlying power structures of the school system in which I work. This conflict took place in terms of performance evaluations, but also around the image that American teachers seem to wish for others to hold concerning their classroom practice. I noticed a narrative in my own thinking that involved me as ultimately triumphant against any challenges in my classroom that I faced. I could easily admit feeling frustrated with this or that aspect of my practice, without any threat to my ego, but having another person observe my lesson represented a threat to me because I am not fully in control of what will unfold in my practice and my responses to what occurs are often very different from what I believe the response of a “good” teacher would be. Over the course of this study, I began to realize that I felt pressure to be the example of competence to my team in order that my ratings on the LEAP rubric might be legitimate.

As I worked to lead LS, my underlying values about what a good teacher is began to shift. The narrative of self as a kind of superhero who may get knocked down by the villain in the first fight of the film, but who ultimately prevails began to seem like a hindrance rather than a strength. Humility and openness became more valuable to me in my own practice. I became more willing to expose the areas I was struggling with. This

willingness allowed me to open myself to feedback from the members of the team I led. In the first cycle, I was often telling others what to do. While this seemed to minimize their frustration with what I asked them to do, the role-based power relations of the praxi-ecological context were quickly reproduced in the form of status quo. LS became like a new skin on an old operating system. The underlying mechanism of how PD unfolded didn't really shift in the first cycle of LS that I led (Chapter 4). It was only when I began to become aware of the praxi-ecological context that was shaping my role that my vision for LS began to come to life. In Cycle 2, I began to shift to a new way of thinking about the power structure within which I was working. I've represented this shift in my leadership as moving from generating a Compliant Praxi-Ecological Context (Figure 7.1) to generating a Caring Praxi-Ecological Context (Figure 7.2).

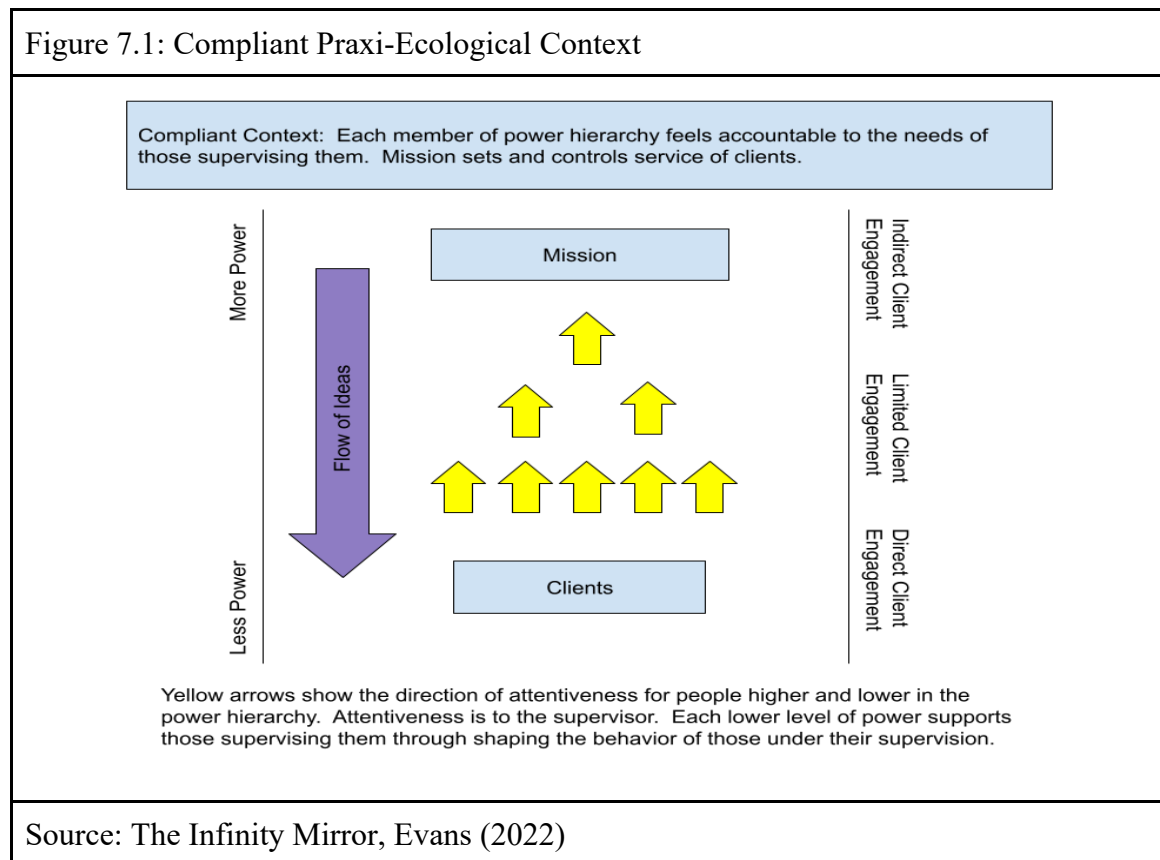
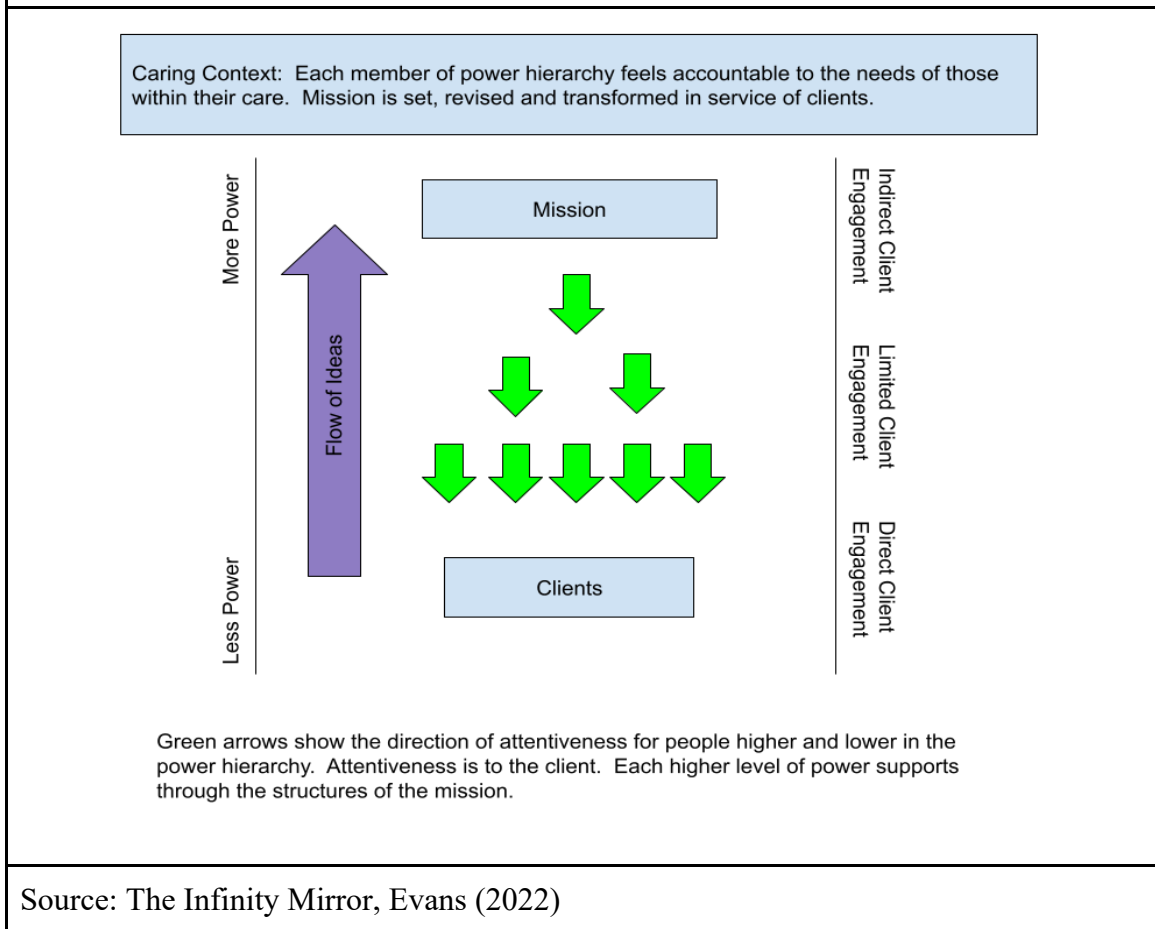


Figure 7.2: Caring Praxi-Ecological Context



Embodiment

The recognition of embodiment also really emerged through the current study. In my first attempts to lead LS (and to write this Dissertation-in-Practice), the direction of my thinking flowed from my engagement with intellectual materials to my experience of practice. A shift occurred in me as I led LS. The direction of my thinking began to flow from my experience of practice to my engagement with intellectual materials. It is most easily seen in how I started Cycle 1 with guiding artifacts taken from research literature,

and then tried to bring those artifacts to life in my interaction with my team. I do not think it is a coincidence that when my thinking was flowing in that direction, I found it most difficult to step out of the power structures of the status quo. I began Cycle 2 by opening myself up to feedback from others using the metaphor of a potluck. I began Cycle 3 by engaging in the concrete experience of hosting an LS inquiry cycle myself, and in my reflections from that cycle, I reversed the order of Stage 2 and Stage 3 in my emergent LS model. Prior to Cycle 3, my emergent model moved from Stage 1: Inquiry Design to Stage 2: Content Focus to Stage 3: Setting Focus. After Cycle 3, my emergent model moved from Stage 1: Inquiry Design to Stage 2: Setting Focus to Stage 3: Instructional Focus.

My emerging focus on embodiment also helped me gain feedback from my team members. When I started, I sat in the leader's chair. My institutional power gave me substantial influence over the agenda and pace of the special education team meetings. By the third cycle, I was in the role of LS host, and there were many aspects of serving in this role that were beyond my control. I had gone from sitting in the seat that insulated me from vulnerability to sitting in the seat that framed my vulnerability. I had transitioned from giving feedback around pre-determined ends to offering my own experience up to the feedback of others and then facilitating those who offered feedback in reflecting on how they could use their observations and comments on my practice in order to determine and clarify their own ends. The shift in the context I was generating was also evident in how people sat. At the beginning, when I was generating a complaint context, the members of the team I perceived as compliance-oriented sat near the front and demonstrated the most engagement. By the end, when I was generating a caring

context, the members of the team I perceived as being inquiry-oriented sat near the front and demonstrated the most engagement. The actions and engagement of a few members of the team even changed my impression of their stance, switching my impression of their stance from a compliance-orientation to an inquiry orientation.

