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"Wait, watch this....What do you see?": Conceptualizing Mentor Practice in the Context of a Video Club for Induction Mentors

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“Wait watch this . . . what do you see?”

Conceptualizing Mentor Practice in the Context of a Video Club for
Induction Mentors

A Dissertation by

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Submitted in partial fulfillment of the requirements for the degree of
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August 2024

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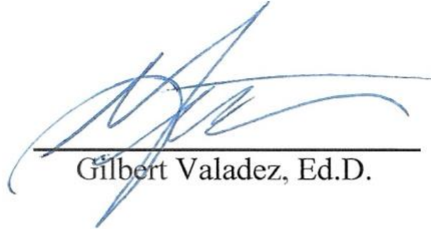
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“Wait watch this . . . what do you see?”

Conceptualizing Mentor Practice in the Context of a Video Club for Induction Mentors

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I have benefitted immensely from the guidance and support of scholars, teachers, activists, and friends who have, in one way or another, shaped my thinking and the trajectory of my educational career and professional life. When we pause to reflect on the major turning points in our lives, there is no doubt a mentor who has served as witness, confidant, and friend along the way. I am indebted to several mentors from Chapman University for their tireless service on my behalf. Thank you to Dr. Tara Barnhart for her guidance and support throughout the study and for showing me that to collect high-quality data one must be a high-quality person. Her faith in teachers and students is inspiring. I am grateful to Dr. Scot Danforth for believing in me and for advocating for a research focus for graduate students in education. He showed me what it means to be a scholar–activist. Thanks to Dr. Gilbert Valadez for providing the spark that inspired me to pursue a doctorate. A special thank you to Dr. Margaret Grogan for her thoughtful, extemporaneous teaching and parsimonious approach to qualitative inquiry. The summer class she taught while Dean of Attallah College was a turning point in my doctoral studies. Thank you to Dr. Brenda Hall for introducing us to Nvivo, which I used extensively for data analysis. And I appreciate Dr. Peter McLaren for sharing his intellectual gifts and critical mind. His work is foundational for students of educational philosophy. I am grateful for Dr. Laura Burns for her careful attention to detail and for putting students first. And I very much appreciate Dr. Keith Howard’s support. I’d like to thank my dad for plying the trade he learned in Mexico to make us our very own “Happy Corner” in the United States. His experiences growing up poor and becoming a tailor in Tijuana have informed who I am as a person, my research agenda and teaching practice. And thank you to mom for her stubborn faith in a better life—for everyone!

ABSTRACT

“Wait watch this . . . what do you see?”

Conceptualizing Mentor Practice in the Context of a Video Club for Induction Mentors

by Victor Vega

Due to current teacher shortages, there is renewed interest in mentoring beginning teachers for induction. Induction is an intellectually rigorous process of enculturating novice teachers into the professional teaching community (Carver-Thomas et al., 2020). Induction programs build on novice teachers’ experiences in university teacher preparation programs by providing intensive mentor support (Commission on Teacher Credentialing, 2016). Induction programs are required to establish robust mentoring systems, which include training and meaningful support for mentors. This study examined how a video club model (van Es & Sherin, 2004) supported induction mentors in their professional learning. Understanding mentor professional learning in the context of induction programs is important because approximately half of new teachers leave the profession within their first 2 years (Carver-Thomas et al., 2020). A group of induction mentors participated in a series of professional development meetings in a video club context. Initially designed to assist mentors in analyzing video of novice teachers’ instructional practices, the video club focus shifted to analyzing video recordings of mentor practices. Individual mentor interviews were audio recorded both prior to and after video club participation. A reflexive thematic analysis of the interview transcriptions (Braun & Clarke, 2006) showed how the video club influenced mentor knowledge and practice. The practice of highlighting and discussing significant features of coaching conversations and leveraging video of classroom instruction during coaching conversations led to new conceptualizations of mentoring for induction.

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CHAPTER 1: DISSERTATION INTRODUCTION

The current teacher shortage and educational policy environment has brought teacher induction programs to the fore as an intellectually rigorous and relational process for developing and certifying beginning teachers (Carver-Thomas et al., 2020). A critical, yet understudied component of induction programs is mentor practice (Ingersoll & Strong, 2011). The purpose of this study was to understand professional learning from the perspective of induction mentors. Exploring the relationship between the induction context and mentor practice is critical because approximately half of new teachers leave the profession within their first 2 years (Ingersoll & Strong, 2011). An underlying assumption of this study was that beginning teachers have not yet had the kind of guidance and support that leads to a better understanding of teaching. Induction mentors may help to instill the kind of intellectual curiosity in novice teachers that may persuade them to stay in the classroom and make teaching a lifelong vocation.

This chapter is organized in the following way. First, the design and rationale for the study are briefly outlined. Next, the research questions guiding the study are listed followed by a statement of the problem of mentoring in the context of induction. Next, the significance of the study is detailed. Specifically, this part describes how this study extends prior research on mentor professional development and why the problem of mentoring in the context of induction is worthy of study. Lastly, the organization of the remainder of the study is presented.

Design and Rationale for the Study

A qualitative case study approach (Thomas, 2016; Yin, 2018) was selected to explore teacher induction from the perspective of mentors who participated in a video-based professional development model referred to in the literature as video clubs (van Es & Sherin, 2004). The

study engaged a group of induction mentors in monthly video club meetings from Fall 2018 to Spring 2019. The monthly video club meetings were designed to assist mentors in analyzing videos of their candidates' instructional practice and to analyze videos of their own mentoring practice over the school year. Individual interviews were audio recorded both prior to and after the video club intervention. Interview transcripts were coded and analyzed systematically and recursively (Braun & Clarke, 2006, 2021).

First, this study examined how mentors analyzed video-recorded classroom instruction during video club meetings and in their ensuing coaching conversations with beginning teachers. Second, it examined how mentors leveraged video in coaching conversations with beginning teachers. Third, it analyzed how mentors discussed coaching conversations with other mentors during video club meetings. The following research questions guided inquiry into the topic of video clubs as a professional development model for induction mentors.

Research Questions

1. How do mentors understand video club practices in the context of teacher induction?
2. How do mentors' understandings of teacher induction influence video club practices?
3. How does video club participation influence mentor practice in teacher induction?

Statement of the Problem

In 2016, the Commission on Teacher Credentialing (CTC) in California adopted the new teacher induction program standards (TIPS). TIPS was designed to extend the “knowledge and skills gained during the Preliminary Preparation program and implement a robust mentoring system . . . that helps each candidate work to meet the *California Standards for the Teaching Profession*” (CSTPs; CTC, 2016, p. 1). Induction programs serve as the bridge from initial teacher education programs to full membership in the professional teaching community.

Induction programs also must, as a precondition for accreditation, provide training for mentors and ongoing support with individual mentoring challenges, reflection on mentoring practice, and opportunities to engage with mentor colleagues. It is hypothesized that a mentor video club can contribute to solving the problem of mentor training in the context of induction.

TIPS requires local education agencies to train mentors to assist teacher candidates with goal setting and best practices in adult learning. Induction programs also are required to support mentors in the appropriate use of mentoring instruments (CTC, 2016). The focus of this study was to explore the potential for video to be used as an instrument for mentor learning in the context of induction. Although very few video club studies have been designed for mentors, the effectiveness of video club models for professional development have been established (Borko et al., 2015; Jacobs et al., 2010; van Es, 2012; van Es et al., 2019).

There is an urgent need for mentoring practices that encourage teachers to stay in the profession (Bleiberg et al., 2023; Carver-Thomas et al., 2020). TIPS explicitly states that mentors must “serve to strengthen the candidate’s professional practice and contribute to the candidate’s future retention in the profession” (CTC, 2016, p. 2). In addition to providing candidates with timely support, mentors assist the candidate in developing an individualized learning plan (ILP), which documents the candidates progress toward mastery of the CSTPs. TIPS’s expectations for mentors include guiding candidates in reflection and feedback on classroom practice, modeling classroom instruction, reviewing and adjusting the candidate’s ILP, connecting candidates to resources, and providing foundational knowledge to promote long-term professional growth. Although mentor training is a critical component of teacher induction, conceptions of mentor knowledge and practice have been problematic for educational researchers (Crow, 2012). The next section outlines theories of mentor knowledge and practice related to teacher induction.

Conceptualizing Mentor Practice

This case study was focused on a program of support for mentors working with new teachers using video observations as a tool for discussion among mentors in a video club. Although use of video in the context of teacher induction is not new, observations of mentor practice in video clubs is a novel approach to mentor professional development research (Barnhart & Vega, 2021). This section provides a brief overview of the mentoring models that guided this study. First, a critical constructivist model (Tang, 2012) for mentor practice is described. Next, Mullen and Schunk's (2012) four phases of mentoring relationships are explained. Finally, educative mentoring (Cherian, 2007; Schwille, 2008) is suggested as a model for understanding mentor practice in the context of a video club. This model was included because, as Mullen (2012) noted, mentoring is steeped in theory. Educative mentoring emphasizes a more pragmatic approach to professional mentor practice.

Mentoring is a highly contextualized activity with the potential to transform educational practice. Tang (2012) suggested a critical constructivist framework to illustrate the knowledge mentors need to challenge inequitable systems and practices. The critical constructivist model situates mentor practice in the broader contexts of higher education and educational policy. Specifically, mentors practice within initial teacher education and induction programs as well as continuing professional development settings. The critical constructivist model considers both the institutional contexts and educational policy landscape in which mentors practice.

A Critical Constructivist Approach to Mentor Practice

Tang's (2012) critical constructivist model conceptualizes mentoring using three key constructs: (a) humanistic mentoring, (b) situated learning theory, and (c) critical constructivism. The humanistic conception of mentoring emphasizes teacher learning as a process of developing

an understanding of oneself in relation to society. Humanistic mentoring involves motivating novice teachers by meeting their social and emotional needs (Tang, 2012). In the literature, this is often referred to as the counseling aspect of mentor practice (Sundhi, 2007). Humanistic mentoring is considered a form of psychosocial support for novices (Mullen & Schunk, 2012).

Secondly, a critical constructivist mentor model is grounded in situated learning theory (Lave, 2011). In this view, learning is a highly contextualized process, and knowledge is defined as appropriation of the broader community's tools and ways of knowing to accomplish purposeful tasks. Knowledge is defined as social and cultural practice. According to Tang (2012), "The situated conception, which stresses teachers' construction of knowledge in contexts of practice, may lead to transformation of knowledge and practice within existing institutional parameters" (p. 483). In other words, situated mentoring seeks to transform knowledge through participation in existing social structures. For example, in professional learning communities within schools, teachers engage in collaborative inquiry into various educational structures (e.g., curriculum and assessment) that affect student learning. Mentors play a key role in professional learning communities as facilitators and bearers of knowledge.

Lastly, critical constructivism in education views mentoring as a process of interrogating existing knowledge and co-constructing new knowledge with the aim of transforming institutional policies and practices. With this knowledge, mentors cultivate a strong commitment to social justice and to serving communities that have been historically marginalized (Tang, 2012). According to Tang (2012), all three conceptions—humanistic, situated, and critical constructivist—are needed for mentors to navigate the complicated process of teacher learning and the expectations of educational leaders and policy reformers.

Healy and Welchert (1990) characterized the nature of mentoring relationships as dynamic and reciprocal, emphasizing that both novice and expert benefit from professional learning. The beginner seeks to be recognized as an autonomous, capable colleague, and the mentor finds a creative outlet and a renewed interest in educational issues. Healy and Welchert stressed the satisfying nature of mentoring a novice as motivation for mentors to share their expertise. Reciprocity and achievement of an identity transformation are what distinguishes mentoring from supervising. They asserted:

Mentors transmit a complex legacy of professional acumen that reflects their own unique ability to identify salient issues and heuristics in the work environment. They cultivate qualitative changes in the protégé's approach to tasks rather than his or her immediate productivity. (Healy & Welchert, 1990, p. 18)

The issues and lenses for interpreting events that stand out to mentors are particular to each mentor based on their own professional knowledge and expertise. Healy and Welchert maintained that mentoring relationships are shaped by individual personalities, shared history, and the varied commitments to numerous professional learning communities within schools.

Likewise, J. H. Shulman (2004) noted mentoring in schools can be challenging due to the “constraints of competing agendas” (p. 399). The demands placed on teachers can limit the nature of interactions they have with colleagues and with their students as well as curtail teachers' efforts to sustain new instructional practices. Mentors can help beginning teachers to evaluate which approaches, strategies, or innovations are most practical. Noddings (1986) suggested this process of guidance is dependent on teachers' attitudes toward their guides. On the other hand, it is an orientation toward structural change that emphasizes the social value of experimentation beyond the context of schooling children. Noddings (1986) explained:

There is an attitude to be sustained and enhanced as well as a set of skills to be learned.

By working with master teachers whose fidelity is to persons, new teachers will have an opportunity to learn that this fidelity induces a drive for competence, more and deeper learning, responsible experimentation with instructional arrangements, considered suggestions for structural changes in school, and the exercise of imagination in resolving conflicts. (p. 504)

Nodding's (1986) notion of fidelity to persons illustrates the important role mentors play in motivating novice teachers. A mentor's professional regard for their mentee can serve as motivation to improve instructional practice, cause to transform institutional structures, and as inspiration to "imagine" new educational possibilities. The next section explores more specifically how mentors interact with novices in thoughtful and practical ways.

Four Phases of Mentoring Relationships

Based on Kram's (1985) work, Mullen and Schunk (2012) detailed how mentors can build and sustain relationships in education. According to Mullen and Schunk, successful mentoring relationships unfold in four phases: (a) initiation, (b) cultivation, (c) separation, and (d) redefinition.

Initiation

During the initiation phase, a novice begins a process of self-exploration regarding their goals and the type of mentoring they need. They may seek recommendations for mentors from peers or experts or observe mentors in action. This kind of self-appraisal and help seeking is the groundwork necessary for developing an appropriate disposition toward a new mentoring relationship. It can help the novice evaluate whether a given mentor is an appropriate match. Mullen and Schunk (2012) used the example of a student who wanted to become more assertive

and intentionally planned her learning with this goal in mind. She entered into a partnership with a confident, successful female mentor who had a similar path in education.

Once immersed in the initiation phase, the mentor and novice warm up to each other by developing a common language and shared interests. Some of the ways novices establish a positive rapport with their mentors is by seeking advice and feedback focused on professional development. As a form of career counseling, mentors guide novices by asking questions to clarify goals and priorities for learning. As the mentor–novice relationship continues to develop, novices learn more about their mentor’s personal style, and mentors assess the novice’s skills, needs, and potential. A major goal for the novice during the initiation phase is to learn the mentors’ thinking processes.

The initiation phase may be considered informal when stakeholders agree to work together more or less spontaneously. In a formal relationship, a third party (e.g., department chair or school principal) brings the parties together, or they may be matched through a structured mentoring program as is the case with induction or teacher preparation programs. In the context of induction, school district policy defines mentor roles and responsibilities. For example, induction mentors are obligated to support novices in the development and enactment of an ILP and for providing consistent and timely feedback on progress toward their goals. Once initiated, the mentoring relationship can move to the cultivation phase, which is described next.