Hayashi and Tobin (2015) identified a mode of instruction that is common to Japanese pre-school education that seems as though it might be a good conceptual model for future inquiry in the study of Lesson Study. Hayashi and Tobin (2015) identify this model as embodied teaching and gallery learning. They noticed that instead of directing the behaviors of pre-school children and isolating problems from the view of others, Japanese teachers tend to allow problems to unfold publicly. When the teachers debrief the situation, Hayashi and Tobin (2015) interpret their comments as directed both towards the active participant children in the problem as well as toward a gallery of other observing children so that these children might also learn from how the problem was resolved. In LS, the idea of gallery learning might be an important concept for extending the lessons LS has to offer to compliance-oriented members of the team. The active core members interact with their students, curriculum and knowledgeable partners while the peripheral members fill in a gallery of learners. The barrier between the core group and the gallery is permeable, and any member can transition when they feel comfortable to do so.

Co-construction

One of the themes that Lewis, et. al. (2003) note in their research about LS is that despite more and more research existing about how to do LS and what is likely to happen in the field when it is attempted, participants seem to only understand when they

experience LS itself. One of the themes that emerged from my study is that this may be the case because learning to follow a prescription is the opposite of what LS is all about. Meanwhile, learning through one's own experience while in collaborative conversation with others is exactly what LS is all about; perhaps this is the reason Lewis et. al. (2003) note that participants seem to have to discover the processes of LS through their own experience. Instead of instilling the processes of LS into the actions of the people one leads, LS comes to life when it is drawn out of the actions in which the people one leads are already engaged.

As a result of these insights, the initial model I'd developed for LS (c.f. the guiding artifacts of Cycle 2) has expanded into a set of resources describing each stage (c.f. Appendix A). In the current form represented in Appendix A, I provide a description of each cycle, adopting the tentative language of suggestion rather than the assertive language of direction. My hope in adopting this tentative language is to provoke an image of what the stage might consist of and how the learning within the stage might occur. I've also highlighted key lessons about leading LS in a key points section for each stage. I've situated each stage in the cycle and I've devoted substantial page space to this diagram for every stage to re-emphasize again and again that LS is an iterative process. I have also provided a "to-do" checklist for the activities of each stage rather than a set of steps to follow to indicate that teams should pursue those checklists that seem most salient. My hope is that this checklist will give teams experimenting with LS a starting point of concrete actions to carry their actions forward. At the same time, I hope that the checklist form inspires a sense that LS emerges from the overall inter-relation between the parts rather than taking on a technical form of this first and then this and then that, etc. At each

stage, perhaps some checkboxes will be left unchecked, and perhaps other steps will be added in instead of the checkboxes I've listed.

When I imagine LS, I imagine a community of teachers working and learning from each other. When I first started this project, I simply expected that by being interested in joining such a community, I would rapidly find such a community to join. What I discovered is that teachers are situated in a working environment that is rather different from the community I imagined. In the district where I work, the official ends towards which teachers are expected to aim are prescribed in myriad ways. These ends can be found in standards, in performance evaluation rubrics; they can be found in job descriptions, in curriculum and in district and state assessments. The problem is that the prescribed ends towards which teachers aim don't actually seem to describe what they do in their classrooms every day. Standards can be met, but the teachers who successfully meet them often seem to do so as a side thought, while the driving force of their teaching leads elsewhere. Meanwhile, those teachers who do aim directly toward the standards often struggle.

Performance evaluation observations are often observations of performances that diverge from what the everyday practice of a classroom looks like. I have noticed that those who are most successful on performance observations are sometimes the teachers who have established a strong relationship with their children in other ways. The teacher then adjusts their instruction to align to the rubric and the children play along, demonstrating expected behaviors in order that a guest in the classroom might be impressed. My peers have done this. I have done this. We sometimes even do this when we are visiting each other's classrooms. It is a way of hiding, though. It is a way of

protecting a fragile space of autonomy in which our real work unfolds. It is a facade that isolates us from each other.

Misaligned organizations can create disruptive artifacts that undermine the possibility of collective action, so I am not arguing that the existence of an alignment of prescribed ends across standards, curriculum, evaluation tools, and job descriptions are a bad thing. It is mistaking the presence of aligned artifacts for wholehearted alignment itself that I find worrisome. When this mistake is made, strategic alignment (i.e., alignment demonstrated when under observation in order to preserve one's autonomy when not under observation) replaces wholehearted alignment, and a kind of double-talk and double-think emerges within the community of teachers. Everyone is aware of what a classroom should look like, and so everyone projects a front that conceals the areas of their own classroom practice that diverge (for better and for worse). LS is a commitment to openness - a rejection of strategic alignment in favor of consensus building. LS draws praxi-ecological context and interaction into the open so that it might be discussed honestly.

LS Inquiry Lessons are not exemplary models to be shared with others to replicate. Instead, LS Inquiry Lessons are vulnerable moments in the practice of teachers committed to openness in their teaching practices. LS Inquiry Lessons are humbling in the context of LS. In the context of the surveillance accountability systems that are in place to prop up the empty strategic alignment that is written into the various artifacts of practice that have been disseminated to the teaching community by the powers that be, LS inquiry lessons are humiliating. Humility and humiliation are derived from the same root word, but there is a difference between being humble and being humbled. That

difference is in whose agency is being supported. When teachers are placed into an organizational structure that gives them collaborative, intersubjective agency, my working hypothesis is that substantial professional learning can occur at the level of groups. When teachers are placed into an organizational structure that subjects them to passive compliance demands with a variety of mandates, my working hypothesis is that professional learning becomes disjointed and irrelevant. What's more, this study has also led me to entertain the working hypothesis that teachers teach the way they learn professionally. When teacher professional learning encourages a passive role where compliance with expected procedures is prioritized over the construction of a coherent whole, my working hypothesis is that the instruction those teachers then provide encourages the same.

Openness

In the first paragraphs of this section, I've tried to capture some sentiments that I have held during this project. I've chosen to share these sentiments because I've found that they are often reflected back to me by the teachers with whom I've worked. These sentiments reflect the complaints I've often heard amongst my colleagues; one surprise was that LS, which I designed with the sole purpose of addressing these complaints, was not universally preferable to the situation that gave rise to the sentiments expressed above. Some teachers I led seemed to prefer the very framework they were complaining about to the structures of LS. The inquiry of this study has helped me to realize that committing oneself to openness (both in moments of competence and in moments of struggle) is both a necessary precursor to the successful practice of LS as it is imagined here and a risk. This commitment carries risk in and of itself, but to make the situation

more fraught, in order to commit to openness in teaching, teachers must decide to forgo the strategy of subversive teaching that allows so many of us to protect those fragile spaces of autonomy where we do the work we consider most important as a teacher.

I have struggled to write this study up, in part, for this very reason. I wished to maintain my subversive teaching stance and commit to the openness of LS at the same time and found that I could not. I chose openness. I chose to forgo the double-think and double-talk that characterizes so much of what I have experienced as a teacher in the United States. By double-talk, I mean that teachers tend to talk about aspects of their practice that align to the prescribed ends toward which they are expected to aim, while keeping other aspects of their practice private. By double-think, I mean that teachers tend to look away from those aspects of their practice that they find inconsistent with their beliefs. LS is an honest, humble discourse that leaves its participants vulnerable to each other. LS is an open discourse that invites teachers to learn both from each other's successes *and* struggles. Even as I write this, I wonder again if my commitment to openness brings more benefit to my practice than closing myself and teaching subversively would.

Recently, a friend from Japan who I respect very much came to visit me. We've collaborated over the years on the practice of LS, and I've learned a great deal from him. As I write in the wake of the pandemic, I have struggled deeply. When I hold the 4th grade class I currently lead up as a mirror for myself, the reflections I see disturb me deeply. I can also see so many wonderful aspects of my students seeking to break through. I can see so many potentials for strong teaching seeking to break through in my own teaching. Yet, when I look into that mirror, I see a class that has been bound together

by so many of the weaknesses I have as a teacher. My class and I agreed recently (with me offering the metaphor and the class taking it up in their problem-solving conversations with me that followed) that we are like a broken puzzle of beautiful pieces. I wanted so much to turn my eyes away from the state of my practice. Indeed, I've become isolated from many of the colleagues I engaged in LS with over the course of this study. I wanted to close my practice and hide it away, but I didn't. I maintained my commitment to openness and allowed my friend to see my struggle. It was painful and in the aftermath of the lesson he observed, I struggled deeply with my ego. It loomed again as an end to which I am overly eager to hold myself accountable. I'd held my classroom teaching up as a lens through which he could see me, but as always happens with openness, I was also able to see myself and my class through his eyes. After his visit, I began to notice the patterns that had led me to where I was. I turned my eyes towards those practices I was engaging in out of survival that conflict with my core beliefs about what teaching should be. The result? It is what I've experienced every time the underlying spirit of LS appears in my life as a teacher, I began again to learn and to grow. As I finish this, I am in a state of struggle. The structures of LS that I had built up now seem as sandcastles on the beach with the tide rushing in. It is painful to watch what I've done exhibit its transitory nature, falling short of sustainability. I am broken hearted about the state of my practice in the aftermath of the pandemic. The 2021-2022 school year has been a difficult one. I feel a sense that I haven't been everything my students needed me to be. But I am not trapped in this spot. It also is transitory, and I am not alone in my practice. I am now reconnecting to others, and as the tide flows out, I am building sandcastles on the beach once again.

LS is not a snap solution to the problems we grumble about as teachers. Simply swapping out the status quo in favor of LS is neither possible nor would it result in a utopian state of being. Any movement from how we interact now to something more akin to the interactions I've envisioned for LS would have to be a gradual transition of transforming the power structures within which we work through careful attention to the embodiment of how we co-construct our community of practice. LS is a pathway that connects teachers to other teachers. The spirit of LS appears when we, as teachers, have the humility to recognize that no matter how heroic our efforts, saving those we teach is beyond our ability; trying to do so only reproduces the power imbalances of the status quo. Instead, I believe it is the transformation of our own actions and living educational theories to which we must attend.

While the opinion I've arrived at as a result of this study may not be universal, I'd like to share it, nonetheless. By being open, we have the potential to create community and see ourselves through each other's eyes. I think this is a solid basis upon which to build wholehearted alignment, and I think that is important because strategic alignment will never be enough no matter what we are able to do in the private spaces of our subversive teaching.

There is an emerging movement around open education. This movement seeks to make educational resources open, but it has also come to embody a concept of openness that is in direct opposition to the kinds of institutional surveillance strategies designed to promote compliance with the organizational structures of the status quo. Openness is not clearly defined in intellectual terms, but the experience of openness generates a common understanding among collaborating groups of inquiry-oriented learners (Childs, Axe,

Veletsianos & Webster, 2020). This emergent discourse may be a useful forum for the further discussion of LS moving forward. LS, in turn, can become a forum for exchanging knowledgeability in the various forms of our living educational theories.

Consolidating the Inquiry of the Study

How has my perspective on what it means to be a teacher leader been transformed through my engagement with lesson study in the context of an American community of educational practice?

When I began this study, I experienced a kind of division between my work as a researcher in my role as an Ed.D. student and my work as an educational professional in my role as a public-school faculty member. The infinity mirror of this study has helped me bridge that division. In opening my practice to others, I have gained a certain detachment from my actions in the moment while establishing a more stable foundation for my identity as a professional. I am no longer a teacher or a teacher leader who needs to be affirmed through feedback. I have become a teacher and a teacher leader who is open to feedback as a source of growth. I have become more flexible and open in my personal theory of action. McNiff and Whitehead (2011) might call this personal theory of action my *living educational theory*. Eisner (1991) and Uhrmacher, Moroye McConnell and Flinders (2017) might call it my *connoisseurship*.

I have disentangled myself from the power structures in which I had been embedded, and I've realized how the physical and metaphysical settings in which I work shape my actions far more than my curricular intent. I've learned to see the situation in front of me in its concrete manifestation, and to understand what that concrete manifestation can afford, and what it cannot. I've learned to draw my authority as a

leader from my own engagement in the situations I lead rather than the institutional power assigned to the role I fulfill. I've learned to be tentative in my interpretations of others' intent and to be respectful of mutuality in our relationships with each other. Ironically, I began this study with an answer in mind for the problem-of-practice I had identified. If I could engage in this study again, I would begin with a question rather than an answer. I would begin collaboratively with others rather than looking for ways to gather the agency to realize my own vision.

Unexpectedly, I have also become aware of how my own body is an object in my setting of practice. I've understood for the first time how the societal script of interaction (Murray-Garcia & Ngo, 2020) for the way I am embodied in the world influences my perspective. For me, the biggest transformation that I've experienced in conducting this study is shifting from seeing the world through the lens of ideas I've read in books to seeing the ideas I read in books through the lens of what I've seen in the world. In Appendix A, I've laid out the model I've developed through the cycles of this study. As I mentioned above, treat it as a question rather than an answer. Please don't impose it upon the world but engage the checklists as the suggestions they are intended to be. Instead of implementation, try enacting the model that I've laid out and allow the enactment of the model to modify its form.

Revisiting The Infinity Mirror

Throughout this dissertation-in-practice, I have had to take a step back to examine the connection between *professional learning*, *inquiry* and *communities of inquiry practice* from the higher level of abstraction that those three terms all belong to. It is all too easy to conflate the various activities we engage in and thereby miss the very

distinctions that can help us rearrange the power structures in order to embody our co-constructed practice openly.

One side of the infinity mirror, the *Learning in Landscapes of Practice* conceptual framework (Wenger-Trayner & Wenger-Trayner, 2016) that I used to understand LS also helped me transition my understanding of my role within inquiry from the identity of a researcher to the broader identity of an investigator and eventually to the identity of a critic. The regimes of practice that structure the communities arising around practice of a profession of one sort or another also structure the communities arising around the practice of inquiry of one sort or another. I started this study thinking of the landscape of practice in which I was engaged as constituting the public school where I work. Now, I see the school as one scale of a broader landscape of practice that also encompasses the communities of inquiry practice that I've engaged with as I've worked.

On the other side of the infinity mirror, I began by thinking of LS as a form of PD. As I began to realize how PD is a delivery system for knowledge created by others, I began to understand that LS cannot be implemented as a form of PD. Rather, PD might be integrated into LS. My work in the communities of inquiry and my growing comfort with the paradigm of action has allowed me to really understand how LS can be seen as a form of action-oriented inquiry like the self-study that I engaged in as the method of this study. Breaking down this barrier between the professional learning of practitioners and the professional learning of investigators is essential to the co-construction of knowledge. When I began in the role of researcher, I sought the power to control my setting, which turned my engagement in that setting into an ethical problem that limited the scope of my study to first person self-study. Now that I have transitioned to the role of a critic, I seek

mutuality with my colleagues in hopes that we might be able to engage in a form of collaborative intersubjective second person self-study. I am left with the working hypothesis that the power structures that disenfranchise practitioners from direct engagement in inquiry also limit the professional learning that can be gleaned from inquiry engaged in by others to a very superficial level characterized by a cognitive dissonance between understanding and action. I see the value of action-oriented inquiry, whether enacted by members of the university collaborating with insiders to the communities we study or enacted by insiders in the community under study itself, as deepening the cognitive dissonance of shallow professional learning into the deeper form of embodied knowledge.

Limitations and Forward Directions

One of the limitations of this study turned out to be the greatest source of growth for me as an action researcher. After reflection, I realized that I could not structure this study as the story of how my team experienced LS. Instead, because I was in a position of power and because my passion for LS served as the impetus of the study, I had to focus this study on my own leadership of LS. At every point, I had to stop myself from telling other people's stories in order to tell my own. The scope of the study allowed me to describe what I saw others do, and how I interpreted their actions in making subsequent choices as a leader, but I was forced to recognize that my interpretations are fallible. Prior to this study, I had been in the habit of thinking I could know the intentions behind others' actions. This study forced me to step back from that habit of thought. As a result, I think I became more open and better able to listen to other people's concerns.

As I read over my descriptions, however, I am filled with regret that I couldn't tell the story of how my team experienced LS. I wish I could have structured this study as a second-person action-oriented inquiry study. As I was exploring methods, I came across a method called *métissage* that is widely used on Vancouver Island to explore difficult topics relating to the colonization of the educational system and the inclusion of all voices (Bishop, Etmanski, Page, Dominguez & Heykoop, 2019). The method involves weaving the narrative descriptions of several participant-researchers together to form a multi-perspective account of a situation or a topic. I hope that in my future research endeavors, I will be able to break through into second-person action-oriented inquiry. I imagine the fullness of the story that would be gained by the interweaving of multiple perspectives in critiquing the improvements and discernments of iterative cycles of shared inquiry. Leaving the others I shared the experiences of this study in the silhouette of their institutional roles was a difficult decision, but ethically, it was the correct decision for maintaining the integrity of the current study.

Another limitation of this study pertains to the nature of experiential knowledge. Here again, this limitation has been a source of growth for me as an action researcher. Traditional academic research divides the dialectic of research from the rhetoric of practice. This means that conventional research is written up as a record of inquiry in the dialectic of the academy, but it is then used as a justification for advocacy in the rhetoric of practice. Imagine a pitch video encouraging a school or a district to purchase an evidence-based practice. The research behind the practice is always in the form of a propositional claim stating that the program has been proven to accomplish goals a, b, and c. The knowledge generated in the current study can't be used that way.

No one can take the practical model I propose in Appendix A and cite the evidence that I have presented as a justification for their advocacy of LS as a practice. This study is quite simply not that kind of study. This study does not aim to produce and disseminate propositional knowledge that can be used as the justification for advocacy. Instead, it aims to generate and disclose experiential knowledge that can be used to inform further inquiry. Recognizing that action-oriented inquiry is iterative, with studies generating more insightful questions rather than answers has been a major transition in my perspective as a researcher and teacher leader. I hope that I can introduce the practical model represented in Appendix A as a kind of question for those who would continue the work I've started here. I suppose that question might be: what happens when we adopt this model into our practice? I hope it will serve as an invitation to second person action research. In action-oriented inquiry, advocacy and inquiry are necessarily blended into a single unified act.

As a final note, while LS was not fully realized within the scope of this study, I was able to identify several considerations that seem to me to be necessary for its meaningful enactment. I was also able to develop a more nuanced emergent curricular model for LS for use in my practice going forward. Though IEPs have not featured prominently in this critique, it is my evaluation that the IEPs my team wrote as a result of the professional learning afforded by LS did become more coherent as a whole because, as a team, we broke through some of the barriers that prevented us from deeper collaboration with each other. We began to move away from the contractual trust of the power structures of the status quo toward developing relational trust with each other in the sheltered scale of practice of our LS group (Bryk & Schneider, 2002). We shifted the direction of our

thinking away from implementing abstract evidence-based practices out based on a compliance-orientation and we began thinking about the embodied experiences we share with each other and the students in our care in order to generate practice-based evidence (that then led us to evidence-based practices amenable to holistic integration into our IEPs. We moved out of our passive acceptance of what the research says and became co-constructors of our own understandings of practice. All three of these developments helped us to become more open with each other in our exchange of knowledgeability.

For me, as a researcher, I was able to recognize that the path I took in this inquiry was flawed. I began with an answer (Lesson Study) rather than a question (action-oriented inquiry). As I proceeded through the study, I accessed more and more institutional power in the participant aspect of my role in order to carry forward my study, which ultimately limited my study to the first-person form of action-oriented inquiry. If I had begun with a question, I may have been able to establish integrity in my inquiry more quickly and engage others in the mutuality of second person action-oriented inquiry. As Torbert (2004) notes, we all have to begin what he calls our action inquiry somewhere. It is not a mechanical process that can be learned and employed from time to time. Action inquiry is a long-term commitment to inquiry that is infused into the very core of who we might choose to become. By establishing the infinity mirror of this study, I was able to identify those steps in my study that led me towards and away from an action inquiry stance. I was able to wrestle with these steps and eventually establish integrity in the first-person inquiry this study took on. I brought the story and the way the story is told into dialogue with each other (Pendergast, 2007). I end this dissertation-in-practice eager to move into second person inquiry with a deeper understanding of how

my actions influence my positionality as an educational critic who practices action-oriented inquiry, and how my positionality as an educational critic who practices action-oriented inquiry influences my actions.

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Appendix A: A Practical Curriculum Model for Future Use

In this appendix, I present the most recent iteration of my emergent LS model. It is my hope that this study will enable the audience to make insightful use of this model. I wish to reiterate that I have intentionally avoided propositional claims in this dissertation-in-practice. I make no promises about what will happen should you enact the following model in your own practice. I also wish to reiterate that the evidence generated and presented in this study cannot be used as justification for any advocacy that the model presented here will function in a certain way that fulfills a need you identify in your practice. The current study was conducted within the methodology of action-oriented inquiry. If you are to make use of this study and the model presented here with integrity, it seems to me that it is necessary that you adopt this model in the spirit of inquiry; ideally, the “you” I am referring to here would be plural. By this, I mean that the integrity of this study would be most fully extended if continuing inquiry into the model presented here were conducted in a form of second person action-oriented inquiry (Torbert, 2004).