Cultivation

The cultivation phase in a mentor and novice relationship is characterized by informal and formal conversations and responsive, constructive feedback. During cultivation, the mentor assists the novice in refining learning goals and sustaining motivation by modeling learning strategies and developing an awareness and understanding of the novice’s strengths and needs.

Novice teachers look to mentors to affirm their progress and for corrective feedback. Mentors support novices through professional development practices, such as managing cognitive load, goal setting, and providing practical social support (Sims et al., 2023).

As novices ask for and receive more sophisticated levels of feedback, mentor conversations become increasingly important. Conversations provide novices with a road map to extend and deepen their learning. Consistent communication, productivity, dynamic dialogue, feedback, and changes to practice are some of the observable features of the mentoring relationship during the cultivation phase. The rigor of the work in which mentors and novices are engaged increases the level of trust and intensity of the relationship. Mullen and Schunk (2012) noted “intensity makes the difference” (p. 96). They asserted, “The extent to which mentoring relationships are passionately committed to a shared purpose helps determine the level of cultivation, the quality of the relationship, and the kind of work that gets accomplished” (Mullen & Schunk, 2012, p. 96). Basically, mentoring is about more than fulfilling the functions of formal certification or social support. Instead, mentors build trust and commit to supporting novices in their instructional practice (Schwille, 2008).

During cultivation, novices are most likely to take charge of their own learning by seeking higher levels of critique and by producing examples of their learning for mentors (Mullen & Schunk, 2012). Video clubs can serve as a vehicle for novices to show they have responded to mentor feedback and implemented new strategies into their teaching practice (Barnhart & Vega, 2021).

After an extended cultivation period, the mentor and novice relationship shifts to one of reciprocity and collegiality (Mullen & Schunk, 2012). Both mentor and novice make personal and professional gains through reciprocity in the sharing of needs and knowledge. However, as

the aim for the novice is autonomy and the development of a professional identity separate from their mentor, the relationship inevitably moves into the separation phase (Mullen & Schunk, 2012).

Separation

In the separation phase, the novice establishes their independence from the mentor. Mullen and Schunk (2012) observed that this phase is not always a positive experience; the mentoring relationship may end abruptly, or it could be a protracted negative experience. In either case, this phase is an opportunity for both parties to decide if the relationship will be redefined and preserved or if it will be terminated. Regardless of the outcome, confident mentors will support beginning teachers in the formation of their professional identity. New teachers with a realistic appreciation of their own and their mentor's abilities will likely manage emotions well and weigh the benefits of redefining and continuing the relationship. Mentors, too, must decide if continuing the relationship is aligned with their own values and professional goals.

As intensive support is decreased, mentors can work with novices to evaluate the learning that occurred and celebrate the novice's progress. Mentors may introduce their novice learner to newcomers (i.e., teacher induction candidates) in need of additional support. During this phase, the novice teacher may have turned their attention toward securing full-time employment. In the context of induction, for example, the teacher candidate's attention may be more focused on questions of permanent employment or networking within the school or district to secure an appropriate teaching position. Mentors can provide focused support for beginning teachers with job leads, letter writing, and interviewing skills. In this example, the mentor and novice's collaboration is a positive signal that closure has been negotiated.

Redefinition

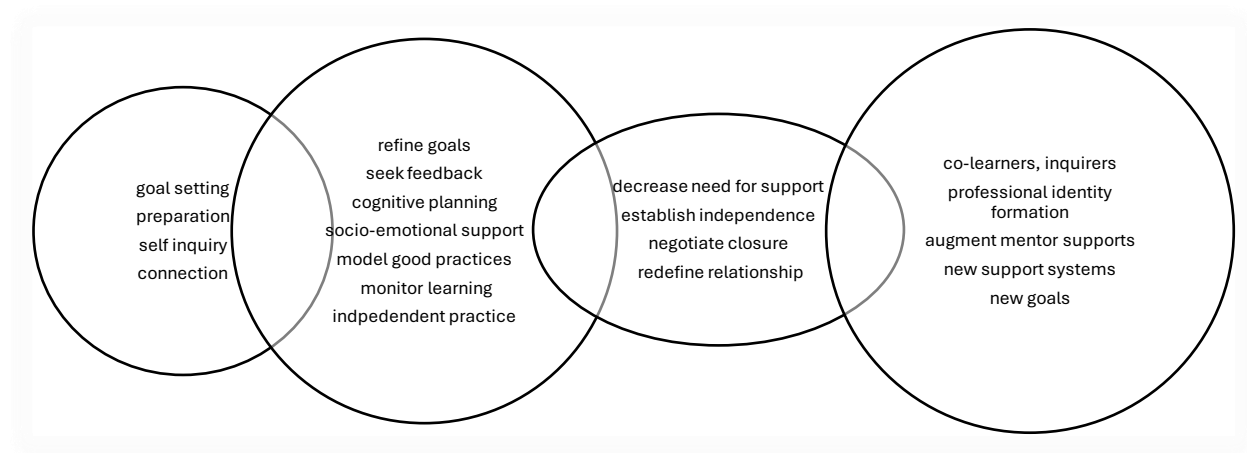
The redefinition phase of the mentor–novice relationship is characterized by peer-like connection and the goal of self-actualization for the novice. The novice teacher, for example, may transform their identity from having previously defined their teaching practice in relation to their mentor to now augmenting their practice with new tools and strategies. They build on what they have learned by exploring meaningful questions about who they are and setting new goals for teaching and learning (Mullen & Schunk, 2012).

Redefinition may mark the beginning of a lifelong intellectual journey (Mullen & Schunk, 2012). New teachers will have to prove themselves often in their instructional practice and professional evaluations based on formal standards. Teachers in redefinition may seek to improve instructional practice through professional development and by initiating new relationships of support. Teachers may become mentors themselves, further deepening pedagogical knowledge and practice (Mullen & Schunk, 2012).

Mullen and Schunk (2012) stated protégés “on a journey of self-development and mastery have moved from the initiation to the redefinition phase, experiencing a shift from social regulation, to guided self-regulation, to independent self-regulation” (p. 102). In other words, professional autonomy depends on a novice’s ability to do more than appropriate their mentor’s practice. They are increasingly self-directed and intrinsically motivated to develop their own teaching practice and professional identity (see Figure 1).

Figure 1

Mentoring in Four Phases: Initiation, Cultivation, Separation and Redefinition



Note. Adapted from Mullen and Schunk, 2012—phases listed from left to right.

The 4-phase model illustrates how each phase overlaps with the next. The first circle shows the key ideas in the initiation phase, and the second circle shows the cultivation phase followed by separation and redefinition. Importantly, Mullen and Schunk (2012) stated the cultivation phase is the longest in duration, lasting from 2–5 years, depending on whether the mentoring relationship is formal or informal. Correspondingly, the model shows the relative length of time for each phase by the relative sizes of the ellipses. The separation phase is typically the shortest and is sometimes entirely omitted as part of the mentoring process (Mullen & Schunk, 2012).

Educative Mentoring

The term educative mentoring was advanced by Feimen-Nemsur and Rosaen (1997) to prioritize a conceptualization of professional practice for mentors. According to Feiman-Nemsur and Rosaen, mentors guide new teachers in understanding the conceptual, contextual, and relational aspects of teaching and learning. They argued that a novice's professional dispositions

are as important as the skills to be learned and that developing dispositions such as equity orientations or relational approaches to learning in novice teachers is part of the work of mentoring. This section outlines the conceptual, contextual, and relational dimensions of educative mentoring and how they interact to inform professional mentor practice.

Educative mentoring is rooted in Dewey's (1938) theory of educative experience and informed by sociocultural theories of knowledge, which view learning as a process of internalizing concepts mediated by a more capable guide (Schwille, 2008). Drawing on Vygotsky's (1978) notion of the zone of proximal development, a knowledgeable mentor scaffolds the learning of a novice teacher until new knowledge is internalized. Professional mentors engage teachers in the intellectual and practical work of teaching when they intentionally frame learning to teach as a context-specific and continuous process of reflection on practice. Therefore, educative mentoring is the professional practice of helping "novices get inside the intellectual and practical tasks of teaching" (Schwille, 2008, p. 139).

To clarify, educative mentoring integrates a relational approach to mentoring involving the whole person—feelings, interests, personal values, and cognition—with conceptual practices (e.g., organizing curriculum for inquiry) and contextual practices (e.g., creating community and negotiating learning goals). Likewise, in a critique of conventional mentor practices, Tang (2012) maintained that "the situated conception, which stresses teachers' construction of knowledge in contexts of practice, may lead to transformation of knowledge and practice within existing institutional parameters" (p. 480). In other words, conceptual, contextual, and relational processes are interrelated and can have a transformative effect on teaching and learning.

Educative mentoring depends on mentors' professional judgment and on *knowing* their novices as learners. It emphasizes learning by knowing *and* doing. As in Lave and Wenger's

(1991) apprenticeship model, novices learn to teach by engaging in authentic teaching activities under the guidance of a skilled mentor. According to Schwille (2008), “Educative mentoring means providing multiple and varied opportunities for novices to try out the intellectual and interactive tasks of teaching under the thoughtful and caring guidance of a more knowledgeable mentor” (p. 141). Professional mentors adjust levels of support as novices engage in original teaching tasks. By contrast, putting mentors in supervisory or evaluative roles runs counter to the practice of educative mentoring and can limit mentor impact on teacher learning (Schwille, 2008).

Drawing on mentors’ own descriptions and insights about their work, Schwille (2008) identified 10 different ways mentors support and guide novice teachers. These forms included *stepping in* (e.g., coaching on the spot), *co-planning*, *teaching together* (e.g., coteaching), *mentoring on the move* (e.g., brief interactions), *debriefing sessions*, *writing*, and *videotape analysis*. Schwille (2008) discovered mentors were guided by “knowledge of their novices as learners and their own vision of the kind of teaching they want to foster” (p. 143). Thus, mentors critically and actively shape teacher learning. According to Schwille (2008):

Mentoring is differentiated work in that mentors determine and adjust their mentoring actions based on what they know about their learners and what needs to be learned.

Learning to mentor is a process of developing a practice based on a conceptual stance toward mentoring . . . the activities in which mentors and novices are engaged . . . form a repertoire of mentoring moves from which a mentor can draw as a preconceived plan or as improvisation for a novice’s learning. Seen holistically, they suggest the complexity of mentoring and support a conceptualization of practice. (pp. 143–144)

Basically, Schwille (2008) claimed, due to its complexity, professional mentoring is its own specialization, and, just as teaching can be learned and taught, mentoring must be learned and taught. However, Schwille emphasized the mentoring actions presented are not a checklist but a repertoire of tools for practice.

Finally, drawing on Noddings's (1986) concept of *fidelity to persons*, Feiman-Nemser and Rosaen (1997) described the relational knowledge needed by mentors to guide novice teachers in equity-oriented practices. Noddings (1986) framed teacher learning as a human and moral imperative:

There is an attitude to be sustained and enhanced as well as a set of skills to be learned.

By working with master teachers whose fidelity is to persons, new teachers will have an opportunity to learn that this fidelity induces a drive for competence, more and deeper learning, responsible experimentation with instructional arrangements, considered suggestions for structural changes in school, and the exercise of imagination in resolving conflicts. (p. 504)

In other words, a caring guide can serve as impetus for innovative practices and a reform oriented approach to teaching. On the one hand, the process of guidance is dependent on teachers' attitudes toward their mentors. On the other hand, it is an orientation toward structural change that emphasizes the social value of experimentation beyond the context of schooling children. Noddings's (1986) theory of care is insightful because it sheds light on the difficult problem of how relational practices can lead to equality *and* quality in teaching.

From a Deweyian perspective, relational practice matters because learning is shaped by environmental factors often outside an individual's control and because learning is social. If individual autonomy is the aim of learning, then reflection on practice is the mechanism allowing

teachers the freedom to experiment with new knowledge. Thus, resolving social conflict or inner tension is the crux of mentor practice. A novice teachers' motivation to learn is connected to their attitude toward their mentors (Feiman-Nemser & Rosaen, 1997; Schwille, 2008).

It is axiomatic that very few in academia have succeeded without the guidance and support of a knowledgeable mentor, indeed a scholarly friend. The researcher has benefitted immensely from the guidance and support of scholars, teachers, activists, and friends who have in one way or another shaped his thinking and the trajectory of his educational career and professional life. When we pause to reflect on the major turning points in our lives, there is no doubt a mentor who has served as witness, confidant, and friend along the way. It is this researcher's hope that this account of the induction mentor video club study may in some small measure honor his mentors past and present.

Purpose of the Study

The purpose of this study was to explore how mentors understand video clubs in the context of teacher induction. Absent from the literature are video clubs for induction mentors. In a typical video club, teachers analyze and discuss video clips of their own classroom instruction (Jacobs et al., 2010; Sherin & Han, 2004; Sherin & van Es, 2009; van Es & Sherin, 2008, 2010). Video clubs have been designed and studied for their potential to improve teacher practice. Specifically, the *affordances* of video sharpen teachers' abilities to attend to salient classroom interactions (Zhang et al., 2011). This skill, referred to in the literature as *teacher noticing*, involves teachers highlighting significant interactions and interpreting student thinking. Studies have demonstrated the potential for video clubs to assist teachers in expanding disciplinary knowledge and instructional practice (Barnhart & van Es, 2018; Sherin & Han, 2004; van Es & Sherin, 2002). Still others have developed video clubs to assist teachers in responding equitably

to students (Hand, 2012; Jilk & Crespo, 2015; Louie, 2016, 2018; Louie et al., 2021). By focusing on mentor knowledge and practice, this study can provide insights into the potential for video clubs to augment mentor trainings in induction programs and to support educational leadership in planning for teacher induction and teacher education.

The next section situates video club research in the broader historical context of educational reform. It describes the educational policy environment that has led to the current teacher shortage and high attrition rates for new teachers. It also highlights important research that has led to the development of the video club model.

Background and Rationale for the Study

From 2009 to 2017, the Race to the Top (RTTT) federal policy initiative sought to improve teacher quality by providing funds to states and districts that agreed to reform teacher evaluation policies. RTTT yoked teacher performance to student achievement (Bleiberg et al., 2023; Crow, 2012). Although some evaluation reforms met with success at local levels, overall student achievement showed no significant changes, positive or negative (Bleiberg et al., 2023). Bleiberg et al. (2023) stated, “In general, the effect of teacher evaluation reforms on student outcomes did not vary by the rigor of teacher evaluation system designs” (p. 22). The emphasis on improving teacher quality through various (nefarious?) means, such as merit pay, denying tenure, or threats of dismissal, did not lead to improved outcomes for students and have contributed, instead, to a shortage of teachers across the United States.

Bleiberg et al. (2023) offered several reasons to explain why teacher evaluation policies did not lead to increased student achievement. Teacher evaluation reforms have been undermined by political opposition, by the decentralized structure of U.S. public education, and by local constraints. Bleiberg et al. also stated evaluation reforms without increased

compensation and other benefits to offset the stress, or “nonpecuniary costs” associated with the new accountability demands and extra workload for teachers, has resulted in high turnover rates in the teaching profession. In fact, teachers have most often cited stressful working conditions as the main reason for leaving the profession (Diliberti & Schwartz, 2022; Doan et al., 2022).