As you read over the model presented here, it is my hope that you will be able to identify how each cycle presented between Chapters 4-6 helped to shape what you are reading. I hope the experiences I’ve disclosed here will edify your own connoisseurship as you engage in LS and that the themes of the self-studies, I’ve engaged in will inform your living educational theory as you make decisions about how best to proceed from here.

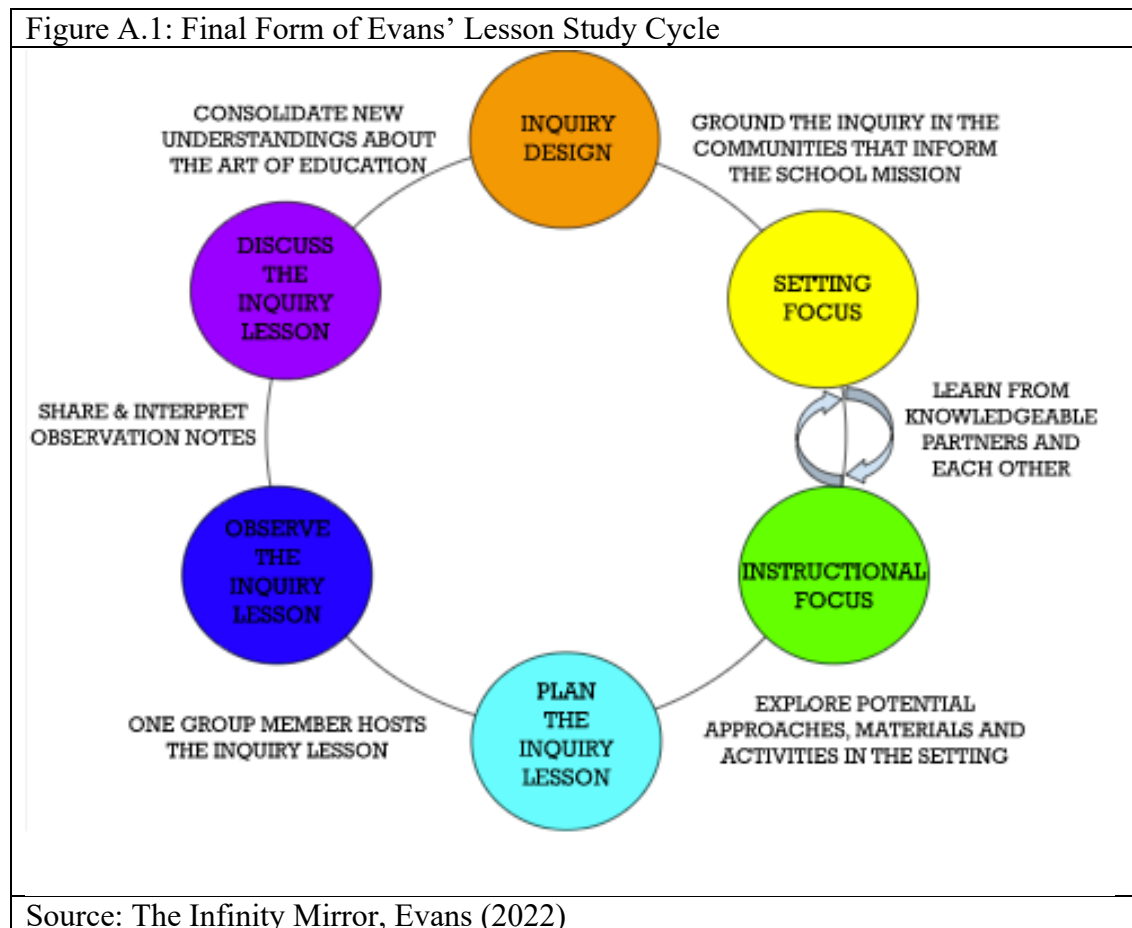
Abandoning the current power structures in favor of recognizing the embodiment of yourself and others in your setting of practice carries a certain risk. I have found that LS helps to limit the scale of practice to a manageable level as you step out of

relationships defined by contractual trust and into relationships defined by relational trust (Bryk & Schneider, 2002).

A Brief Introduction to Lesson Study (version 2.0)

Lesson study is an inquiry-driven professional learning model designed for the adaptive challenge of learning to teach in new ways. In this model, educational practitioners collaborate to select a setting and instructional focus for improvement. Then, we explore what works through collaboratively planning and observing an inquiry lesson over several weeks. The inquiry lesson showcases what was learned and allows others to observe and learn. After observing, the LS group reflects together, sharing perspectives, affirming solid practices and learning from the unexpected.

Lesson study is designed to empower teachers to learn from each other, as well as from the communities we serve, the broader school and district community, and other networked lesson study communities. To accomplish this, lesson study groups collaborate with knowledgeable partners from these communities throughout the lesson study cycle to exchange insights and perspectives.



In collaboration with knowledgeable partners, the lesson study group builds community around exploring various approaches, materials and activities that can support the act of bringing education to life - a defined focus area for each cycle keeps things manageable. The opportunities for this community building are embedded into the setting focus, the content focus and the planning of the inquiry lesson.

The inquiry lesson is intended to be a community feedback event in which the lesson study group and knowledgeable partners can explore how instruction can be responsive to the needs of the community. Additionally, lesson study serves as a platform for generating practice-based evidence, which deepens collaboration between teachers, educational researchers and curriculum developers.

Lesson study uses a single lesson as a concrete window into the underlying structure of education. While one teacher volunteers to host the inquiry lesson in their own practice, the focus of lesson study is not on that teachers' performance. Instead, the focus is on how the various instructional approaches, materials and activities used in the inquiry lesson shape student learning.

Professional Development is too often a disconnected, passive experience for teachers in American public schools. You stop what you are doing. You leave your classroom. You sit through a lecture or a series of activities toward an objective the professional development leader is pursuing. Often, these sessions are compulsory.

The collision of a variety of different priorities that public schools must pursue simultaneously often means that the PD curriculum is patchwork. These PD sessions are the opportunities teachers have for formal learning. Through these opportunities, teachers can maintain their professional licensure, meet district and school requirements for professional evaluation. The problem arises because teachers have become disenfranchised from shaping these opportunities to meet our daily needs. What is needed is a structure that expands the intersections between what teachers need in our everyday lives and what we can learn through professional development.

Instead, the problem has become acute because formal opportunities for PD are disconnected from the informal experience of being a teacher throughout the day. The informal aspects of learning involve the little moments with our students and colleagues each day that gradually add up to become our personal knowledge base about how to teach. Organizing an intersection between these informal moments and the formal aspects of the school mission and district initiatives allows for what is called non-formal learning to take place.

Non-formal learning is the intersection between the planned formal learning of professional practice and spontaneous informal learning that arises from living one's life as a teacher. The Inquiry Lesson and the processes leading up to and following after it afford this intersection between formal and informal learning. Grounding our professional learning in the planning, action and reflection on our live practice as teachers ensures that we are learning what we need to improve our practice as teachers rather than learning whatever new practice has become popular in academic, commercial and administrative circles.

A TNTP report entitled the Mirage found that a substantial cross-section of US teachers find that PD is disjointed, decontextualized and largely irrelevant to their learning needs. As a result, if you ask a teacher about their experience with PD, the teacher whose eyes light up with excitement and curiosity is likely to be the exception. That doesn't mean that teachers lack excitement or curiosity. It just means that PD sessions are not typically where teachers express themselves. As the bumper sticker reads, "Just let me close my door and teach."

Adding a formal aspect into teacher learning from teachers does have benefits, though, as long as that formal aspect is integrated into the informal aspect rather than isolated from it. LS offers collaborative structures so that teachers don't feel alone and isolated in our classrooms. LS offers dedicated time that teachers can use to organize our own professional learning. LS offers teachers a voice in the conversation about what is needed in our classrooms. LS helps align the various parts of the school and district into a coherent whole. LS offers a general path to guide teachers in learning from each other and discovering new ideas together. LS offers community.

Non-formal professional learning through Lesson Study for teachers sets the stage for culturally responsive teaching practices. One of the teachers who participated in the pilot process for Howell Lesson Study commented that participating in non-formal inquiry-based learning as a teacher had a ripple effect into her own teaching. Because she was learning in a way that addressed her as a whole person, connecting informal and formal learning together through inquiry, she found that her tendency to teach her own students in the same way was strengthened.

Of course, LS is just an affordance. It will become what you make of it. It was designed to empower teachers, but that depends partly on the teachers who use it. You could follow its steps because you must, and LS could become just "one more thing you have to do". On the other hand, you could take it and use it for purposes yet to be imagined. LS will take on the life you lend to it.

Figure A.2: Final Form of Infinity Mirror Lesson Study Stages

Stage 1: *Inquiry Design*: Using input from the community the school serves, the lesson study (LS) group engages in discussion of the various missions (team, school, district, etc.) that guide the school in order to come to a common initial understanding of them. Based on this understanding, the LS group identifies a focus for improvement to guide the cycle. Building community in this stage amongst the LS Group and the knowledgeable partners in the school community as well as the broader in the educational community is essential for relevant learning to take place in subsequent stages. Stage 1 frames who and what are included in the inquiry.

Stage 2: *Setting Focus*: In collaboration with more knowledgeable partners from the school community, the larger organizational community and the academic community, the LS Group explores the concrete settings of its members' practice in depth. The LS group explores each group members' setting of practice using visual thinking strategies. The group starts by observing settings as still life, and then moves on to observing settings in action through learning exchanges. Stage 2 frames the means available that can be organized into a meaningful change. ***At some point over the course of Stage 2 and 3, it may become appropriate to identify one group member to serve as the host for the Inquiry Lesson.***

Stage 3: *Instructional Focus*: The LS Group identifies an instructional practice (this is the Instructional Focus) that may contribute to improvement in the area of focus of the inquiry cycle. The instructional focus might either 1) help the LS Group to enact the school mission in daily life in new ways or 2) represent a practice that might need to be more deeply informed by the school mission. The team learns about this practice from each other and knowledgeable partners. Stage 3 sets the innovation to be studied within the setting identified in Stage 2 and the topic of the cycle identified in Stage 1.