From 2017 to 2018, new hires in California made up 10% of the teacher workforce; teachers in their first 2 years, or beginning teachers, constituted 12% of California’s overall teacher workforce. Approximately 90% of the yearly demand for teachers in California can be attributed to teacher attrition (Carver-Thomas et al., 2020). California has allocated \$300 million to build a stable teacher workforce (Carver-Thomas et al., 2020). Induction programs have been identified by state educational leaders as a key strategy for stabilizing the teacher workforce. Carver-Thomas et al. (2020) stated:

Evidence suggests that strong mentoring and induction for novice teachers can be a valuable strategy to retain new teachers and improve their effectiveness. All beginning teachers are required to complete an induction program to earn their clear credential . . . it may be useful to develop creative state strategies to support districts with large numbers of beginning teachers. (p. 8)

The educational policy landscape over the last 2 decades has led to renewed interest in induction programs for beginning teachers (Bleiberg et al., 2023; Crow, 2012). For decades, scholars have advocated for more instructive approaches to teacher education and certification (Ball & Cohen, 1999; Little, 1990; L. S. Shulman, 1986). The next section is devoted to some of the antecedents of video clubs, case-based teacher education programs, and the theoretical constructs informing their *innovative* designs.

Video Club Antecedents

For several decades, researchers have insisted on more relevant, educative approaches to teacher education and certification (Little, 1990; Putnam & Borko, 2000; L. S. Shulman, 1986).

Discussing the potential for case method as a model for teacher *examination*, L. S. Shulman (1986) wrote:

I envision the use of case method in teacher education, whether in our classrooms or in special laboratories with simulations, videodisks, and annotated scripts as a means for developing strategic understanding, for extending capacities toward professional judgement and decision making. These methods of instruction would involve the careful confrontation of principles with cases, of general rules with concrete documented events—a dialectic of the general with the particular in which the limits of the former and boundaries of the latter are explored. (p. 13)

L. S. Shulman (1986) argued practical knowledge can be gained through analysis of cases and principles of teaching with tools and artifacts, such as “videodisks,” “annotated scripts,” and “documented events” originating in the classroom. When confronted with real problems of practice, teachers enact strategic knowledge that can be learned in “simulations” and then applied in the classroom (Putnam & Borko, 2000). These problems of practice may be theoretical, practical, or moral, and they present opportunities for teachers as researchers to explore precedents from specific cases that, at times, contradict one another. Afterall, teaching is a complex and nuanced process “where principles collide, and no simple solution is possible” (L. S. Shulman, 1986, p. 13).

Putnam and Borko (2000) also noted professional development for teachers was disconnected from everyday practice. They encouraged researchers to create simulated learning

environments that mirrored the types of innovative, experimental environments sought after in university-based teacher education programs. Moreover, they insisted artifacts such as classroom footage facilitated learning. Essentially, they argued a balanced teacher education program should include both classroom practice and classroom experiences adapted for clinical settings. In their view, case-based learning experiences could transfer to classroom practice. Similarly, video clubs offer mentors and teachers a practice-based perspective using video as an artifact for self-reflection in a structured, research-based format (Putnam & Borko, 2000).

Lampert and Ball (1990) explored how advances in technology could be leveraged in teacher education programs to simulate classroom environments. They studied case-based models using multimedia, modeling aspects of classroom teaching through various resources, including videotapes of classroom lessons combined with tools for lesson planning as well as teacher journals for reflection and teaching materials. In addition, student notebooks, student work, and teacher–student interviews were used as artifacts for annotating and constructing arguments. They described the benefits of video and nonlinear platforms to attend to a variety of resources often and efficiently and the ability to *hyperlink* information to outside resources, allowing teachers to see events from multiple angles simultaneously. Further, they created an extensive, searchable database that enabled teachers to define and explore problems of their own choosing. Subsequently, multimedia provided a shared context for the exploration of pedagogical problems. As precursors to online teacher development and assessment systems widely available today, clinical (i.e., not in the classroom) case-based models made it possible for teachers to experiment with the flow of information and experience teaching, albeit vicariously. They demonstrated how distributed cognition worked to animate knowledge through tools and artifacts of the profession in both clinical and classroom settings (Hutchins, 1995; Lampert & Ball, 1990).

Their case-based approaches to teacher education set the stage for video-based teacher professional development.

Schools did not readily adopt video-based professional development. As Little (1990) noted, “Teacher-induction programs and other consultative arrangements that are premised on the utility of ‘help’ confront both the occupational prohibitions surrounding interference and the wider cultural ambivalence about help-seeking” (p. 517). Induction mentors must first be prepared to address skepticism about institutional support systems in schools where collaboration or joint work may not be the norm. Further complicating matters for mentors are high-stakes accountability schemes that deskill teachers and perpetuate didactic instructional practices (Cochran-Smith et al., 2016). New policy initiatives often can lead back to traditional teaching that perpetuates the status quo (Cherian, 2007).

Nevertheless, exemplary scholarship on case-based teacher education and video-based professional development models were the antecedents of video club scholarship. This work is rooted in constructivist practices in teacher education and professional development (Ball & Cohen, 1999; Lampert & Ball, 1990; Mason, 2002). The next chapter defines the literature on video clubs as a form of professional development and research design that has taken up the call for improved, relevant teacher education.

Overview of the Remainder of the Study

This chapter provided the background and rationale for the induction mentor video club study. The problem of mentoring for induction was introduced within the context of educational policies that have exacerbated the problem of teacher shortages and teacher retention (Carver-Thomas et al., 2020). It was argued that there is an urgent need for relevant professional development for induction mentors (Putnam & Borko, 2000) and that technological advances

have made it possible to turn to video reflection for improved teacher practice (Lampert & Ball, 1990). The research questions guiding this study were presented: The purpose of this study was to explore a group of mentors' understandings of a video club in the context of teacher induction. It is not known how induction mentors understand video club models. The video club as a research design and professional development model could support induction mentors in their work with beginning teachers.

The remainder of the study is organized in the following way. Chapter 2 delves more deeply into the video club literature, its theoretical underpinnings, and its practical applications. In particular, the centrality of professional vision and the role of situated learning as theoretical frameworks in the video club literature are discussed. Chapter 3 describes the methodology, research design, and procedures for this investigation. This section elaborates on the choice of reflexive thematic analysis as the method of analysis. Chapter 4 details how the data were analyzed and provides both a written and visual summary of the results. Chapter 5 is an interpretation and discussion of the results with implications for future research.

CHAPTER 2: LITERATURE REVIEW

This chapter synthesizes the literature on video clubs with a focus on how video clubs can support mentors in the context of induction. It presents the theoretical framework and design elements for this case study. It develops the topic of video clubs as a professional development model (van Es, 2012; van Es et al., 2019; van Es et al., 2014). Although the literature indicated video clubs support teachers, it is not known in Citrus Unified how the video club model would support induction mentors. The purpose of this chapter is to illustrate that video clubs are a compelling professional development option for mentor training in the context of induction. Though video club research has not focused on mentor learning, video clubs can support induction mentors because they are a practice-driven professional learning model (Barnhart & van Es, 2015, 2018; Sherin & van Es, 2009; van Es et al., 2019). For example, they have developed teachers' abilities to notice important features of classroom instruction, they have been used to better understand students disciplinary thinking, and they have facilitated the development of teachers' pedagogical and subject-matter knowledge (Hand, 2012; van Es, 2004; van Es & Sherin, 2008, 2010). This chapter provides a synthesis of the scholarship that has led to the research questions guiding this study.

This case study is located within scholarship on video clubs seeking to reform professional development for teachers and teacher educators. An instrumental case study approach was selected because video clubs can shape mentor practice and because mentors have a direct impact on beginning teachers' pathways toward certification as a bona fide teacher. Although findings in a case study cannot be generalized, case studies are instrumental in providing insights into issues such as mentor professional development in the context of

induction, they allow for different methodological approaches such as reflexive thematic analysis, and they can help to refine theories, such as video club theory or conceptualizations of mentor practice (Creswell & Creswell, 2007; Thomas, 2016; Yin, 2018) .

The sections in Chapter 2 are presented in the following order: theoretical framework, literature review, and summary. The next section, the theoretical framework, is organized in the following way. First, the historical development of video club theory is described briefly. Next, the approach taken to survey and evaluate the literature is outlined. Then, how the problem of a mentor video club for induction was conceived and grounded in the video club literature is presented. Lastly, key points from Chapter 2 are summarized.

Theoretical Framework

To understand the relationship between video club research and the development of a video club for induction mentors, an examination of one of its key constructs—teacher noticing—is necessary. Jilk and Crespo (2015) put it very succinctly, “Researchers and professional developers focus on teacher noticing because noticing informs practice, and teachers’ practices are consequential for students’ learning” (p. 1046). A video club consists of a group of teachers who come together to view and discuss video clips of their classroom practice (Sherin & Han, 2004; van Es & Sherin, 2002). Videos have been used to capture complex and nuanced classroom interactions to understand how teachers and students build new knowledge (van Es & Sherin, 2008). A video club setting provides teachers with time to view and reflect on these classroom situations. Teachers analyze and discuss videos to learn how to interpret in different, often novel ways, significant classroom interactions (van Es & Sherin, 2010). For example, video club research has demonstrated the need to shift attention away from what a teacher is saying or doing to a focus on student ideas that can lead to a better understanding of

how students are learning math. This may lead to better decision making on the part of the teacher (van Es & Sherin, 2008, 2010). On the other hand, teacher predispositions, their values and beliefs, often influence what they notice and how they respond to students, yet student learning is dependent on a teacher's ability to see opportunities to respond to students in new, more equitable ways (Jilk, 2016). This ability to see, interpret, and potentially shape learning is referred to in the literature as *teacher noticing*, a complex skill involving teachers learning how to define what counts as a significant interaction and interpreting students evolving disciplinary knowledge (Jilk & Crespo, 2015).

A notable example of research on teacher noticing is Jacob et al.'s (2010) study of 131 practicing and prospective teachers who were part of an ongoing professional development program designed to facilitate student mathematical discourse. Teachers analyzed video from their own classrooms to practice teacher noticing. The researchers found teachers had over time refined their ability to notice significant classroom encounters and respond in ways that advanced student mathematical understanding and communication (Jacobs et al., 2010).

Jacobs et al. (2010) noted video clubs most often use Goodwin's (1994) theory of professional vision to understand and develop teacher noticing as a pedagogical practice. In the video club literature, professional vision has a prominent place in the theoretical development of *teacher noticing*—the practice of highlighting and interpreting salient classroom interactions (Sherin & Han, 2004; van Es & Sherin, 2008). The next few paragraphs delve into the theory of professional vision because it has been central to the development of the video club as a form of professional development for teachers.

Professional Vision and Teacher Noticing

Goodwin's (1994) theory explains how professional knowledge is both enacted and learned in a social context. According to Goodwin, professional vision both shapes and is shaped by the shared discourse of a professional community. He described professional vision as an analytical stance likely to capture the highly contextualized and complex interplay of factors (e.g., policy environment, institutional culture, and teacher development practices) that influence professional practices. Goodwin described how coding schemes modulate professionals' understandings of events and phenomena within a given discipline or domain. As with van Es and Sherin's (2002) teacher noticing framework, these classification schemes serve as interpretive frameworks to focus attention on particular events or phenomenon in a given perceptual field.

Goodwin's (1994) framework consists of the following three components: (a) coding, which transforms phenomena observed in a specific setting into the objects of knowledge that animate the discourse of a profession; (b) *highlighting*, which makes specific phenomena in a complex perceptual field salient by marking them in some fashion; and (c) *producing and articulating material representations* (p. 606, emphasis in original). Goodwin (1994) asserted, "By applying such practices in the domain of scrutiny, participants build and *contest* professional vision, which consists of socially organized ways of seeing and understanding events that are answerable to the distinctive interests of a particular social group" (p. 606). In addition, coding schemes are not "neutral templates for viewing and understanding in a particular way the events visible on tape" (Goodwin, 1994, p. 617). Professional vision involves coding schemes that are built by consensus and that provide a professional discourse that can influence how we think and what we *see*. Consequently, professional communities are vested with authority to highlight

specific features in their field (e.g., classroom interactions) and to create shared representations of social phenomenon (Goodwin, 1994). Goodwin's theory has significant implications for mentors in the context of induction because a mentor's professional vision can shape a beginning teacher's practice and commitment to teaching.

van Es and Sherin (2004) adapted professional vision for teacher noticing. Their learning to notice framework paralleled Goodwin's (1994) professional vision model and consisted of three phases of analysis: (a) identifying what is important in a teaching situation, (b) using prior knowledge to interpret the situation, and (c) connecting the salient feature of classroom instruction to broader principles of teaching and learning. They developed this framework to find out how teachers' thinking and practice may change in the context of educational reform. van Es and Sherin sought to learn how students' ideas were being interpreted by teachers and how teachers might respond in ways that expand on student ideas. So, the theory of teacher noticing has provided video club researchers with a lens for examining how teachers not only make sense of classroom practice but also as an opportunity for teachers to enact practices that challenge the dominant discourses.

Video club studies have focused on *teacher noticing* as a framework for refining in teachers the ability to reason about significant classroom events. To clarify, teacher noticing is defined as highlighting classroom interactions and interpreting these encounters for instructional improvement (Sherin & van Es, 2009). Video clubs can support teachers in centering student ideas and in responding in ways that respect student learning. This line of inquiry has confirmed the potential for teacher noticing to shift "teacher attention to substantive aspects of instruction" (Russ & Luna, 2013, p. 285).

Although professional vision was central to the development of video club research, there are debates in the field about the application of Goodwin's theory (Louie, 2018). Some researchers focused on the ideological aspects of Goodwin's theory and described teacher noticing as a sociocultural process involving "groups of people who interact with one another and their environments to code [name], highlight, produce and articulate material representations, and in other ways create and maintain *systems* for [interpreting]" (Louie, 2018, p. 62). Some researchers focused instead on the facilitation of video clubs rather than teacher noticing (Zhang et al., 2011b, 2019). Still, others emphasized the professional learning aspects of video clubs to inform new designs for professional development (Kazemi & Hubbard, 2008). Currently, studies have advanced new video club frameworks that address how sociocultural contexts *shape* classroom interactions (van Es & Sherin, 2021). The next section describes how the literature review was surveyed and defined.

Method

Literature for this study came from the database Academic Search Premiere published by EBSCO Host. Because I anticipated writing my dissertation on the topic of mentoring and video clubs, through my participation as a graduate research assistant in the mentor video club study, I attempted to be as comprehensive as possible in my search for relevant studies. I defined specific rules for searching that matched the phenomenon I investigated. I defined as clearly as possible what kinds of literature would be included in this study and what would be excluded. I developed the following criteria to guide my search:

1. Each study needed to include a video club model and teacher noticing and show the relationship between the two.

2. Each study needed to have taken place in the context of K–12 public schools with a focus on video clubs for preservice or in-service teachers.
3. Each study needed to include a video club model or teacher noticing and mentoring or coaching or induction.

Literature was acquired through EBSCOHost or ERIC. Search terms included references to K–12 public schools, education, video clubs, video-based professional development, and teacher noticing. Searches in the EBSCOHost database produced 72 peer-reviewed articles from academic journals. Excluded were studies in languages other than English, video clubs for managerial or vocational training, and faculty professional development, which narrowed the total to 64. After parsing out articles that did not address K–12 public education, these were narrowed further to 60 relevant articles. This systematic search embodied the conceptualizations of video club models necessary to address the research question of adapting video clubs for induction mentors.

The Video Club Design Framework for Teacher Education

van Es et al. (2019) consolidated the evolving video club research into a comprehensive framework to guide researchers and educational leaders in the design of professional development. Their design framework for teacher educators (DFTE) described six dimensions to consider when planning for professional development focused on using video as a tool for reflection on practice. The six dimensions of the DFTE are (a) audience, (b) goals, (c) video selection, (d) task design, (e) planning and facilitation, and (f) assessing learning. A brief description of each dimension follows.

The first dimension is a consideration of the audience and their needs for professional development. In-service teachers, for example, are more likely to dismiss video-based

professional development when videos are from sources other than their own classrooms.

Professional development that incorporates examples from teachers' classroom practice is more meaningful to them because it connects the learning to classroom experiences (Borko et al., 2015). Regardless of the audience, facilitators must balance challenging teachers' current thinking during analysis of video with developing trust among colleagues (Zhang et al., 2011). Zhang (2011) pointed to the risks associated with teachers critiquing each other's videos and has reminded participants in her study to be sensitive as they analyzed and discussed different scenarios.

The second design consideration is the learning goals or intended outcomes of the project. Video clubs for teachers have been used to develop specialized content knowledge, facilitate reflection, and improve *teacher noticing*. Zhang (2011) used video to promote project-based learning (PBL) discourse and PBL facilitation strategies. Others, such as Jacobs et al. (2010), have investigated students' mathematical thinking through reflection and discussion with teachers in video clubs. Louie (2016) investigated how teachers resist deficit theories of students in the mathematics classrooms. Overall, discussions focused on video can serve a variety of professional learning needs (Putnam & Borko, 2000).

The third dimension of the design framework focuses on video selection. Determinations about the length of the video, the number of video segments, and the sequencing of videos within a session will influence the framing and task design for viewing. Some studies have focused on peer-to-peer interactions in their video selection (Jilk, 2016). Interactions between teachers and students have been recorded in both small group or whole class settings (van Es et al., 2017). Often it is the facilitator who selects the video clips for viewing (Borko et al., 2015). In one model, facilitators sequenced video segments after teachers analyzed and selected video clips

and identified areas of focus (e.g., math concepts, student thinking, instructional decisions; Borko et al., 2015). In some models, teachers select video clips and cofacilitate discussions during meetings (Jilk, 2016).

The fourth dimension of the DFTE is task design, which includes traditional framing, or pre-viewing activities, such as completing a math task before examining how students accomplish the task (Jilk, 2016). Some tasks, such as annotating the video or transcripts of the segment, are specific to video-based professional development (Santagata, 2009). Task design also includes time for reflection, or post-video analysis, to help teachers connect their learning to classroom practice (Sherin & Han, 2004; van Es et al., 2014).

The fifth dimension of van Es et al.'s (2019) framework is planning and facilitating. The decisions the facilitator makes prior to a video club session can strongly impact the project's outcome. Planning involves multiple strategies for situating the videos for productive learning. Importantly, facilitators establish norms for viewing video. Often this is done by using a video obtained from an outside source and not a video from participating teachers' classrooms (Stockero et al., 2017). After launching a new group for professional development, it is up to the facilitator to situate the video in context, to know the learners—both the teachers and the students—and to establish a meaningful purpose for learning new ways to use video (van Es et al., 2017). Through observation and video-recorded classroom lessons, facilitators gain insights for preparing professional development (Borko et al., 2015). A facilitator introduces tools and frameworks for making sense of video segments and the interactions in classrooms as they unfold in the moment (van Es, 2009). Moreover, the expert facilitator possesses strong pedagogical and content knowledge (Tekkumru-Kisa & Stein, 2017).

The authors round out their framework with assessment. The authors stated that for most

video club studies assessment of learning was embedded within the activities themselves. For example, the problem-solving cycle (PSC) model (Borko et al., 2015), structured professional development into three parts by collaboratively planning, implementing, and recording lessons in the first cycle, then analyzing the teacher's role during instruction in the second cycle, and, finally, analyzing student reasoning in the third cycle. van Es et al. (2019) noted:

This [third] cycle anchored the video club analysis activities to the tasks that teachers planned and enacted between the first and second meeting, locating the professional development work in teachers' own instructional practice. Therefore, the structure of the PSC professional development design reflects how teachers' experiences in professional development are intertwined with their own teaching, which may, then, lead to improvements in teaching. (pp. 16–17)

The PSC model made professional learning relevant to teachers by giving them time to plan and reflect before analyzing student thinking. Assessment of professional learning was embedded in their instructional practices such as lesson plans, analysis of the video clips and reflections of student thinking.

Noticing as a Theoretical Construct for Understanding Teaching

Regarding video club research, teacher noticing has emerged as a key construct for incorporating new ways of understanding student thinking in mathematics (Sherin & Han, 2004; Sherin, 2010). van Es and Sherin (2008) examined teacher noticing in elementary math classrooms. Their study consisted of teachers participating in a series of 10 video club meetings. They included a control group of teachers who did not participate in the video club meetings to compare pre- and post-interview data. During the video club meetings, teachers were asked to

comment on what they noticed in three video segments of elementary math instruction. From the video club meeting data, the researchers extrapolated five distinct phenomena. They developed a framework consisting of five domains reflecting these categories of teacher noticing: actor, topic, stance, specificity, and video-based responses. Their analysis consisted of coding transcripts for instances of each of the five domains. References to students, teacher or other persons were coded as such and categorized under *actor*; references to content, or pedagogical concerns with regard to teaching mathematics, were coded as such and categorized under *topic*; when teachers sought to describe, evaluate or interpret events or objects of focus their comments were labeled thus and categorized as *stance*; and, *specificity* referred to whether participants' comments were general or specific in nature (van Es & Sherin, 2008).

The number of codes were counted and the percentages of comments for each particular category were calculated. Both the control group that did not participate in the video club and the teachers that did were interviewed before and after the video club professional development. The interview data were analyzed in the same way—by the teachers' domain of focus during participation in the video club.

Based on the percentages from each of the analyses and variations in teacher comments, the researchers determined teachers may take one of several developmental paths when learning to notice (van Es & Sherin, 2008). The three paths are described as (a) the direct path, characterized by a single qualitative shift in teacher noticing; (b) the cyclical path, characterized by teachers moving from broad considerations of multiple categories to narrow and specific categories; and (c) the incremental path, which is characterized by teachers that adapt their analysis of video segments of teaching by narrowly focusing on one or two dimensions at a time.

For example, focusing on actor and topic for a meeting or two, then changing the focus to stance for two meetings, then shifting to a focus to specificity or video-based considerations.

They concluded teachers started to take ownership of the process of analysis: “the teachers began to take on the role of raising issues of students’ mathematical thinking and prompting one another to discuss those issues in an in-depth way” (van Es & Sherin, 2008, p. 265). van Es and Sherin (2008) attributed this to the fact that they were genuinely concerned with the issues raised in the video club. The authors stated:

While they valued the meetings for providing them with images of one another’s teaching, they also came to see that viewing video helped them to learn more about their students’ understanding . . . teachers commented that viewing video helped them to realize the importance of students having the opportunity to explain their ideas in class. (van Es & Sherin, 2008, p. 265)

Thus, the construct of teacher noticing also has focused on understanding student thinking and has been a common focus of video club research design (van Es & Sherin, 2002, 2008, 2010). Having students explain their thinking is a strategy that allows not only the teacher to “see” inside students’ ideas but allows teachers to incorporate those ideas in the learning situation. Practicing this skill in a video club setting gave teachers more confidence to follow suit in the classroom.

Similarly, Sherin and Han (2004) investigated the learning of four middle-school mathematics teachers who participated in a year-long series of video club meetings. They defined video clubs as meetings “in which groups of teachers watch and discuss excerpts of videotapes from their classrooms” (Sherin & Han, 2004, p. 163). They concluded that, over time, teachers shifted their attention to students’ actions and ideas rather than their own, and that the

nature of the discussions also changed. They attributed these changes to video-supported teacher learning, that is, by observing video footage of classroom instruction, teacher perceptions of interactions shifted more toward student thinking. Sherin and Han (2004) described teachers' abilities to see and interpret in new ways thus:

Specifically, what kinds of knowledge have teachers acquired? To answer this question, consider what Goodwin (1994) refers to as *professional vision*. According to Goodwin, as people become part of a professional discipline, they develop particular ways of viewing the phenomena that are of interest to their professional group. Thus, archaeologists develop techniques for looking at stones and sand, and detectives are good at noticing things that stand out at a crime scene. Similarly, teachers have a professional vision—the ability to see and interpret critical features of classroom events. (p. 179)

According to the authors, effective video clubs consist of three essential components. First, video clubs engage teachers in collaborative reflection to build community. Second, they promote an inquiry stance, and third, they provide a forum for *critical colleagueship*. In this context, video clubs become a powerful tool for connecting pedagogy and student thinking, supporting teacher inquiry into practice, and sustaining educational reform (Sherin & Han, 2004).

Video club research has prioritized pedagogical content knowledge (Sherin & Han, 2004; L. S. Shulman, 1986; van Es et al., 2008). Teachers have focused on the impact of instruction on student reasoning about content knowledge. In teacher noticing, understanding student thinking, has become a prerequisite to selecting a teaching strategy. Sherin and Han's (2004) analysis showed reasoning about significant features of classroom instruction varied among individual teachers. Through typological analysis (Hatch, 2002), the researchers identified patterns by

counting codes and calculating percentages. Russ and Luna (2013) cautioned, however, that Sherin and van Es's (2008) analysis was a calculation of the percentages of teacher responses in each of the various categories and an explanation of the most typical responses. The authors stated, "[Counting] categories remove nuance in data by reducing complex qualitative data to counts of pre-defined categories . . . and allows broad similarities across participants—or patterns—to become more salient" (p. 291). As Russ and Luna (2013) noted, however, counting codes does not explain variations in practice or teachers' thinking. It is important to realize there are variations in how the construct of teacher noticing is defined (Sherin et al., 2010).

The way teacher noticing is defined has methodological implications. Specifically, Russ and Luna (2013) argued that although van Es and Sherin's (2008) analysis was very granular and thought provoking, they are not convinced an increase in comments focused on any particular category represented a qualitative shift in what teachers may attend to in practice, nor did they agree with van Es and Sherin's assertion that these shifts were a direct result of participation in the video club. Consequently, they called for an interactive model that both informs and is informed by local patterns of in-the-moment teacher noticing (Russ & Luna, 2013).

Specifically, Russ and Luna (2013) argued an epistemological framing is lacking in teacher noticing research to account for what teachers may be seeing or thinking in-the-moment, but that may not have an observable behavior attached to it. For instance, their analysis of a high school science teacher's video clips, 103 total and each 30 seconds long, yielded five types of student talk: question-answer, explanation, question, classroom logistics and casual talk. They concluded the setting, whether class discussion, lab work or small group interactions, structured the teachers framing and subsequent noticing. However, they observed from interview data that the teacher's a priori framing also influenced what she noticed and how students responded.

Namely, because she did not value the lab work as much as the teacher driven class discussion, she was not *actively noticing* and this further reinforced student behavior. In short, Russ and Luna (2013) argued epistemological frames and noticing are reciprocal processes that are dynamic and may change from moment to moment.

Kazemi and Hubbard's (2008) definition of teacher noticing included the teacher formulating a response as part of the sense making process. Their focus expands the teacher noticing framework to include how teachers shape learning, that is, of attending, interpreting *and* responding. Drawing on research in mathematics education, they argued for a contextualized view of professional development. They analyzed professional development models ranging from commercially produced programs to learning from student artifacts and suggested assumptions about the effectiveness professional development are based on unidirectional, cause and effect relationships. They proposed a multidirectional model that includes the varied professional learning activities in which teachers participate. According to Kazemi and Hubbard, there is a need for a better understanding how teachers make sense of primary artifacts, representations, and practices in professional development settings. When it comes to understanding what counts as knowledge and high-quality instruction, teachers ought to be consulted (Doan et al., 2022). The following section addresses how video clubs involve teachers in professional development and the need for a sociocultural and political framing in teacher noticing research and practice.

Noticing for Equity

Jilk (2016) and Jilk and Crespo (2015) illustrated how video clubs can provide coherence for students' learning experiences by bringing together a variety of stakeholders to view a single common learning event. Their study involved a professional development network of three

different schools across two school districts. Participants were mathematics teachers who were part of a larger network of support including administrators, math coaches, and student teachers, who were participating in professional development training with complex instruction (CI). CI values the intellectual, social, and cultural resources all students bring to school and leverages these resources to help them learn academic content. CI creates a *social system* in the classroom that explicitly and deliberately addresses students' internalized concepts about intelligence that may have hindered their learning in the past, addressing problems of inequality head on (Jilk & Crespo, 2015). Jilk (2016) noted:

Since most of the teachers in this professional development network were members of the dominant culture and the young people with whom they worked were mostly working class and students of color, it is reasonable to imagine these teachers might be additionally challenged to perceive and interpret moments of classroom activity as strengths and potential resources for learning. (p. 193)

Jilk and Crespo (2015) reported, when participants practiced noticing strengths in the video club, it changed the way they talked to students. During the video club, they were asked to attend to what students did or said that was mathematically smart. They were provided with a sentence frame that required them to be very specific in the language they used to describe their observations. The sentence frame read: "I think it was smart when (name of student) did/said (evidence from the video), and I think this was smart because (how does this strength support students' learning?)" (Jilk, 2016, p. 196). Assigning competence is one of the key strategies from CI to disrupt deficit mindsets in the classroom. When teachers reframe their language, students follow suit and begin to understand that expressing confusion, for example, is a mathematical strength all good mathematicians employ.

Similarly, Louie (2018) noted past research on teacher noticing has “failed to notice” (p. 67) the ideological barriers to more equitable teacher practice. Louie (2018) argued researchers did not consider the ideological aspects of Goodwin’s theory: namely, that discourse shapes practice and that the language and material representations used to describe how students come to know are not neutral; teacher noticing is a “disciplined” activity that happens in sociocultural and political contexts. The language teachers use in the classroom may have unintended consequences for students when teachers’ seeing is influenced by negative assumptions about students’ cultural backgrounds and intellectual resources. Louie asserted interpreting student behaviors from a strengths-based perspective can change how teachers respond to students of color. Louie acknowledged, however, that dominant discourses in education make it difficult for teachers to respond in new ways to student offerings. Even with a social justice orientation, individual teachers find it difficult to incorporate strengths-based noticing into their daily teaching practice when it is not supported by the broader learning community.