Stage 4: *Plan the Inquiry Lesson*: After describing and internalizing (debating and revising) the scope and sequence of the unit the host teacher selects, considering the readiness of the students engaged in the unit, the LS Group begins collaborative planning. The collaboratively planned Inquiry Lesson explores how the focal practice(s) will play out in live instruction. The Inquiry Lesson lesson sketch articulates the lay-out of the room, the planned use of materials, activities, approaches and potential cultural scripts of interaction. The LS group discusses and writes out predictions about how the inquiry lesson will play out in live practice. Stage 4 gives the innovation shape and contextualizes it in the work of the school.

Stage 5: *Observe the Inquiry Lesson*: The hosting group member engages in the inquiry lesson with students while the rest of the lesson study group observes the lesson. The focus of the observation is on the capacity of the lesson design to draw out the intended learning. More broadly, the focus of the observation is to explore what it is that the students learned from the lesson (whether that learning was intended or not). Stage 5 generates practice-based evidence that allows the team to reflect.

Stage 6: *Discuss the Inquiry Lesson*: The LS group meets to discuss inquiry lesson observations. The hosting group member begins with reflections on the easiness/difficulty of teaching the lesson, and how the teaching did and didn't go according to plan. The LS Group members then share their observations and the collected evidence (photos, student work, etc.) in order to interpret and evaluate what was observed during the Inquiry Lesson. The LS group should reference the problem-of-practice, the inquiry questions and the grounding missions, in their interpretation and evaluation of the observation. Stage 6 allows for analysis and synthesis of practice-based evidence.

Source: The Infinity Mirror, Evans (2022)

Lesson Study as a Professional Learning Community

A professional learning community or a PLC is as easy to understand as the three words from which the term is constructed. A PLC is professional, meaning that it is a group of people who collaborate in various overlapping, but distinct roles towards a common goal of service to others. A PLC is about learning, meaning that in order to provide service to others, we must constantly learn how our individual approach, our environment, and the approaches of other people within our environment interact to make certain courses of action viable and other courses of action inviable. A PLC is driven by community, meaning that we all learn from each other via discussion, example and reflection. The full nature of what was learned may not be fully evident until it consolidates after the cycle of phase is completed.

Lesson Study Groups are one way to organize a PLC. The functions of a lesson study group are myriad. As described on the previous page, there are various varieties of Lesson Study that have been developed in Japan and around the world. Teramasa Ishii (2017) created a quadrant system to describe the various varieties of lesson study. Sometimes lesson study groups might organize their inquiry questions around questions of “how” and “whether to”, with a focus on learning to bring research literature to life or on solving problems. At other times, LS groups might organize their inquiry questions around questions of “where”, “when” and “what”, with a focus on what qualities certain approaches bring to the school and exploring problems-of-practice.

The Inquiry Design stage establishes the community necessary for the LS Group to move beyond compliance into inquiry. Engaging with the communities that inform the school mission and various district initiatives starts an ongoing conversation about how to integrate a coherent vision. This engagement establishes the basis for rigorous inquiry into how this coherent vision can be brought to life over subsequent stages.

The Setting Focus stage builds the community necessary for the LS Group to come together around the Content Focus. Exploring and describing the physical setting (including how physical bodies and interactions in that space are racialized, gendered, etc.) builds a common language for discussing the Content Focus meaningfully and culturally responsively.

The Content Focus stage provides the focus of the intended learning for the LS Cycle. Though, as any experienced LS Group member knows, the incidental learning and community that emerges through lesson study is often just as valuable as the intended learning. The Content Focus should start in broad strokes and then be explored with deep reference to the settings in which the LS Group members practice.

The Collaborative Planning, Observation, and Discussion stages help define the “profession” or the “practice” that ties the LS Group together. One outcome of each LS cycle is a deeper understanding of how professional collaboration might unfold in practice. Another outcome of each LS cycle will be a sense of creative belonging within a school-wide community of teachers working together to practice the school’s mission. When we know what others do and we have the language to discuss each other’s settings, we have the power to collaborate deeply.

Lesson Study as Collaborative Educational Criticism

Tracing Lesson Study back to its roots, it emerged from Johann Pestalozzi, a Swiss educator who was engaged in redesigning education for traditionally underserved children as serfdom was abolished in the late 1700s and early 1800s. Pestalozzi held that meaningful learning starts by observing concrete objects in the physical environment and learning through these observations to discuss what was observed. Through this discussion, Pestalozzi held that all abstract understandings of the world could be re-discovered by students.

Pestalozzi's philosophy was later adapted to teacher education by the Mayo siblings in England in the early 1800s. At the Home and Colonial School, teachers learned to observe concrete lessons of others in order to learn about how a lesson is structured. Students observed two types of lessons: model lessons and criticism lessons. Model lessons were presented by experienced teachers as models to be followed. Criticism lessons were presented to students of teaching who then criticized each other's lessons as a learning experience.

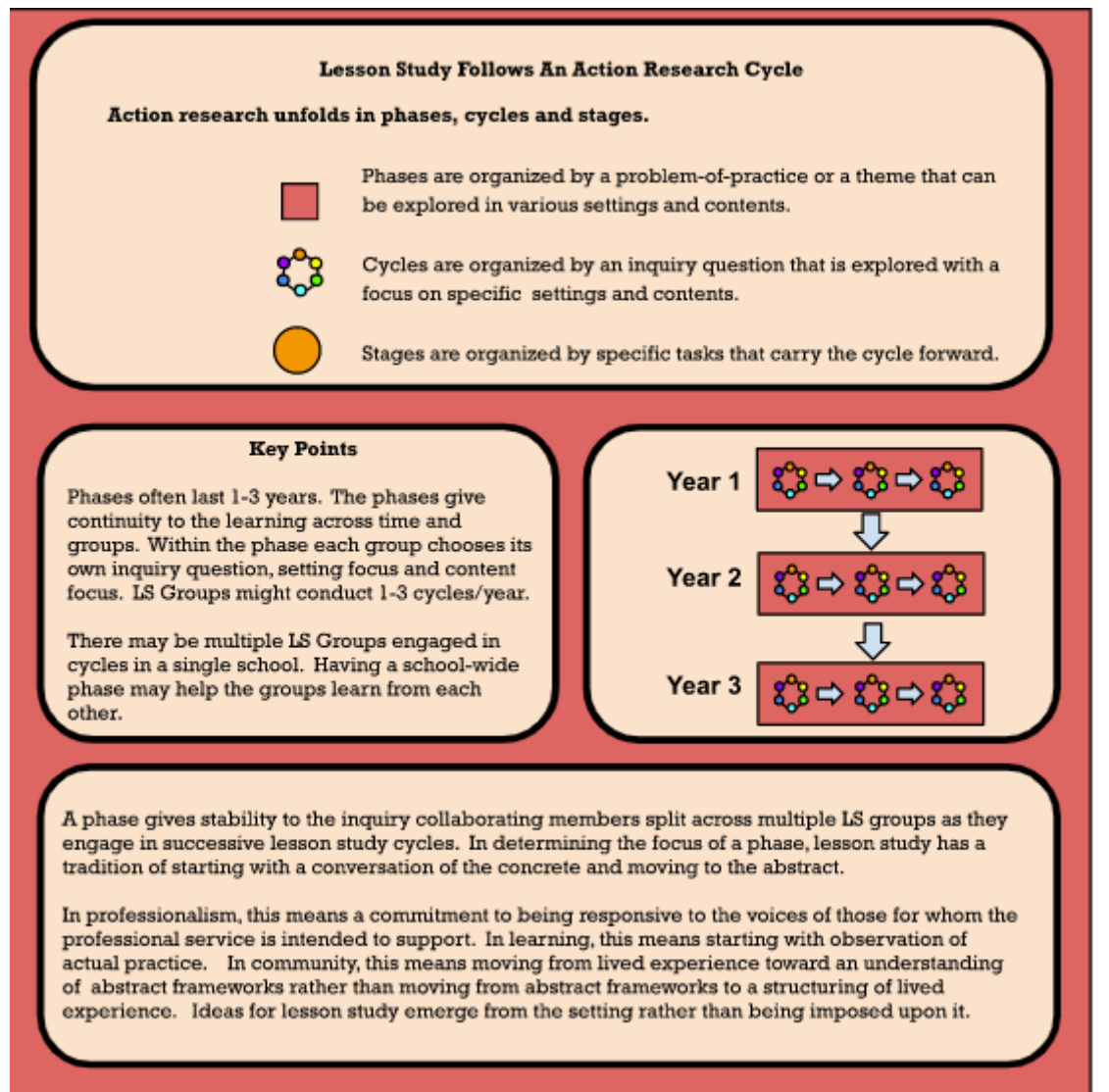
There was a marked difference between Pestalozzi's responsive approach serving traditionally underserved children entering education after the abolition of serfdom and the Mayo sibling's highly regimented approach to serving wealthy British students. The common thread between Pestalozzi and the Mayo siblings was this idea of learning to see the abstract through the concrete rather than learning to see the concrete through the abstract. For this reason, Howell Lesson Study is flipped from the traditional model of learning a practice to apply in the classroom with fidelity. Howell Lesson Study focuses on learning from the classroom in order to create or refine a practice that serves our needs.

Edward Austin Sheldon re-envisioned this approach once again in a more progressive, child-centered educational philosophy when he restructured the curriculum of the Oswego Normal Schools around the processes of observing model and criticism lessons. Later, Hideo Takamine attended the Oswego Normal School as an emissary from the Meiji Government in Japan. During the Meiji Restoration Era, Japan established its first public education system, and used the lessons Takamine (among other emissaries) had learned about Normal School education to initiate and expand a normal school network across the entirety of Japan.

The tradition of learning through concrete observation of other teacher's lessons (both model, criticism, and, then later research lessons) has flourished in Japan over the last century and a half. From the 1960s onward, the development of the research lesson transformed Japanese Lesson Study into a model of action research. Teachers learned to work together to plan research lessons as a kind of hypothesis of how educational ideas might be enacted in practice. Collaboratively observing research lessons allow teachers to explore these hypotheses.

Lesson study can be thought of as the education of perception, which allows teachers to anticipate and appreciate more and more nuances in the planning and flow of instruction. Elliot Eisner calls this anticipation and appreciation *connoisseurship*. Over time, teachers learn to appreciate these nuances in deeper and deeper ways through observation and to disclose the example of their own instruction as a form of educational criticism that others can learn from. Elliot Eisner calls this disclosure *criticism*.

Figure A.3: Lesson Study Phases, Cycles, and Stages



Source: The Infinity Mirror, Evans (2022)

Figure A.4: Situating LS Group Goals

For Lesson Study Groups just starting out for the first time, it might be best to keep the process simple. If you are starting unofficially, perhaps you could start by getting a little perspective on where you are working by looking at the school mission and district initiative (if your school has adopted LS as an official strategy, the school should organize this step) From there, you might discuss aspects of your practice that either frustrate you as problems that need to be solved or aspects that confuse you or aspects that excite your interest as new directions to explore. You might consider how these aspects fit into relevant aspects of school mission and/or district initiatives.

Then, begin brainstorming what you want to do in your classroom teaching to fix the problem or explore the new direction. As you begin to take action, you will probably find that an LS cycle of one sort or another will come in handy. The LS cycle presented on this site is one cycle among many available. As you go through the LS cycle, you will be able to clarify your goals into an inquiry theme for the phase.

For LS Groups with more experience, you might take a little bit more time to consider the outcome of your last phase, revise the school mission based on what you learned and rank district initiatives in terms of their relevance to your needs in your school. Also you might discuss how your LS Groups Goals have changed over time through your experience with the previous cycle. Then you might revisit your LS Group Goals for this phase and write them up as your inquiry theme for the phase.

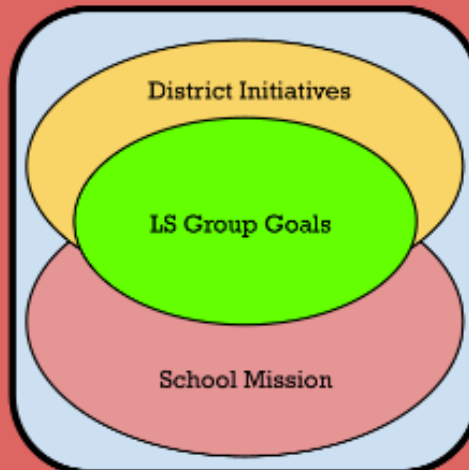
Key Points

Lesson study should move from the concrete lived experience of the LS group to more abstract concepts.

The LS group should situate its activities in the context of the school and the district.

If your school doesn't have a written mission, consider writing one.

To prevent lesson study becoming a means to impose compliance demands on the team, the LS group should always set the goals and lead the design of each phase within the context of the school mission and district initiatives.



- Provide all LS group members with school mission, vision and priorities for the year.
- Provide all LS group members with information about district initiatives.
- If it exists, provide LS group members with the executive summary of the last phase.
- Use relevant aspects of the school mission and district initiatives along with what is important to the LS Groups to set goals for the Phase.
- Cycles can be launched from LS Group Goals by choosing one aspect of those goals to focus the cycle on.
- Clarify your goals into an inquiry theme. "In this phase, we are interested in exploring ____."

Source: The Infinity Mirror, Evans (2022)

Figure A.5: Three Approaches to LS Inquiry Design		
Problem-of-Practice	Puzzle-of-Practice	Potential-for-Practice
<p style="text-align: center;">The Old</p> <p>Discuss problems you are facing in your practice. These might be topics that are discussed by saying, “This is getting really old” and “I am just done with that.”</p> <p>Be careful because discussing this too much can sap your energy and turn the discussion into a venting session. The learning can then feel old, or perhaps you are done before you start.</p>	<p style="text-align: center;">The Bizarre</p> <p>Discuss things that are happening in the classroom that are kind of baffling. These might be topics that are discussed by saying, “You won’t believe what happened.”</p> <p>These are funny stories to share and can lead to some interesting learning, but the further out there the story is, the harder it might be to change. The bizarre may be beyond our influence.</p>	<p style="text-align: center;">The New</p> <p>Discuss things that you are excited about trying out. These might be topics that start off with, “So I was on Pinterest and…” or “I heard about this cool idea…”</p> <p>New ideas are light as the wind when you imagine them, and they are as heavy as lead as you turn them into reality. A few new ideas can energize you, too many new ideas can weigh you down.</p>
Discussion Notes	Discussion Notes	Discussion Notes
How would solving this problem contribute to the focus of the cycle and phase?	How would understanding this puzzle better contribute to the focus of the cycle and phase?	How would exploring and refining this potential idea contribute to the focus of the cycle and phase?
Source: The Infinity Mirror, Evans (2022)		

Figure A.6: Cycle Design				
Based on the rhythms of the American school year, I suggest planning one to two cycles a year to begin with.				
Cycle 1				
August	September	October	November	December
Stage 1	Stage 2-3	Stage 3-4	Stage 4-5	Stage 5-6
<ul style="list-style-type: none"> Establish Community Mission & Initiatives Broader Community Input 	<ul style="list-style-type: none"> Learning exchanges Improvement Focus Knowledgeable Partners 	<ul style="list-style-type: none"> Unit Internalization Collaborative Planning Explore Materials 	<ul style="list-style-type: none"> Explore Activities Lesson Sketch Feedback Schedule Inquiry Lesson 	<ul style="list-style-type: none"> Observe Inquiry Lesson Discuss Inquiry Lesson Consolidate Learning
Cycle 2				
January	February	March	April	May
Stage 1	Stage 2-3	Stage 3-4	Stage 4-5	Stage 5-6
<ul style="list-style-type: none"> Re-Establish Community Revisit Mission/Initiatives Refresh Community Input 	<ul style="list-style-type: none"> Learning exchanges Improvement Focus Knowledgeable Partners 	<ul style="list-style-type: none"> Unit Design Collaborative Planning Explore Materials 	<ul style="list-style-type: none"> Explore Activities Lesson Sketch Feedback Schedule Inquiry Lesson 	<ul style="list-style-type: none"> Observe Inquiry Lesson Discuss Inquiry Lesson Consolidate Learning
Source: The Infinity Mirror, Evans (2022)				

Lesson Study Addresses Adaptive Challenges

Lesson Study and SMART Goals represent two very different approaches to inquiry cycles. SMART Goals start with the assumption that you know what you want to do, how you are going to do it, how long you expect your actions to take and what effect your actions will have. With these assumptions in place, the inquiry is driven by measurement of how long it takes to get where you already know you want to go. SMART Goals tend to be especially effective in steady-state situations where the challenge to overcome is technical. These challenges do exist in education, but they tend to exist within larger adaptive challenges.

Lesson Study is well suited to address adaptive challenges. While Lesson Study and SMART Goals both prioritize relevance, SMART Goal Inquiry Cycles begin with the assumption that relevance is easily identifiable. By contrast, Lesson Study Inquiry Cycles embrace the discovery of relevance as part of the inquiry process by grounding the cycle in the current practice of the team, the school and the district. An expansive exploration of the setting, materials, activities and approaches are also included in the inquiry cycle prior to getting too specific. Lesson Study is not time-bound to completion on a specific schedule. Rather, the schedule of Lesson Study is iterative, with each iteration suggesting the next. Where measured change is the centerpiece of the SMART goal, the centerpiece of lesson study is the sharing of interpretations and evaluations of observed practice.

Lesson Study starts from the idea we might not know what we should do. Lesson study allows us to explore and identify specific practices that can then be coherently integrated into our living practice with SMART goals. It can help us examine what measurements will provide the richest information. It can help us know what is likely to be achievable and by what means. It creates a community conversation about what is relevant and gives deeper meaning to collaboration around common goals. It helps give us a sense for how abstract practices fit into the often-rapid flow of time in our daily lives. Done well, Lesson Study also does something else: it reconnects us to each other, our students, and the reasons we chose to become teachers in the first place.

SMART Goals support the psychometric growth of a skill that a person has committed to improving. **Lesson Study** supports the transformative growth of a community or people working together.

Ethical Resolutions

We shall be color-cognizant and culturally humble. By placing an intentional, respectful and caring lens on the physical living bodies of those we work with and those we serve as educators, we shall affirm personhood and the right of all human beings to have access to excellent public service from all institutions in society. We shall affirm the reality of the physical **consequences** of body myths in daily life and explore how these body myths distort perception and perpetuate prejudice. We shall recognize that these myths represent neither the nature or culture of any person they harm or privilege.

We shall consider, respect and care for both our own bodies as well as the bodies of others we interact with. In pursuit of this, we shall raise our awareness of the media, institutional and historical narratives that have been inscribed into our perception of bodies. This is important because these narratives affect our collaboration with each other and often invite us into **scripts of interaction** that cause great harm, especially to those with less power in the interaction. Our institutional roles as educators tip the power imbalance in our direction when we interact with students and families.

With this institutional power, it is our responsibility to ensure that we engage scripts of interaction that empower the personhood of those in our care, including ourselves.

As Patrisse Khan-Cullors, Alicia Garza, and Opal Tometi of the Black Lives Matter movement highlight, scripts of interaction based on harmful body myths, especially in the form of race, have deadly consequences in the form of institutional violence and institutional neglect. Some of these consequences are sudden and acutely traumatic and some are chronic and cumulative; both forms are unacceptable. **An understanding of acute, chronic, and historical trauma shall inform our practice.**

It is only by naming, confronting and disrupting the media, institutional and historical narratives that invite us into oppressive scripts of interaction that we become able to reciprocally learn from each other. Failing to do this makes it inevitable that, as educators, we will perpetuate these scripts in our interaction with each other and those we serve.

It is not enough to simply name, confront and disrupt these narratives, we shall also seek out affirming and emancipatory narratives representing the demographics of the populations we serve and representing ourselves as teachers. Based on these narratives, we shall intentionally adopt and enact interactive scripts that allow each member of the population we serve to access excellent public service from the institute of education. In engaging in this work, we shall adopt the principles of cultural humility laid out by Jann Murray-Garcia and Melanie Tervalon.

LS Group Roles

Lesson Study Groups allow members of the group to take on different roles at different times. In this model, there are four main roles that LS Group members can take on: Lesson Study Group Leader, Inquiry Lesson Host, Co-Planner, and Observer.

Lesson Study Group Leader - This is the most time intensive role. The Lesson Study Group Leader is responsible for organizing the phases and cycles of lesson study and documenting how each phase and cycle unfolds. The group leader assumes a coaching role in guiding the group through the cycles, arranging more knowledgeable partners, and coaching the Inquiry Lesson Host as that person internalizes the inquiry lesson and the unit within which the inquiry lesson is situated. Additionally, the group leader helps co-planners draw connections between the Inquiry Lesson planning process and the planning processes of the co-planners in their own instruction. Finally, the group leader helps the group debrief the inquiry lesson observations at the end of the cycle, reconnecting the lessons learned to the overall theme of the phase.