In general, common-sense assumptions about the nature of learning create unequal opportunities to learn by positioning some students as more capable than others (Jilk & Crespo, 2015). For example, tracking students by ability, as defined by narrow standardized measures, from early in their educational careers is a persistent and pernicious practice in the United States (Oakes, 2008). Hand (2012) described how *systems of classification* shape mental structures such that social stratification and intellectual hierarchies seem natural and immutable. Further, students may *identify themselves* as intelligent or unintelligent unwittingly reproducing the social hierarchies imposed by meritocratic systems assumed to be fair and ethical. Though researchers (Oakes, 2008; Louie & Zhan, 2022; Park & Datnow, 2017) have clearly demonstrated there is no basis for these sorting schemes, deficit theories of learning continue to have devastating

consequences for students of color. Why are deficit theories used to explain Black and Brown students lack of success in public schools? How can induction mentors help teachers disrupt deficit views of students' attitudes and capabilities in school and instead value and make use of the cultural resources they bring from home?

Louie (2018) claimed too much of the scholarly literature on video clubs insists on developing teacher noticing in terms of individual cognition, a kind of heuristic, at the expense of cultural and political ways of seeing. Current research on teacher noticing in the classroom takes a cognitivist approach in two ways. First, it emphasizes the dimensions of attending, interpreting and responding to student thinking as characteristics of individual teachers. Secondly, it is theorized that cultivating teacher noticing in video clubs will transfer to classroom practice (van Es & Sherin, 2009). van Es and Sherin's (2009) claimed skills learned in a video club setting transfer to classroom practice. However, this assumption has been mostly inferred from post hoc participant interviews and buoyed by the theory of distributed cognition (Russ & Luna, 2013). Nonetheless, scholars from both the cognitivist camp (van Es & Sherin, 2008, 2009; van Es et al., 2019) and the sociocultural community (Jilk & Crespo, 2015; Kang, 2022; Louie, 2018; Shah & Coles, 2020) have agreed transferability is best examined in situ (i.e., in the classroom).

Researchers have illustrated how teacher cognition and disciplinary knowledge is context dependent and shared among members of a community of practice (Jacobs et al., 2010; Putnam & Borko, 2000). For example, Louie (2018) problematized the use of professional vision for discerning individual teacher cognition and urged scholars to adopt more political ways of seeing by adopting instead a sociocultural perspective. Louie (2018) discussed the challenges teachers face when resisting dominant paradigms of teaching and learning: "opposing practices and

ideologies maintain a dominance in schools that makes ambitious and equitable teacher noticing difficult above and beyond the challenges of learning to notice as a technical skill” (p. 64). The representation in the literature of individual teachers’ abilities to disassociate from or transcend systemic inequities or even the ability in practice to disregard normative behaviors such as labeling and grouping students by ability, may unintentionally obscure the influence of power and race in teacher noticing. In essence, both cognitively distancing oneself from racialized discourses of student learning or dodging normative practices in teaching “conceal the ways in which culture and power relations embedded within cultural ways of thinking and acting may constrain or challenge teachers as they learn to notice for equity” (Louie, 2018, pp. 63–64). In other words, questioning dominant practices with a mind to redress unequal relations of power is a prerequisite for equitable teacher noticing.

To emphasize, interpretations of student thinking are necessarily embedded within the broader discourses that influence day to day interactions in the classroom. The practice of equitable teacher noticing is ambitious because it challenges teachers to intentionally disrupt common assumptions about student abilities. Nonetheless, a teacher may strategically employ strength-based approaches in the classroom but feel isolated in that practice because deficit theories persist in the teaching and learning community.

In the case of Amanda Pepper, Louie (2018) illustrated how new teachers are challenged by dominant views of intelligence and expectations for student learning. Her case study of a teacher (i.e., Amanda Pepper) whose participation in a CI program (Cohen et al., 1999) sparked an interest in understanding and responding to student mathematical thinking, from a strengths-based perspective, put her at odds with the culture of her school. The practice of responding to student thinking in more equitable ways excited her but also made her nervous. She doubted her

newfound sense of the strengths and intellectual resources students bring to learning in mathematics. She felt conflicted by the overwhelming pressure to name what is wrong with student thinking or the students themselves, to identify what they cannot do, and then to follow prescriptive teaching methods for addressing perceived student deficits. She struggled to reconcile new information and practices that advanced strengths-based teaching.

Even with a strong awareness of the cultural and political aspects of teaching and a strong interest in equitable outcomes for students, adopting new practices that seek to promote student understanding is difficult. Louie (2018) claimed ambitious and equitable noticing has the potential to disrupt this dynamic. By questioning the policies and practices that reproduce knowledge statuses, making them transparent to teachers and students and providing opportunities for students to critically examine theirs' and others' thinking they become protagonists in their own education. By incorporating systems of classification that contest dominant discourses teachers may foreground collective capacity over individual achievement, community building rather than competition, and creative problem solving rather knowledge reproduction. A professional vision for equity influences which interactions teachers attend to, highlighting the cognitive resources students bring to bear on group-worthy tasks and responding in ways that honor students' cognitive resources (Jilk, 2013; Jilk & Crespo, 2015).

Learning to attend to strengths in students thinking within video club professional development has helped teachers from dominant cultures respond positively to students' offerings in the classroom (Hand, 2012). Guided by a skilled facilitator and in reflective collaboration with other professionals, teachers can respond in ways that deepen student knowledge and develop agency (Louie, 2018).

Video Clubs and Situated Learning

Applications of situated learning have shown how teacher cognition is highly contextualized and portable (Jacobs et al., 2010; Putnam & Borko, 2000). Situated learning theory defines learning as an interactive and socially meaningful process (Lave, 2011). Learning can be understood from the point of view of apprentices using tools in meaningful, purposeful learning situations. As learners gain expertise through practice, observation and problem solving in meaningful contexts, they *move* from the periphery of the learning context toward full participation in a community's ways of knowing and being (Lave, 2011; Lave & Wenger, 1991). Lave and Wenger (1991) referred to this phenomenon as legitimate peripheral participation. It is a key component of situated learning theory and a powerful metaphor for teacher development in the context of induction and for mentors participating in a video club model (van Es et al., 2019).

Situated learning theory explains how apprentices labor with tools and artifacts in social contexts to bring about accomplished practice. For individuals to enjoy the rich benefits that come with expertise in their particular task, craft, or vocation, they must have access to concrete exemplars of master practice that can make learning concrete (Lave, 2011). Similarly, novice teachers rely on induction mentors to help them identify goals for learning, model instruction, develop action plans, and highlight practices for instructional improvement (Little, 1990).

J. H. Shulman (2004) suggested professional development is most effective within *communities of practice* arguing “transforming traditional practices . . . demands more than individual collaborations . . . it needs encouraging contexts and opportunities for teachers to participate in teacher learning communities that promote reflection and sustained inquiry” (p. 405). Individual collaborations between novice and mentor are insufficient to bring about change in practice for novice teachers. Rather the collective work of professionals with common

interests and goals generates an enthusiasm and the intrinsic motivation necessary for sustained work (Little, 1990). Although video club scholarship has not focused on mentorship as a key support for moving novice teachers' learning forward, it is nonetheless a critical aspect of induction programs. From a situated learning perspective, mentors can be seen as a critical component in the education and enculturation process of beginning teachers (Tang, 2012).

Lave and Wenger (1991) defined situated learning as social relations that shape participation and make learning transparent among members of a community of practice—members with varied interests, points of view, and ways of contributing. Similarly, Wenger and Wenger-Trayner (n.d.) defined communities of practice as groups of people who share a common interest or passion and want to participate in a process of collective learning. Significantly, they described the role of artifacts, or tools, in terms of access to social and cultural forms of knowledge. They said:

The activity system and the social world of which an artifact is part are reflected in multiple ways in its design and use and can become further “fields of transparency,” just as they can remain opaque. Obviously, the transparency of any technology always exists with respect to some purpose and is intricately tied to cultural practice and social organization within which the technology is meant to function: it cannot be viewed as a feature of an artifact in itself but as a process that involves specific forms of participation, in which the technology fulfills a mediating function. (Wenger & Wenger-Trayner, n.d., p. 102)

This quote explains how a video club can become a catalyst for making learning transparent in the induction context. Hollingsworth and Clarke (2017) described the phenomenon of professional learning through video as knowledgeability that comes from participating in a

communities' ongoing practices. In other words, novice teachers adopt the norms, behaviors and perspectives of a community in practice.

Thus, the latent potential of video resides in its application, and the reason for its use. Meaning is made when tools such as video are contextualized in social and cultural practice. The meaning of the tool comes from its purposeful application in meaningful tasks such as discerning important events in the classroom. In this way knowledge can be shared with the community that assigns meaning to the activity. Knowledge is constructed from the social interactions with video and therefore tools have latent community building properties. The affordances of video as a tool for teacher professional learning have been amply documented in the video club research (Jacobs et al., 2010). Research designed around the use of video has shown its potential as both a planning tool, a focal point for organizing professional learning, and as a means of making pedagogical practices more transparent and accessible to teachers.

The Role of Language in Mediating Learning

Additionally, this study assumes that language is a primary tool for learning (Edwards, 2007). Lefstein et al. (2020) argued learning is mediated by the varied discourse practices *within* professional settings. Sedova et al. (2016) described the role of language in student learning as a type of “code switching” in which participants intuitively adopt different mental perspectives and voices, like taking on different personas. In this way, each participant contributes something unique to discussions. They stated, “The consequent mixing of various elements creates a dialogue in which individual voices react to one another, each utterance responding to the previous one and stimulating the following one” (Sedova et al., 2016, p. 15). In other words, language makes it possible for participants build on one another's ideas to create new knowledge. According to Sedova et al., incorporating a variety of perspectives and voices in the

classroom fosters creativity and student learning. Problems are better understood when classroom discourse affirms a dialogic approach, whereby teacher's and students' stances interact to form new knowledge and where content is open to interrogation and alternative points of view. Sedova et al. (2016) argued an emphasis on posing questions to elicit alternative perspectives is the essence of innovation, "problems are better understood thanks to the realization of difference" (p. 15). Dynamic interaction, or dialogism, can shift our understanding of learning from a static, homogenous conception of knowledge to one of understanding through difference and the exchange of ideas.

The study of discourse in math and science has played a prominent role in research in the video club literature (Barnhart & van Es, 2020; Tekkumru Kisa & Stein, 2017). Video clubs have emerged as a key strategy for helping teachers understand student offerings in different ways and to attend to and respond more equitably to the contributions students make in the classroom (Abdulhamid & Venkat, 2018; Jilk & Crespo, 2015; Louie, 2018; Tekkumru Kisa & Stein, 2015). Video clubs capture how teachers use discourse in ways specific to the learning situation (Janssen et al., 2013). The sociocultural context of schooling requires flexible thinking and problem-solving for specific purposes such that individual underlying cognitive functions and processes are *situated* within these learning activities. "Learning is as much a matter of enculturation into a community's ways of thinking and dispositions as it is a result of explicit instruction in specific concepts, skills, and procedures" (Putnam & Borko, 2000, p. 5). Mentors are positioned in such environments as experts who can encourage teachers to take "students' ideas seriously as drivers of instruction" (Louie, 2018, p. 56)

In sum, several theories and research practices have informed video club studies and teacher noticing. Professional vision (Goodwin, 1994), situated learning (Lave & Wenger, 1991),

and teacher noticing (Sherin et al., 2010; van Es et al., 2002) provided frameworks for ongoing efforts to improve classroom instruction by refining *in* teachers the ability to notice and make sense of classroom activity (Sherin et al., 2010), and to respond to student thinking in meaningful (Jacobs et al., 2010) and equitable ways (Louie, 2018).

Additionally, teacher noticing scholars have demonstrated how video clubs can assist teachers in improving their pedagogical knowledge in math and science instruction. Recent scholarship has demonstrated that video clubs can help teachers bridge the gap between pedagogy and content knowledge and respond to students' disciplinary thinking from a strengths-based perspective. Video clubs can assist teachers in expanding their professional vision to support students who bring unique cultural knowledge and resources to learning situations (Hand, 2012; Jilk, 2016). Videos can help educators see classroom interactions in ways that may have otherwise gone unnoticed (Hollingsworth & Clarke, 2017). van Es and Sherin (2008) described how teachers' interpretations of students' mathematical thinking was facilitated when participants developed an appreciation of the affordances of video. The benefits of using video to analyze teacher noticing has created new avenues of research across different settings (Sherin et al., 2010). The construct of teacher noticing has been a focal point of video club research. Professional developers have used video to make salient those aspects of student thinking, the tacit knowledge that would otherwise go unseen, and for reinterpreting their own thinking in light of new insights and observations.

Previous iterations of using video to capture teacher-student encounters advanced frameworks to map out teacher thinking during instruction (Russ & Luna, 2013; van Es et al., 2019). These frameworks widened teachers' interpretive lens and improved their ability to highlight more substantive interactions with students in the classroom. Furthermore, as pointed

out in the literature on noticing for equity (Louie, 2018), teacher noticing may constrain professional vision when it does not explicitly address the sociocultural and ideological contexts of learning. Debates about the role of professional vision in teacher noticing have led to new scholarship that focuses on how knowledge of the sociocultural context of learning shapes practice (Lefstein et al., 2020; Louie, 2016, 2018; Louie et al., 2021). In short, this literature is spearheaded by Louie (2018) who claimed video clubs have the potential to disrupt common assumptions about knowledge building and students' abilities to engage in higher level group worthy tasks.

This literature review showed how video of classroom practice can shed light on the complex interactions between teachers and students. Further exploration of how video might help us to unlock teacher noticing in mentoring contexts is needed. By analyzing interactions between mentors and their reflections on mentor practice in a video club context, we can gain insight into an understudied, yet crucial aspect, of teacher professional development: new teacher induction.

CHAPTER 3: METHODOLOGY

Problem Statement

A critical, yet understudied component of induction programs is mentor practice (Ingersoll & Strong, 2011). The purpose of this study was to understand video clubs for professional learning from the perspective of induction mentors. Exploring the relationship between the induction context and mentor practice is critical because approximately half of new teachers leave the profession within their first 2 years (Ingersoll & Strong, 2011).

This chapter documents how the study was conducted. First the research questions are restated and situated in the context of broader educational reform. Next, the methodology section provides the rationale for the study and elaborates on the choice of reflexive thematic analysis as the methodology. Third, the research design section explains why a case study approach was the best option for collecting and analyzing data for the phenomenon of a video club for induction mentor practice. Interviews are reviewed as a tool for collecting qualitative data. Fourth, the study context including participant criteria and selection are described. Finally, ethical considerations are discussed.

Research Questions

The current teacher shortage and educational policy environment has brought teacher induction programs to the fore as an intellectually rigorous and relational process for developing and certifying newly hired teachers (Carver-Thomas et al., 2020). A critical, yet understudied component of induction programs is mentor practice (Ingersoll & Strong, 2011). The research questions that guided data collection, analysis and summary of this study are as follows:

1. How do mentors understand video club practices in the context of teacher induction?

2. How do mentors' understandings of teacher induction influence video club practices?
3. How does video club participation influence mentors practice in teacher induction?

The video club as research design for professional development provided the methodological context to understand the phenomenon of mentor practice in the context of induction.

Research Methodology

The following paragraphs describe the epistemological assumptions, theoretical framework and the analytic methods used to organize, describe, and interpret the data.

A social constructionist epistemology guided the decision-making process used to examine the data in this study. A social constructionist epistemology assumes that meanings, experiences, and events are socially produced (Braun & Clarke, 2006). A critical realist perspective (Willig, 1999) also informed analysis. In critical realism, access to reality is always mediated by the ways participants extract meaning from the material world. In qualitative analysis, the researcher's interpretive resources interact with participants' interpretations and meanings so access to reality is always negotiated. In other words, participants provide access to their experiences as lived realities and research produces interpretations of this reality (Braun & Clarke, 2006). From a critical realist perspective, an individual's particular version of reality is construed to be socially produced and coconstructed with others. According to Braun and Clarke (2006), critical realism

acknowledges the ways that individuals make meaning of their experience, and, in turn, the ways the broader social context impinges on those meanings, while retaining focus on the material and other limits of "reality." In other words, critical realism attempts to

reflect reality by disentangling and dissecting the words people use to make meaning. (p. 9)

Analyzing the ways participants interpret reality or make meaning can shed light on their experiences as lived realities produced within a broader social context. In this case study the researcher extrapolated induction mentors' understanding of video clubs and how to improve them from individual interpretations within the context of schooling in Citrus Unified. Through the lens of critical realism, it is possible to center the experiences of mentors within a social constructionist paradigm. In other words, critical realism contextualizes individual, often dominant views, within a social constructionist paradigm (Braun & Clarke, 2006).

A reflexive thematic analysis (Braun & Clarke, 2006) was used to examine the data sources. A reflexive thematic analysis process involves six phases. Before describing each phase, however, several decisions regarding analysis were made prior to analysis. For example, as noted in the literature review on the question of prevalence, there are no hard-and-fast rules as to how much of the data set must display evidence of a specific code or pattern for it to be a theme (Braun & Clarke, 2006). Thematic analysis is an active process involving researcher judgment to determine what counts as a theme (Braun & Clarke, 2020). The robustness of a theme is “not necessarily dependent on quantifiable measures—but in terms of whether it captures something important in relation to the overall research questions” (Braun & Clarke, 2006, p. 10). Regarding quantifying codes, the researcher continually examined and re-examined the decision-making process during analysis. In other words, the researcher had not foreclosed on the question of prevalence of codes to determine patterns but revisited this issue and others as part of the ongoing “reflexive dialogue during the analytic process” (Braun & Clarke, 2006, p. 9).

Another key decision was made to test the mentor video club data against a theory of effective professional development (Sims et al., 2023). This analysis was conducted in a top-down fashion, using an extant theory of effective professional development prior to an open coding, or inductive method. This served two purposes: (a) it enabled the researcher to familiarize himself with the data; and (b) it provided an opportunity to test the video club model against a vetted theory of effective professional development practices. To clarify, this method alone proved insufficient to explore mentors' understandings of the video club in the context of induction. Braun and Clarke referred to this deductive method as *theoretical thematic analysis*.

However, as was previously noted, a bottom-up (inductive) analysis of the data was used to better understand the video club from the perspective of induction mentors (Braun & Clarke, 2006, 2020). This study focused on video clubs as a strategy for mentor professional development; analysis privileged instances in the data that illustrated how video influenced mentor practice. On the other hand, it was assumed that the context of induction, including broader educational policy issues, shaped mentor interpretations of video as an instrument for instructional improvement. Additionally, scholarship on mentoring (Crow, 2012; Mullen & Schunk, 2012; Schwille, 2008; Tang, 2012) was used to theoretically analyze the data set—individual mentor interviews pre and post the video club intervention. The literature has described mentoring as a practice rooted in humanistic and pragmatic conceptions of pedagogy (Mullen, 2012; Schwille, 2008; Tang, 2012). And these concepts were further developed during analysis.

An inductive reflexive thematic analysis was conducted across the entire data set. In reflexive thematic analysis, the researcher is the key instrument for analyzing data within a qualitative methodology (Braun & Clarke, 2006; Creswell & Poth, 2016). As previously

mentioned, data analysis was conducted from a social constructionist perspective. Braun and Clarke (2006) succinctly defined this paradigm:

Meaning and experience are socially produced and reproduced, rather than inhering within individuals . . . thematic analysis conducted within a constructionist framework . . . does not seek to focus on motivation or individual psychologies, but instead seeks to theorise [sic] the socio-cultural contexts, and structural conditions, that enable the individual accounts that are provided. Thematic analysis that focuses on “latent” [interpretive] themes tend to be more constructionist. (p. 14)

In addition to the focus questions guiding this study of how mentors made sense of video club practices in the context of an induction program, other questions were asked during analysis. For example: How did dominant ideologies in education influence mentors’ conversations in the context of induction? Or, in the context of high attrition rates for teachers, what are mentors’ commitments to increasing the prestige of the teaching profession as a whole, to attract and retain good teachers?

Within this epistemological framework, a reflexive thematic analysis method formed patterns from the data. A thematic analysis was contextualized to seek patterns across the entire set of data (all the mentor interviews) or data items such as (individual mentor interviews). Basically, this provided the flexibility to report the experiences and meanings of mentors within a particular interview, and to examine the events, meanings, and experiences of participants across the entire data set, or all the interviews (Braun & Clarke, 2006).

In sum, thematic analysis is about decisions regarding epistemology, organization, description and interpretation. “[It] is a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 6). The analysis was reflexive because the

researcher was constantly returning to the data to link and compare codes and themes to check for coherence and meaning both within and across the data set. This analytical practice is often referred to in the literature as constant comparison (Charmaz, 2014; Saldaña, 2016).

A Case Study Approach

Case studies are analyses of persons, events, decisions, time-periods, projects, policies, institutions, or other systems which are studied holistically by one or more methods” (Thomas, 2013, p. 594). This case study investigated a video club designed to support induction mentors. It examined how a group of induction mentors discussed video to support teacher candidates working toward clearing their professional teaching credential. A case study approach made sense because the project under investigation had clear demarcations of persons (i.e., mentors), institutions (i.e., public schools), and policies (i.e., induction programs), and because it allowed for flexibility in the method of analysis.

Case studies are defined by a commitment to rich, in-depth narrative descriptions that can incorporate various analytic methods. Thomas (2013) argued case study research must do more than exemplify and illustrate, stating, “A case study, as a *study* . . . must in some sense explicate a wider theme: it must help in our understanding of some theoretical issue” (p. 595). It was theorized that with the video club strategy mentors would build capacity in formal and informal ways to enculturate novice teachers meaningfully into the profession. The video club model can also be refined based on mentors’ experiences.

A previously noted, the video club model may serve as tool for investigating the sociocultural elements of induction programs. As a form of professional development, the video club for mentors can help explicate how mentor practice is conceptualized and mediated through language and culture. In other words, case study research does more than summarize or describe

a phenomenon, it provides meaningful insights into existing theories and practices and offers alternative explanations for the phenomenon under investigation (Thomas, 2013).

Furthermore, case study research is “an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a ‘real life’ context” (Yin, 2018, p. 21). The parameters of this study were the induction program context, and the conceptual and relational aspects of mentor practice. This case study explored how a group of mentors leveraged video as an instrument or intervention in the context of induction. It is an instrumental (issue related) case study because it addresses concerns over high attrition rates among beginning teachers and may provide insights relevant to the ongoing teacher shortage.

Assumptions, Limitations and Delimitations

Analysis was guided by the theory of apprenticeship and movement from peripheral participation toward full participation in a community of practice (Lave & Wenger, 1991). A key assumption is that the activities, artifacts, identities, and relationships that form the context of video clubs influenced mentor practice. Another key assumption guiding analysis was that educational policies would influence mentor conversations in the context of induction. Issues of teacher retention, evaluation, and teacher education were expected to play out during the study. Within these boundaries video club tools and artifacts such as video, agendas, coaching stems, tools used for data collection such as intensive interviews and recorded video club meetings interact to form the case of the induction mentor video club.

In recent discussions of case study research, a sticking point has been the (in)ability to generalize findings from case-based evidence. Thomas’s (2013) theory of inquiry in case study research provides insight into the problem of generalizing from local perspectives to the broader

educational community. According to Thomas, local knowledge and practices offer many opportunities for researchers to take an active role in linking ideas, experiences, and insights, or theorizing in ways that help the researcher to answer the research questions. Thomas (2013) stated, “While case inquiry may often rely on observation, and to an extent description, these are not ends in themselves and the best-case studies go much further than mere illumination” (p. 599). Reflexive thematic analysis was selected because it is a powerful analytical tool for generating relevant themes from data (Braun & Clarke, 2006). The primary aim of reflexive analysis was to generalize, or find patterns, *within the case itself* (Charmaz, 2014).

In sum, a qualitative case study approach was selected for this study because a group of induction mentors participating in a video club is defined by policies (i.e., induction), people (i.e., mentors), and issues (i.e., teacher retention, teacher shortage, and high-quality teaching). The next section focuses on the context for the study.

Study Context and Data Collection

This study took place at a medium-sized, suburban school district with a well-established induction program. Citrus Unified School District (Citrus USD) is in a suburban area of Southern California. It serves several cities and an unincorporated area. Citrus USD covers 146.3 square miles and serves a population of 226,372 people. Based on demographic data provided by the California Department of Education (CDE) through the California Longitudinal Pupil Achievement Data System (CALPADS), as of 2022, Citrus Unified consists of 42 school sites serving approximately 26,000 students. The student population is 58% Latino, 24% White, 10.5% Asian American, 1.7% Black and 0.4% are American Indian or Alaska Native. 8.2% of students identified as multiracial. This student population closely mirrors the racial and ethnic composition of the community at large.

In addition, English learners make up about 20 % of the student population—about 4,800 total students. Approximately, 10,000 or 29.8% of students are eligible to participate in the federal free and reduced-price meal program. In all, there are four high schools, five middle schools, and 27 elementary schools. There are several alternative school sites, including a continuation school and two charter schools. According to public data, 9% of teachers have less than 3 years' experience. Citrus USD employs 16 full-time counselors.

The school district had met the preconditions for a program of induction as outlined in the CTC TIPS handbook including a system to support mentors. In this context, mentors worked collaboratively with district leaders to implement the induction program for beginning teachers. The selection of the school district met the following criteria for this study: (a) a public, K–12 school district; (b) providing professional development for mentors; and (c) explicitly working to support beginning teachers through induction.

Participant Selection

A convenience and purposive sampling (Braun & Clarke, 2021) approach to participant selection was used to recruit mentors for this study. The director of the induction program at Citrus USD was contacted because the primary investigator had previously partnered with the district to support the induction program, and because the partnership between the district and the university, where the researcher is based, has historically been very productive. The mentor video club project was presented, or advertised, to approximately 30 induction mentors at the school district's Fall 2018 induction mentor orientation meeting. A one-page document with information about the time commitment, a nominal stipend for participation and the project's goals was distributed.

To examine the experiences of induction mentors the participants needed meet the following criteria. Participants needed to be assigned at least one novice teacher candidate in the school district's induction program. Participants included both full- and part-time mentors. For example, at least one mentor was working at a school site as a teacher and as an induction mentor part time. The director who is also a coach was enlisted as her point of view is relevant to the research questions. Participants invited to join the study had a minimum of 5 years teaching experience and at least 1 year of mentoring experience in public schools.

The induction program director for the school district identified 10 potential mentors as candidates for this study. However, two of the candidates worked with teachers outside of the induction program and two others could not participate due to scheduling. Six mentors, including the director of induction, were selected because they participated in all aspects of the induction program, were assigned to work with beginning teachers in induction, and were experienced K–12 educators with a minimum of 5 years teaching experience.

In total, six mentors participated in the study. All participants were white females with one Filipino participant. Participant teaching experience ranged from 7 to 29 years with an average of 5 years mentoring experience.

Table 1*Participant Information*

Participant (Pseudonym)	Years teaching	Years mentoring	Gender	Grade level focus
Sarah	14	5	Female	Elementary
Renae	29	7	Female	Director
Lynn	16	3	Female	High School
Liza	22	8	Female	Middle School
Leigha	7	1	Female	High School
Brooke	10	3	Female	High School

The data set for this study came from a broader 3-year study on mentors' experiences and perceived benefits and obstacles from their participation in a video club. Intensive interviews were conducted before mentors' experiences with the video club format and after the video club was completed. Six pre and five post audio recorded interviews were transcribed by the researcher. Due to a scheduling conflict, two participants in the study were interviewed together with each responding to the prompts in turn. A total of 11 interviews, then, were audio recorded, transcribed and analyzed. Other data collected included state department achievement data, district accountability reports and demographic information about students and staff in the school district.

The Mentor Video Club Meeting Format

The video club meetings occurred in various meeting rooms at Citrus USD office spaces. These spaces were equipped with a monitor or screen for viewing presentations and were used to view video clips of teacher or mentor practice. A tripod and tablet were set up prior to each meeting to record the mentor conversations as they reflected and discussed issues related to the induction process, mentoring practice, and conversations with teacher candidates.

Eight one-hour group mentor sessions were video recorded. Participants in these sessions included the induction program director-mentor, five mentors, the facilitator-researcher (who was the principal investigator (PI) of the project and the participant observer, a graduate research assistant (GRA). The GRA video recorded each video club meeting. Both the PI-facilitator and GRA/participant-observer took field notes of individual observations and impressions during the meetings. The research consisted of taking field notes of participants' interactions during the video club meetings. Additionally, the videos selected by each mentor of their teacher candidates' classroom instruction were also collected. The meetings were video recorded including the mentor presentations and interactions. The video clips of coaching conversations with their induction teacher candidates were also collected.

All meetings followed a consistent four-part format based on van Es et al.'s (2014) framework for analysis of video. After a brief check-in, individual mentors presented a video segment (15 to 20 minutes) of their teacher candidate's instruction, pausing to highlight significant instances of classroom instruction. The facilitator oriented the group by launching an examination of the video clip and situating the segment by asking for information about the lesson goals and context. Next, the facilitator promoted inquiry by highlighting evidence from the video and posing questions about the interactions in the video. Other ways the facilitator stimulated inquiry included making inferences about a teacher's idea, pressing mentors to explain their own thinking, rephrasing their position, or offering alternative points of view to promote discussion. The facilitator maintained a group focus by connecting ideas in the discussion and challenging mentors' assumptions. Lastly, the facilitator supported group collaboration by stepping back, allowing members time to discuss an issue, inviting members to comment, validating, and affirming contributions and using humor. Throughout the meeting the

facilitator showed empathy through active listening. Broad questions such as “What did you notice?” to more specific questions focused on instructional practice (e.g., “How did using a sentence frame in that situation help the student stay focused?”) stimulated discussion and dialogue about among mentors.

Mentors were asked to observe teacher candidates’ interactions during lessons, and to interpret the situation by pausing the video to highlight examples in the video segment to support their interpretation of the events. A list of coaching moves and sentence stems were introduced to stimulate thinking and conversation. The professional learning taking place required that the facilitator approach problems of practice with sensitivity while also probing more deeply to understand mentor interpretations of instances of classroom instruction. For example, questions about a student’s engagement in a video segment critical to a mentor’s understanding of the new teacher’s developing practice led to questions as specific as the following: “Can [the teacher] see or acknowledge the issue [student lack of engagement]? Why might he not be engaging?” The video club study provided a window into mentor practice and offered insights into issues related to coaching beginning teachers in the context of induction.