Inquiry Lesson Host - After the group leader role, this is the second most time intensive role, but it also means that the whole cycle will center directly on the host's specific situation. The lesson study host will collaborate closely with the LS group leader, co-planners and more knowledgeable partners to internalize a unit from their instruction, and carefully plan an inquiry lesson. The inquiry lesson is designed to try out a new practice that might improve instruction. The idea is to find a new practice that could be used in more than just a single lesson. The Inquiry Lesson is a chance to try the new practice out and see (with the help of co-planners and observers) if it works as expected.

Co-Planners - This role is not quite as time intensive as the Host role. Co-planners join the Inquiry Lesson Host, LS Group Leader, and more knowledgeable others to learn more about the setting of the host and the content focus. Co-planners might also work with the group leader to apply what they have learned about the content focus to their own settings as well.

Observers - This role is not very time intensive. Observers aren't directly involved with the co-planning of the Inquiry Lesson, though they might learn a little more about the content focus through conversations within the group in the lead up to the Inquiry Lesson. The main involvement of observers is when it is time to observe and discuss the Inquiry Lesson. Observers will get to observe a live lesson and add their insights to how the lesson unfolded during the discussion.

Knowledgeable Partner - are hosted as guests of the LS group who contribute their perspective. This role encourages collaboration between the core LS Group and researchers, expert teachers, content experts, community members, etc. It helps to explicitly state what perspective of knowledgeability the partner brings to the group.

The Role of Knowledgeable Partners

The learning in lesson study is afforded and driven by community. This community is specifically focused on live educational practice in the specific setting of at least one of the community members, but this community is an open, interconnected community. The community of a lesson study group can also make it possible to learn from more knowledgeable partners outside the group. In addition to learning from each other, Lesson Study Groups can connect across and outside schools.

The term “knowledgeable partner” is adapted from Lev Vygotsky’s sociocultural learning theory - while most translators translate Vygotsky’s Russian terminology as “more knowledgeable other”, the substitution of partner for other seems appropriate given the connection between the term other and the practice of othering. LS is meant to affirm equal, inclusive collaboration. The word “more” was dropped because knowledgeable partners bring diverse knowledge rather than just more knowledge, providing the LS group with key insights from a perspective that might otherwise be inaccessible to the Lesson Study Group.

In the case of Lesson Study, groups might invite knowledgeable partners to provide insights from a variety of perspectives of knowledgeability. Knowledgeable partners might be knowledgeable in the practice of lesson study itself or in the practice of the instructional focus. They might be knowledgeable about the neighborhood community from which the school draws its students or the school itself.

Knowledgeable partners are guests of the core LS Group and should be treated with hospitality. When inviting a knowledgeable partner to collaborate, consideration should be given to the knowledgeable partner’s schedule and video conferencing may be an appropriate way to sustain collaboration.

Trust between the Knowledgeable Partner and the LS Group is a key component. However, in order for the Knowledgeable Partner to really contribute, the LS Group must consider how to establish a trusting relationship. From the LS Group’s perspective, consideration should be given to how to open the practice of the school to the Knowledgeable Partner - standing on ceremony or altering daily practice to impress the Knowledgeable Partner defeats the purpose of the collaboration. On the other hand, the Knowledgeable Partner must be able to trust that the LS Group is truly seeking feedback and new insights rather than praise and bias confirmation. There is risk involved in giving feedback. The collaboration should benefit the knowledgeable partner as well as the LS group.

The Inquiry Lesson vs. the Model Lesson

An Inquiry Lesson is very different from a Model Classroom. Tracing the history of lesson study back to the mid-19th Century at the Home and Colonial School in England, two types of lessons were considered essential to the education of teachers.

One type of lesson was called the model lesson and the other type was called the criticism lesson. In the model lesson, student-teachers watched expert teachers and learned to take notes on what they saw, creating lesson sketches that they could refer to later in the development of their own teaching. In the early development of the Japanese tradition of lesson study, these model lessons were used by Meiji Restoration reformers to spread Western teaching methodologies throughout Japan. **Today, model lessons are used to demonstrate new practices and innovative approaches to a broader audience** - some practices become so popular that teachers travel from all over Japan to attend model lessons showcasing them.

The second type of lesson was called the criticism lesson. In the criticism lesson, a group of student-teachers gathered to observe a peer's lesson and then discuss the implementation of the lesson according to a set of criteria. These lessons were facilitated by the headmaster of the school, who drew out student comments and then provided a final summarizing criticism that served as the final word. It was out of this type of lesson that Lesson Study was developed over the course of the 20th century in Japan.

With the advent of developmental education, the concepts of inquiry learning, and action research became increasingly central to a certain variety of the Japanese enactment of Lesson Study. In modern Japan, lesson study is enacted in a variety of ways. Some varieties of Lesson Study use the model lesson in a kind of master class format where teachers learn from others. Other varieties of Lesson Study use the criticism lesson to increase the uniformity of practice across an entire faculty or district.

The lesson study protocol presented here takes its cue from an interpretive variety of Japanese Lesson study that differs from both the model lesson variety and the criticism lesson variety. This protocol centers on the inquiry lesson, which is a place of community, exploration and discovery. In this protocol, the reflections of the host and the insights of observers helps the whole group perceive the lesson and the practice of education more generally in new and deeper ways.

Think of the inquiry lesson as a little experiment to test out your hypothesis about how you hope the instructional focus will influence students' learning. Teaching takes up a lot of our observational powers as we balance what we need to do next with making sure students are on task. We are constantly balancing the various demands on our attention, which leaves little attention left over to really observe how the new elements we are inquiring into influence student learning. Having peers observe allows us to expand the attention we have available for our inquiry, and it allows us to get others' perspectives.

Figure A.7: Revised Stage 1 Description

Stage 1 Description

In this stage, the lesson study (LS) group discusses the various missions (team, school, district, etc) that serve to ground the cycle and come to a common initial understanding of them. This stage is a key time to get input from the broader community of students and families as well..

Based on this understanding, the LS group identifies a problem-of-practice and a general inquiry question or focus to guide the cycle. For larger LS groups, the group might divide into sub-groups of 2-7 people at this point. The sub-groups would pursue Stages 1-4 separately and might recombine into the larger group or part of the larger group for Stages 5-6.

Learning at this stage might take place by reflecting on the school/team mission and the various ways the mission is and is not being brought to life in the daily practices of the school.

Key Focus Points

Schedule time to build community amongst the team. When planning meeting agendas, leave half the time unstructured. Consider activities like: a potluck, making a pot of coffee for the lesson study group, do home visits, host a school-family connection event.

While there is no maximum size for LS groups, sustaining conversations with more than 7 people can challenge the community of the group. Groups with less developed community may find groups larger than 2 or 3 difficult.

The missions act as a guide, but the inquiry should be designed by the group itself as a formative activity.

Lesson Study Cycle

Stage To Do List

- Build community in the lesson study group and connect to the broader community..
- Reflect on the various missions in which the group's work is embedded.
- Identify areas of past strength and weakness in relationship to the various missions.
- Preview the various settings in which the members of the group teach.
- Consider continuity with the foci of previous cycles, or if appropriate, start a new phase.
- Choose a topic to explore that is inclusive of the roles and interests of all group members.
- Identify a common problem-of-practice or a puzzle-of-practice or a potential-for-practice.
- Write an inquiry question to explore the focus of the cycle.

Source: The Infinity Mirror, Evans (2022)

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Figure A.8: Revised Stage 2 Description

Stage 2 Description

As a group, use visual thinking strategies to explore the settings in which the members of the LS group teach. The LS group might explore how the classroom set up and culture make certain activities easy or hard to teach. The group might also notice what materials are present and what materials might make teaching richer. This is also the stage where the LS Group might work towards becoming color-cognizant, exploring narratives of race, ethnicity, class, and/or gender shape the setting of the classroom and how languages are used within it.

Learning at this stage might take place by visiting each other's classrooms and exploring the materials, activities and approaches that might be useful in planning the Inquiry Lesson. Focus on how physical aspects of the room (the arrangement of furniture, the objects in the room, the demographic identities of participants, the curriculum, the learning needs, etc.) influence the flow of learning.

At some point over the course of Stage 2 and 3, it will become appropriate to take on roles such as host, co-planner, and observer. The host role requires the largest time commitment, but also makes the lesson study about the host's specific situation.

Key Focus Points

Instead of imposing someone else's ideas, lesson study moves from observing the concrete setting to designing coherent education. Close attention to physical settings and the people in those settings, helps make this happen.

By discussing the various settings in which group members practice in depth, the group opens the door for more extensive collaboration and meaningful conversation. An observation is worth 1000 words.

When discussing social narratives, base comments respectfully in specific observations and seek out various possible interpretations inclusive of the communities represented.

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graph TD
    A[PLAN THE LESSON] --> B[OBSERVE THE LESSON]
    B --> C[DEBRIEF THE LESSON]
    C --> D[REFLECT ON THE LESSON]
    D --> E[PLAN THE NEXT LESSON]
    E --> A
            
```

Lesson Study Cycle

Stage To Do List

- Describe the settings of all members of the LS group using visual thinking strategies.
- Engage in learning exchanges to observe, discuss and learn from the practice of others.
- Describe/diagram the physical setting in which the Inquiry Lesson will take place.
- Discuss the structure/objective of the units in which the Inquiry Lesson might be embedded.
- Learn deeply about the demographics represented in the room (consult IEPs, 504s, knowledgeable partners in students families and the communities the school serves).
- Create an inventory of all materials, activities and approaches that may be relevant.
- Identify the grade level and subject area in which the Inquiry Lesson will be conducted.
- LS Group members choose a role (host, co-planner or observer).

Source: The Infinity Mirror, Evans (2022)

Figure A.9: Revised Stage 3 Description

Stage 3 Description

As a group, identify the instructional focus - this means identifying how the group plans to influence student learning. The instructional focus should either 1) help us enact the school/group mission in daily life or 2) represent a practice that might need to be more deeply examined in light of current conditions & district initiatives.

This practice should be something that the team can come to consensus on as being an area where additional learning is 1) possible, 2) connected to the problem-of-practice and 3) salient to a unit at least one (willing to host) member of the LS group will be teaching in the timeframe of the LS cycle. To provide context, the LS group might write out a description of the unit including reflections on the various student readiness levels for the learning of the unit.

Learning at this stage might take place by learning from team members and knowledgeable partners. Part of the work will involve adapting research literature and the examples of other teachers to fit the specific setting in which the inquiry lesson will take place. This will mean that the team needs to cycle back to the Setting Focus stage.

Key Focus Points

The instructional focus is not the same as a subject area like math or literacy or wellness. It should be a specific set of skills or way of interacting with the lesson content that can be taught through concrete set of activities, materials and approaches. Ideally, the instructional focus can be integrated into many different subject areas as students represent, comprehend, communicate & reflect. .

There is no need for the Inquiry Lesson host to be skilled in the instructional focus - the purpose of lesson study is to learn, rather than present a model lesson for others.

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graph TD
    A[INQUIRY DESIGN] --> B[SETTING FOCUS]
    B --> C[INSTRUCTIONAL FOCUS]
    C --> D[USE THE INQUIRY LESSON]
    D --> E[OVERVIEW THE INQUIRY LESSON]
    E --> A
            
```

Lesson Study Cycle

Stage To Do List

- Gather information about the instructional focus (videos, articles, podcasts, experiences, etc.)
- Consider the history of the instructional focus in all demographics represented in the setting.
- Reflect on how the instructional focus is connected to missions/initiatives grounding the cycle.
- Consider how the instructional focus connects to various subject areas (i.e. math, literacy, etc.)
- Identify how the instructional focus connects to the focus of the cycle.
- Return to consider the instructional focus might change the overall settings studied in Stage 2.