There was a commitment among the mentors to allow teacher candidates the space and time to find solutions to problems of practice. They sought to balance their obligations to the teacher candidate, the school district requirements (e.g., timelines, tasks, and goals written into their ILPs) with their own generative desire to advance conversations about teaching and learning. Mentors’ needs were consistently driving the inquiry and the facilitator probed mentors thinking with open-ended questions and follow-up questions during the video club meetings. The researcher (participant-observer) and the facilitator (principal investigator) each took notes

separately to capture evocative moments from these discussions which were later became part of the data corpus (Creswell & Poth, 2016).

Citrus USD policies and supporting documents were also collected. These documents and the induction directors slide presentations for training were accessed through the district website. In induction programs, a mentoring relationship is formed when the mentor and teacher agree to cooperate in developing an ILP toward the goal of fulfilling practicum experiences aligned with the California Standards for the Teaching Profession (CSTPs). For both mentor and teacher candidate, it was a process of inquiry through various learning cycles and tasks related to professional teaching standards. The video club was designed to support induction mentors, to provide technical assistance with teacher observations through video-recorded lessons, and to provide a forum for reflection and dialogue regarding their experiences with video. To study how video clubs influenced mentor interactions and coaching conversations with teacher candidates and with other mentors in the context of induction, a reflexive qualitative analysis was conducted (Braun & Clarke, 2006). The next section describes in detail analysis procedures and results.

Method: Reflexive Thematic Analysis

Data analysis consisted of six phases as Braun and Clarke (2006) developed. Braun and Clarke stated the stages of analysis described in their work are common among qualitative researchers. They urged that the phases be considered guidelines or basic principles rather than a rigid set of rules to follow. The researcher in this study followed the 6-phase analytic process with fidelity.

Phase 1 of the process was to *familiarize oneself with the data*. The process of transcription was an important step in familiarizing oneself with the content (Braun & Clarke, 2006). Each data item (i.e., transcription of one interview) was read several times. During this

phase, the researcher read actively and thoroughly explored all aspects of the content. Immersion into the data comes with repeated readings while actively searching for possible themes (Braun & Clarke, 2006). Initial meanings and patterns were recorded in memos. These analytic memos served as *ideas for codes* when the formal coding process was started. According to Creswell and Poth (2016), “Memos guide the researcher to determine what is meaningful or relevant in the patterns, categories, and themes. As a quality check, memos enhance the researcher’s ability to compare his or her personal views with social science constructs” (p. 187). The analytic memos were reviewed throughout the process to develop and refine codes. The result of the memoing process was a list of ideas or evocative phrases from within the interview data. Table 2 shows a sample list of analytic memos.

Table 2

Analytic Memos With Evocative Phrases

Sample of Analytic Memos With Evocative Words in Quotations
<p>“Attuned” is an evocative word it implies receptivity and harmony. So, Renae is modeling the kind of self-talk necessary to make better decisions, be in harmony with what you are looking at, understand empathize and respond. Deep!</p> <p>“Sweet spot” when teachers are most teachable. This in vivo code helped me, initially coded as coach awareness.</p> <p>intentionality, “better choices”</p> <p>What is the “disconnect”? A “bridge to connect” coded in vivo.</p>

Next the research proceeded to *generating initial codes* from the data. This is Phase 2 of a reflexive thematic analysis (Braun & Clarke, 2006). The researcher identified features within the data such as latent elements or interesting chunks of information. These were coded, or

labeled with descriptive words that captured their sub-surface or latent meanings. These codes were listed and organized into meaningful groups. However, these groups of codes were not yet considered themes. According to Braun and Clarke (2006), “Your themes . . . are where the interpretative analysis of the data occurs, and in relation to which arguments about the phenomenon being examined are made” (p. 18). In other words, thematic analysis begins when codes are considered in relation to theoretical constructs, in this case, mentoring for induction and the mentor video club. As previously mentioned, a deductive thematic analysis approach to coding was initially used to interpret the data in light of effective professional development models. However, an open-ended, inductive approach was used for all of the data, or the data set.

Each data item—or interview—was systematically analyzed in the same way. Data were coded by tagging and naming segments of text with two- to three-word labels that captured the interpretive meaning of the chunk of text. Each meaningful segment was coded. In phase three of analysis, segments, or chunks of text, which shared a similar code, were collated under the same code. The researcher read each extract to determine if there was a pattern across the groups of codes. These initial patterns were considered to be candidate codes. The researcher generated as many codes as were necessary. A total of 77 codes, or candidate codes, were created. Each data item was coded to include parts of the surrounding text. Segments of text, or extracts, were coded once, coded many times, or left uncoded as appropriate. Table 3 provides an example of Phase 2 coding.

Table 3*Sample List of Initial Codes With Extracts*

Data extract	Coded for
And I think watching Sarah and how successful it was for her has given me more confidence that it's a valuable thing to step outside of my comfort zone and really work to try and figure out how to make this a meaningful [practice] so that other people will do it as well.	1. Growth mindset/confidence 2. Transparency: modeling to make a practice transparent
Having somebody be the guinea pig first and see what it was like and watch her struggle with being uncomfortable in front of us watching her video [clip] and you know seeing how everyone else reacted to the fact that she was a little bit nervous about it. It just helped to norm the room a little bit.	1. Productive struggle 2. Normalize practice 3. Vulnerability

Phase 2 codes are unstable. For example, the “growth mindset” code was dropped in favor of “productive struggle” for two reasons. First, after collating the various extracts with similar contours of meaning, the term productive struggle more accurately depicted the experience of tension and conflicting ideas mentors shared about how to best approach the problem of coaching. Mentors reasoned that guiding teacher learning was counterintuitive when they knew the “fix” for a specific instructional practice with their mentees. On the other hand, they also reflected that they valued constructivist practices that relied on dialogue and experimentation that enabled teachers to connect more meaningfully to practice.

Secondly, the term “growth mindset” is laden with meanings that may or may not relate to mentors’ experiences in the video club context or induction. The work of Boaler (2022) in particular fixed the construct in the minds of educators, and it was the focus of much teacher professional development of the past decade. Growth mindset refers to the idea that intelligence is unstable, not fixed, and can change, and that intellectual growth can be facilitated when educators adopt strengths-based perspectives and practices (Hand, 2012). Growth mindset has been referred to as resilience, perseverance or even grit. The latter word has been problematized

by researchers because it puts the onus of overcoming obstacles to learning squarely on individual students.

To clarify, thematic analysis can yield tensions and inconsistencies in the data item or across the entire data set. Braun and Clarke (2006) asserted:

No data set is without contradiction, and a satisfactory thematic ‘map’ that you will eventually produce—an overall conceptualization of the data patterns, and relationships between them—does not have to smooth out or ignore the tension and the inconsistencies within and across data items. It is important to retain accounts which depart from the dominant story in the analysis. (p. 19)

One such outlier segment came from a comment a mentor had made about coaching outside of the induction context. She stated teachers are more amenable to coaching after they have completed their formal induction program and earned a professional clear credential. In short, they are very coachable. She referred to this 2- to 3-year period after induction as a “sweet spot” for mentors. This was coded in vivo but was not added to a group in Phase 2 because of its dissonant character in the mind of the researcher.

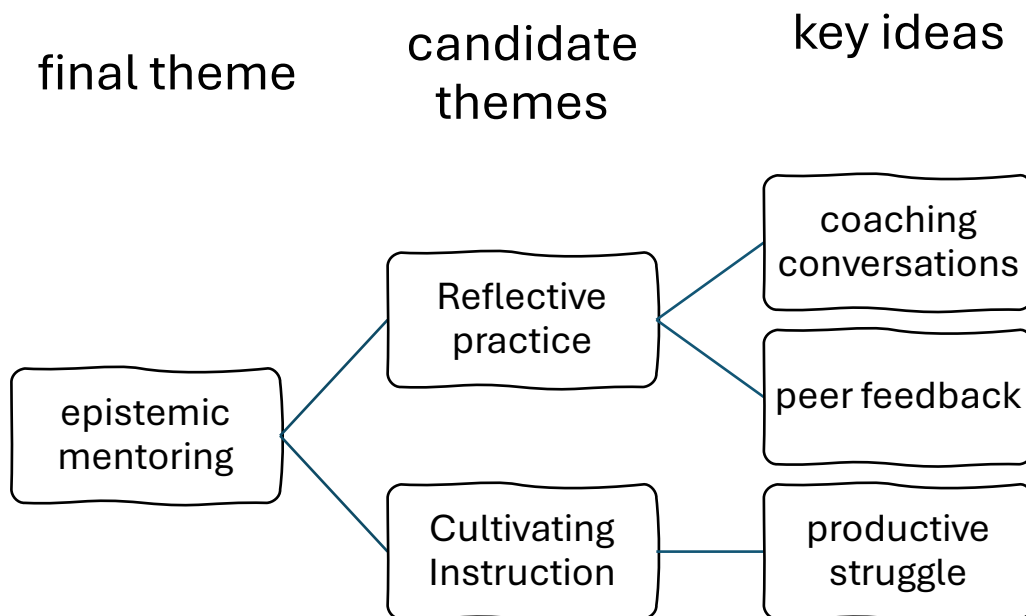
Once all data were coded and collated, Phase 3, *searching for themes*, began. At this level, different codes were sorted into potential themes and the related segments of text were also collated for that theme. In this phase, analysis shifted to a broader level and all codes from the entire data set were considered. This process of winnowing the codes by grouping them together yielded several overarching themes. The research then proceeded to building a thematic map that organized initial themes for further development. The goal of Phase 3 was to have a “collection of themes.” and all the related extracts, segments of text, and memos sorted for further analysis in Phase 4. Braun and Clarke (2006) referred to the potential themes as “candidate themes.” The

significance of individual themes was determined by a close reading of all the extracts. Extracts reflecting bona fide themes were left untouched while others were combined, separated, or discarded. This process is further described in Phase 4: *reviewing themes*.

Phase 4 began after a set of candidate themes had been developed (Braun & Clarke, 2006). This phase consisted of two levels. To refine the themes, some of the candidate themes were combined or collapsed together when the extracts or evidence supporting them was essentially the same. In other cases, themes did not have enough data to warrant further analysis and they were discarded. Braun and Clarke (2006) suggested “the data within themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes” (p. 20).

Figure 2

A Reworked Theme

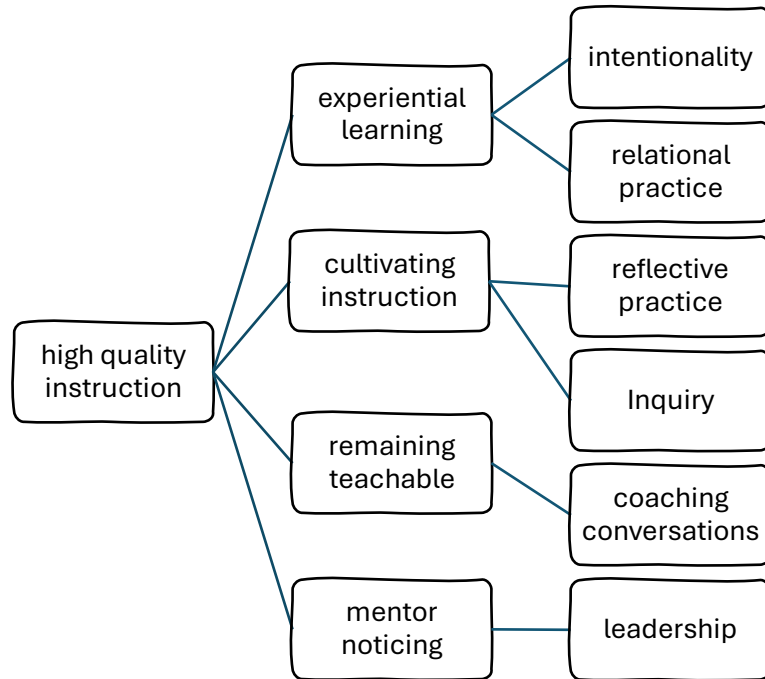


The first step for regarding themes was to actively read all the collated extracts from a particular candidate theme to see if they formed a meaningful pattern within the data item and across the data set. Where there was no significant pattern, the data segments were reclassified, if there was a match, under an already existing theme; or a new theme was created; or the candidate theme was discarded altogether. If the theme itself proved to be problematic, then the theme was redefined or reworked (see Figure 2 for an example of a reworked theme). If a candidate theme was meaningful based on this first level analysis, then it was grouped together with other themes that had been vetted for coherence to form a preliminary thematic map—or a candidate “thematic map.”

Figure 3 depicts the candidate themes for this study in a hierarchical relationship from left to right. Induction begins with high quality instruction. Experiential learning, cultivating instruction, remaining teachable and mentor noticing are all in a column to the right and represent the pedagogical approaches adopted by mentors in the context of induction. Each of these is connected to themes in the third and last column showing the specific practices connected to each of the approaches. The themes and concepts captured the knowledge and practice of induction mentors in the video club context.

Figure 3

Candidate Thematic Map

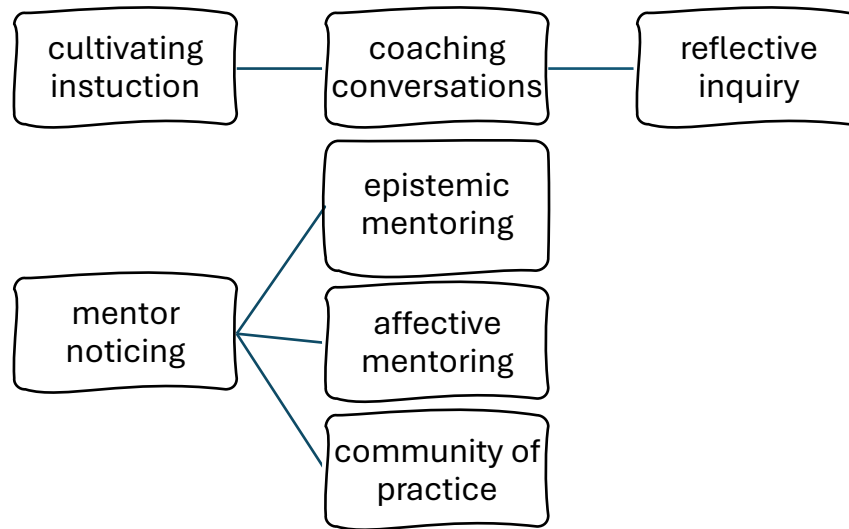


Braun and Clarke (2006) explained the purpose of the second level of analysis in Phase 4: “At this level, you consider the validity of individual themes in relation to the entire data set, but also whether your candidate thematic map ‘accurately’ reflects the meanings evident in the data set as a whole” (p. 21). Similar to the process of checking extracts and themes for coherence, the research proceeded at the level of themes and the data set. First, the entire data set was re-read to check the themes for relevance. Then any data that was missed during initial coding were coded. Other extracts were recoded as needed for analytic integrity. This process was repeated until the themes were fully culled through constant comparison of data and themes and a level of saturation that satisfied the overall relations of the thematic map. At this point, the congruity of themes had begun to form a story about the data (Braun & Clarke, 2006).