Source: The Infinity Mirror, Evans (2022)

Figure A.10: Revised Stage 4 Description

Stage 4 Description

Planning the Inquiry Lesson is the group's chance to find a way to test out whether our instructional focus works the way we think it will and to find out the instructional focus fits into and is supported by the materials, activities and approaches explored during the setting focus stage.

To do this, the group might produce a lesson sketch articulating the lay-out of the room, the planned use of materials, activities, and approaches. The group could also write out predictions about how these materials, activities and approaches are expected to facilitate interactions between teacher actions, student actions and the learning objective. Consideration of the qualities of the actual students in the hosting classroom (their cultures, current levels, interests personalities, etc.) might improve the quality of the predictions.

Learning at this stage might take place by discussing predictions about how teachers and students are likely to interact with the materials, activities and approaches in ways that facilitate learning.

Key Focus Points

The purpose of lesson study is not to create a polished lesson for future use. That is just a side benefit. Instead, the purpose is to explore how our predictions about how materials, activities & approaches designed to address the problem-of-practice play out in live practice.

The collaborative planning process shifts the focus from an individual teacher's performance to a focus on what the group can learn together by focusing on a content, a setting and the interactions of students and teachers in live practice.

```

graph TD
    A((INQUIRY DESIGN)) --> B((SETTING FOCUS))
    B --> C((EDUCATIONAL FOCUS))
    C --> D((PLAN THE INQUIRY LESSON))
    D --> E((DESIGN THE INQUIRY LESSON))
    E --> A
    
```

Lesson Study Cycle

Stage To Do List

- Identify the approach the teacher will take to incorporate the content focus.
- Create a lesson plan that identifies the learning objective.
- Create an agenda of activities with materials used in the activities.
- Predict expected interactions between, educators, students, activities & materials.
- Describe how these interactions are connected to the approach identified.
- Describe how these interactions carry the lesson toward the learning objective.
- Describe how the Inquiry Lesson is designed to address the focus of the cycle..

Source: The Infinity Mirror, Evans (2022)

Figure A.11: Revised Stage 5 Description

Stage 5 Description

The hosting group member engages in the inquiry lesson with his/her students while the rest of the lesson study group observes the lesson.

The focus of the observation is on the capacity of the lesson design to draw out the intended learning (i.e. were the LS groups predictions about materials, activities and approaches confirmed). More broadly, the focus of the observation is to explore what it is that the students learned from the lesson (whether that learning was intended or not).

Learning at this stage might take place by observing students carefully using a variety of observational lenses

Key Focus Points

Observing group members may organize their observations in a number of ways, but observations should generally be low-inference.

The focus of a lesson study observation is not on the hosting teacher's performance according to a pre-determined set of criteria

Sometimes it is necessary to videotape the inquiry lesson so the rest of the lesson study group can observe at a later time. Photos of materials, activities, and people may also be useful to collect.

Lesson Study Cycle

```
graph TD; A[INQUIRY DESIGN] --- B[SETTING FOCUS]; B --- C[INSTRUCTIONAL FOCUS]; C --- D[PLAN THE INQUIRY LESSON]; D --- E[DISCUSS THE INQUIRY LESSON]; E --- A;
```

Stage To Do List

- Create a plan for how to organize observations (observational lenses, protocols, etc.)
- Create a plan for how to record observations (i.e. sticky notes, notes on lesson plan, etc.)
- Decide if it is possible to observe the lesson live or if the lesson needs to be recorded.
- If the lesson is recorded, consider what needs to be captured on film (i.e. student actions may be more interesting than teacher actions, more than one recording angle may be helpful, etc.)
- Decide if it would be valuable to take photos during the Inquiry Lesson to capture student actions and reactions, student work, white board usage, etc.

Source: The Infinity Mirror, Evans (2022)

Figure A.12: Revised Stage 6 Description

Stage 6 Description

The lesson study group meets to discuss inquiry lesson observations. The hosting group member begins with reflections on the easiness/difficulty of teaching the lesson, and how the teaching did and didn't go according to plan. The LS Group then share their observations and the collected evidence (photos, student work, etc.) in order to interpret and evaluate what was observed during the Inquiry Lesson. The LS group might reference the focus of the cycle and phase, the inquiry questions and the grounding missions in their interpretation and evaluation of the observation.

The learning at this stage might result in themes that can be taken away from the cycle as a whole organized around the questions: "How did the instructional focus work out in a live lesson?" and "Did the lived experiences connect to the research theme or problem of practice?"

Key Focus Points

The Lesson Study cycle is a place to learn about the art of teaching. Taking the time to build community is especially important in the discussion stage.

Aspects of the Inquiry Lesson plan that were difficult to teach represent valuable learning for the group - the focus is not on the hosting teacher's performance. Observing members should focus on what happened, and on ideas they got for their own teaching in the future, not on what they might've done if they had hosted instead.

```

graph TD
    A[ISUARY DESIGN] --> B[INQUIRY FOCES]
    B --> C[INSTRUCTIONAL PHASE]
    C --> D[PLAN THE INQUIRY LESSON]
    D --> E[CHALLENGE THE INQUIRY LESSON]
    E --> F[REFLECT THE INQUIRY LESSON]
    F --> A
            
```

Lesson Study Cycle

Stage To Do List

- Meet as a full LS Group to discuss the Inquiry Lesson after the observation.
- Allow some informal time to build community at the beginning of the discussion.
- Review the grounding missions, problem-of-practice, and inquiry question.
- Allow the hosting teacher a chance to share reflections on the enactment of the Inquiry Lesson.
- Share low-inference notes and review any photo evidence, student work, etc. collected.
- Interpret the lived experience of the Inquiry Lesson as a group by adding inferences to notes.
- Evaluate aspects of the lesson that contributed to student learning (expected and unexpected)
- Draw out some themes that emerged from the inquiry in relation to the content and setting foci.

Source: The Infinity Mirror, Evans (2022)

Figure A.13: Post-Cycle Consolidation Description

Post-Cycle Consolidation Description

Lesson Study takes place in phases. Phases are given coherence by the grounding missions and the problems-of-practice. Each phase contains several cycles, and each cycle is driven by an inquiry question.. Sometimes the phase is focused on a particular setting (a grade level or a subject area), and the content focus of one cycle leads to the content focus of the next cycle. Sometimes the content focus remains the same and with each new cycle the setting focus shifts (to a new grade level or new subject area or a new hosting teacher or a new unit or a new lesson within a unit). At a certain point, when it is time to shift the problem-of-practice, the mission focus or even the mission itself, the Lesson Study Group may choose to bring one Phase to a close and open a new phase.

Key Focus Points

The Lesson Study Group may wish to share their experience in the cycle with other group members.

The lesson study group might think ahead to the Inquiry Design stage of the next cycle to think about whether to carry forward with another cycle in the same phase or to close out one phase and open a new one.

The Lesson Study Group may wish to celebrate the accomplishment of bringing a cycle full circle.

```

graph TD
    ID[INQUIRY DESIGN] --> SF[SETTING FOCUS]
    SF --> CF[CONTENT FOCUS]
    CF --> P[PLAN THE INQUIRY LESSON]
    P --> D[DISCUSS THE INQUIRY LESSON]
    D --> ID
            
```

Lesson Study Cycle

Stage To Do List

- Collect all the artifacts (lesson plans, pictures, notes, graphic representations, etc.)
- Revisit the main themes learned in the LS Cycle
- Revisit understandings of the problem or puzzle or priority of practice around which the cycle was organized.
- Map out how the lessons learned in this cycle raise questions to explore in the next cycle.
- Choose a recording medium (video, writing, etc) and summarize the experience including the elements above.
- Celebrate together.

Source: The Infinity Mirror, Evans (2022)

Figure A.14: Consolidating a Phase

Consolidating a Phase

At a certain point, a phase will come to a close. This might happen according to a plan (for example, the LS Group may have decided on how long the phase will last at the beginning). It may happen because the phase has lost its energy and cycles are no longer generating new questions about the phase theme that are interesting enough to explore in a next cycle. It may also happen because the school faces some change or need from the community that requires a shift in direction (perhaps the school's mission changes or a pressing new district initiative is introduced or perhaps some change in the LS group causes it to change its goals.

The purpose of a phase is to provide stability over time, so the LS Group should intentionally make the decision to close out one phase and open a new phase. In order to keep LS from becoming reactive, the team should probably sit down and look back at all the various cycles within the phase being closed out. It might be a good idea to summarize one or two key learning points from each cycle as a cover page.

Key Points

Lesson study should be intentional and long term rather than reacting to the problem of the day.

The LS Group should set a process for closing out a phase and capturing what was learned in a concise form so that these ideas can be revisited in the future.

The diagram consists of three overlapping ovals within a light blue rounded rectangle. At the top is a yellow oval labeled 'District Initiatives'. At the bottom is a pink oval labeled 'School Mission'. In the center, overlapping both the yellow and pink ovals, is a green oval labeled 'LS Group Goals'.

- Collect all the cycle consolidation documents from each cycle within the phase.
- Revisit them as a team and summarize key points learned in each cycle.
- State why the phase is being closed out.
- Identify how the phase contributed to the work of the school and consider revisions to school priorities, school mission and LS Group goals.

Source: The Infinity Mirror, Evans (2022)