Phase 5 of thematic analysis is *defining and naming themes*. During this phase of analysis, themes are further refined. The essence of each theme was captured by organizing the extracts into a congruent structure that could be written into an interesting and unified narrative. Evocative extracts were identified to make the final report interesting and relevant. The result of Phase 5 was a story that addressed the research questions and contributed something valuable to the field (i.e., video club literature). Another outcome of this phase was that the themes of this study were clearly defined and nonexamples were clearly identified as well. In the final analysis, the themes were renamed with concise and evocative names to help readers relate immediately with the content. Figure 4 shows the final thematic map. Cultivating instruction and reflective inquiry flow from coaching conversations at the top. Mentor knowledge and practice were synthesized into three themes—epistemic and affective mentoring and professional mentor community of practice (the mentor guild)—correlating to the contextual, conceptual and relational dimensions of educative mentoring (Schwille, 2008). The mentors developed a professional vision rooted in the latter three domains of educative mentoring. So, the theme of mentor noticing represents how the video club afforded mentors the opportunity to develop and enact a professional vision for inducting new teachers into the profession.

Figure 4

Final Thematic Map



Phase 6 of reflexive thematic analysis is the final step of the process. After all the themes had been worked out, a complex narrative was written up to report the findings and conclusions. The write-up includes a formal presentation of the themes with compelling and vivid examples to make the account interesting. This dissertation makes assertions and claims regarding the question of what video clubs can do for induction mentors and how mentors may influence beginning teachers to consider teaching a worthwhile intellectual pursuit that can change society for the better.

Trustworthiness of the Study

Within a *framework of rigor*, this study conceptualizes data analysis as “an art, not a science” (Braun & Clarke, 2022, p. 9). As such, researcher subjectivity played an important role in the generation of concepts and themes. Analytic memos were used extensively during analysis to capture theoretical assumptions, insights and to articulate the researcher’s role in generating themes. To clarify, the researcher was active in the analytic process, and themes did not simply emerge from the data.

Braun and Clarke (2006) suggested specific criteria to ensure trustworthiness in reflexive thematic analysis. The following criteria adapted from Braun and Clarke guided the researcher: The researcher transcribed the data and compared the transcripts to the recordings for accuracy; each data item was given equal attention and the coding process was inclusive and comprehensive; themes were checked against each other and with the original data in an iterative and systematic fashion; an interpretivist–constructivist lens was used to make sense of the data to create a compelling story about the mentor video club; enough time was allocated to each phase for depth and weight of analysis rather than a cursory review; researcher assumptions were clearly articulated; the researcher checked for alignment of the procedures described and the analysis reported; the language and concepts employed are aligned with the stated epistemological orientation toward analysis.

The following chapter presents in narrative form results of analysis. The coding process is summarized and the researchers role in the analytic process is also illustrated. A summary of how codes and themes were developed is provided. Examples of codes and themes with corresponding extracts are also reported. Sample codes and themes can also be found in the appendix.

CHAPTER 4: ANALYSIS AND RESULTS

The purpose of this qualitative case study was to understand the video club professional development model from the perspective of a group of induction mentors. Very few researchers have designed video club studies to understand mentor practice, and even fewer have studied video clubs in the context of induction (Barnhart & Vega, 2021).

Mentor interviews pre and post the video club intervention were audio recorded and transcribed. A reflexive thematic analysis was employed to code for patterns and themes in the interview data (Braun & Clark, 2006, 2021). Researcher interpretation played an important role in the development of themes. As such, the themes generated reflect the researcher's interpretations of the interview data based on his own ontological and epistemological assumptions. A key assumption in the approach to analysis is that knowledge is negotiated and shaped by and through social practice (Lave, 1994, as cited in Matusov et al., 1994). Similarly, a constructivist perspective claims knowledge is coconstructed in collaboration and in community with others (Charmaz, 2014). Therefore, the study was a collaboration between researchers and participants and captured the understandings of a group of induction mentors' experiences in a video club.

This chapter is organized in the following way. First, a key concept from the study, a "sweet spot" in mentor practice, is presented to describe the analytic process of the researcher. According to Braun and Clarke (2021), "Themes, developed from codes, are constructed at the intersection of the data, the researcher's subjectivity, theoretical and conceptual understanding, and training and experience" (p. 9). The structure of this concept, "sweet spot," and how it informed and generated new ideas, codes, and themes is representative of the researcher's

analytic process for the entire data set because it illustrates the reflexive and iterative character of analysis through all six phases.

Second, the key themes generated from the analysis are reported. The first theme, the *mentor guild*, captured how the video club model supported mentors in developing a community of practice. Specific knowledge and practice was in the video club model as mentors worked in collaboration to hone their craft in the context of induction. Then, the theme of *epistemic mentoring* describes how mentors developed new knowledge about practice. Meschede et al. (2017) regarded professional knowledge as epistemic when it has been vetted and deemed appropriate by peers in the field. The authors stated, “In contrast to beliefs which are based on personal judgement and values, professional knowledge is supposed to have higher epistemic status . . . it has to be justified and requires *group consensus*” (Meschede et al., 2017, p. 159). Likewise, the theme of *affective mentoring* illustrates how relational practices facilitate learning and how mentors enacted Nodding’s (1986) idea of *fidelity to persons* as a foundation for critical thinking.

Lastly, the theme of *mentor noticing* characterizes mentor practice as principled appropriation within the broader social, cultural and political context of education. Key concepts in this theme are mentor dispositions, identity and intentionality in noticing practice. The claim here is that remaining teachable and setting goals for oneself influences what mentors notice in teacher practice. Key examples from the data include mentors’ comments regarding responsive teaching, strengths-based coaching, and respect for teacher autonomy.

Analysis: Anatomy of a Theme

Phase 1: The researcher transcribed, read and re-read the entire data set jotting down initial ideas and notes, or memos, in the margins and in a researcher journal. Phase 2 involved

two types of coding: semantic and latent. Chunks of data were coded semantically in relation to surrounding features in the text. Next, the researcher read through the entire data set for a second time considering the latent meaning. Latent coding involved the researcher's interpretation of intended meanings not immediately discernable within the data (Braun & Clarke, 2006).

Some of the more evocative passages were coded "in vivo" or verbatim from parts of the passage. For example, one of the mentors used the term "sweet spot" to describe their experience coaching teachers *that have already completed induction*. This mentor said teachers in their 3rd through 5th years are intrinsically motivated to improve their practice and are very open to instructional coaching and suggestions from mentors.

Phase 3 involved collating related extracts into candidate, or potential themes. In the latter phases of analysis, Phases 4 and 5, connections to other themes started to surface. Specifically, the extract for "sweet spot" and the collated references attached to this code were interpreted to mean a professional educator that *remains teachable* to encompass any instances where the video club model made it possible for mentors to *reach and teach* their induction teacher candidates. The same extract that was coded "sweet spot" and "remaining teachable" also supported "cultivating practice" (a separate code with its own references attached) in the sense that good teachers, *teachers that stay*, are the ones for whom teaching is a process of continual improvement. The two themes, cultivating practice and remaining teachable revealed the tension that was sometimes present between mentors and beginning teachers. In other words, mentors implied that some teachers were not as open to learning from mentors as others. Nonetheless, mentors acted on the belief that "teacher retention depends largely on opportunities to cultivate practice."

Phase 4: the researcher reviewed the theme for coherence within extracts and across the entire data set in relation to other themes and an initial thematic map was created. Finally, in Phase 5, the theme cultivating practice was renamed “cultivating mentor practice” and redefined as “how mentors engage in inquiry and reflection likely influences induction teacher candidates’ commitment to teaching.” Researcher subjectivity was inherent in the labels created and added in all phases. In Phase 5 of analysis, for example, the theme of *cultivating instruction as an intellectual pursuit* was also entertained; at that point, efforts to squeeze the data for further insights felt contrived, so the analysis was paused, and a final thematic map was created.

The process of continual reflection and returning to the data is the reflexive part of thematic analysis. This process is both intuitive, systematic and, above all, creative. The above process was repeated for the entire data set until no new insights (Thomas, 2016) could be produced and saturation could be said to have taken place (Charmaz, 2014). The following section reports on the case of a group of induction mentors’ video club experiences.

The Mentor Guild: Building a Community of Practice Around Video

Results captured how mentors worked together to support one another in their craft. The term mentor guild is apt because the video club space took on the character of a workshop, an association of journeyman teachers sharing pedagogical knowledge and refining mentor practice. Key concepts in the development of this theme were collaboration, reciprocity, and a mutual interest in developing teachers. There were poignant references to the video club as having afforded the opportunity for collegial relations inclusive of mentors and teachers. Mentor training is a required component of teacher induction programs, and one of the conditions that set the stage for a video club rooted in mentor knowledge and practice. Results indicated the video

club is a viable model for the professional development of induction mentors because it provided a context for building a strong community of practice among mentors.

Professional knowledge is developed in community and learning situated around the use of video can generate new ways of seeing classroom instruction. It was theorized that mentors could use video to develop and refine their own abilities to notice significant features in classroom practice. The shift to examining what mentors noticed in coaching conversations with novice teachers was an important development in the study. Subsequently, the mentor video club emphasized mentor to mentor dialogue and reflection. In the following excerpt, Leigha reflected on the value of this work:

Just like everyone's ideas and hearing how they would approach a mentoring conversation, so not only like the actual like “oh that's a good idea, I should do that in my class” but how they would approach a conversation. It's kind of like how you can coach your candidate but also how I might coach other coaches in the future. But I need more practice coaching a candidate.

Leigha expressed that she needed more practice coaching teacher candidates. She also showed the perspective taking that is necessary for mentors to coach effectively from thinking like a teacher “oh that’s a good idea, I should [try] that in my class” to how to “approach a conversation.” This kind of awareness, shifting back and forth from a teaching perspective to a mentoring role is a key example of the kind of skill needed from mentors to assist teachers in creating new knowledge about teaching.

Also, the induction program mandated structured time for teacher candidates to debrief with mentors on pressing concerns. In the induction program policy language, these interactions

with the mentor are called “just in time” support (CTC, 2016). The video club provided mentors with a forum to debrief these critical interactions. Leigha offered:

The process helped me feel connected to other people who were in a similar coaching situation, so it made it kind of a cohort rather than just me and my candidate, which I enjoyed, and I foresee next year kind of being a little more strict about our conversations and being a little more professional but like on task and focused.

Leigha expressed positive feelings about her interactions using language such as “connected” and “cohort,” and she indicated it can lead to more focused work with words like “on task and focused.” Coaching conversations presented in the video club by mentors were another method of building community and learning new skills. For example, Leigha noted:

I didn’t know what to expect from the meetings we had but I thought those were really valuable and I really enjoyed seeing other people’s [coaching] conversations and it makes me more interested in pursuing this as like a program in Citrus USD next year.

Leigha acknowledged the importance of collaboration by “seeing other people’s coaching” as well as her interest in pursuing the video club model “like a program” in the context of induction at Citrus. Consequently, experiences such as Leigha’s highlight the positive potential of video clubs in fulfilling the requirement of professional training for mentors within induction programs.

The group of mentors stressed the importance of reflection to improve practice. Mentors consistently reflected on coaching practice within the video club meetings. Liza affirmed how the video club structure promoted reflective practice:

Like the colleagues in there, they’re all brilliant in that room, just sharing their expertise. When I showed my video there was a lot of feedback because I was very good about

[asking], “how do I say this, how do I approach this kind of thing?” And there’s a lot of feedback that came back. So even just having those conversations really just helped me reflect.

In essence, feedback and asking questions are reciprocal processes mentors used to reflect on and build their practice. Liza observed too, that her colleagues are “brilliant.” Implicit in this statement is the fact that Liza has remained open to suggestions from her colleagues. However, her self-concept changed as she gained more confidence through the video club. Whereas previously she was unsure about her coaching abilities, she grew more confident as the group became more comfortable with one another and with the process of evaluating video:

I think we're all kind of the same actually now. Now just getting to know everyone a little bit more, like I've known Sarah forever, but I do feel like we kind of we're like OK we're all kind of in the same, you know, in the same boat, we're all wanting to head toward the same pathway. And the [video club] is actually helping us. So yeah, I think we were all, maybe they feel the same.

The quote above illustrated the common bond and interests shared by mentors in moving professional mentoring practice forward. Key phrases such as “getting to know everyone,” and being in “the same boat” sharing in a common “pathway” illustrate the dispositions mentors needed to persevere in their practice and build a sense of community.

For mentors, knowledge gained through experience was highly valued. And induction programs are unique because they draw on the wisdom of mentor practice and regard it as foundational knowledge. The following statement made by Renae, the director of the induction program, who is also a coach, encapsulated how the video club helped to develop a community of practice:

I think my biggest focus right now is being attuned to my coaches you know if I really think about my role, it's really coaching the coaches. So, the more I can hear about their actual experiences the better and [the video club] gave me an excellent avenue to do that because it's not always a *transparent process* and people don't always tell you exactly what they're experiencing or need so you're guessing you know you're kind of judging did they seem to really eat that up or not want it so much. So, this makes it a little bit more transparent for me to coach my coaches, so I appreciate that.

As director of the induction program, Renae's theory of learning informed the mentor video club practice. She stated the video club was a good avenue for understanding mentors' needs, and "actual experiences" with coaching beginning teachers. Renae framed learning through the video club as situated in context and the video club process made learning "transparent." In other words, the mentor video club goals, procedures, and processes were made transparent, and, therefore, rigorous learning can be said to have taken place. Above all, the group of mentors strived for transparency with one another and their teacher candidates.

The bond mentors created, the very skilled nature of their work, and the kind of knowledge needed to be a coach, can best be summed up by the following quote. Sarah was asked to reflect on her experiences in the video club and, in particular, the role her colleagues played in her professional learning. She stated:

I remember just getting a lot of really good feedback on or hearing about different ideas for coaching. I think we don't get that a lot, as often as we should, kind of hearing how other people actually coach. We talk a lot about PD, professional development. We talk a lot about different things we do with data and stuff like that, but we don't talk a lot about coaching and I feel like coaching is like a really it's a skill and it's not like you can just

walk in and you can be like “I feel like my strength is instruction and data” I love that stuff but it doesn’t mean just because I’m really good at it that I can always just walk in and coach someone on it. And I’ve learned that over the last 6 years I think I’ve gotten better but I always have room to grow and so I think hearing their ideas on coaching was really powerful.

This quote illustrates how mentors in the video club and the induction context acted as stewards of the craft of teaching. Concepts such as feedback, coaching conversations, and instruction demonstrate the range of skills needed for the professional development of mentors.

The word “guild” in the heading for this section, implies a professional association or a community of practice in pursuit of a common goal. In the case of the mentor video club, that goal is high-quality teaching. And membership in the mentor professional learning community requires knowledge of the district and schools’ culture, skills and values so they can assist beginning teachers to participate effectively both in the classroom in the broader school culture. The next section illustrates the kind of professional knowledge mentors needed for induction and how the video club supported mentors facilitated new mentor knowledge.

Epistemic Mentoring: Intentional Video-Based Coaching

As the video club evolved, the practice of coaching conversations between mentors and beginning teachers was explored more in depth and took on greater importance. At first, mentors analyzed video of classroom instruction to guide teacher candidates in their induction program and personal goals. Later, mentors emphasized their own coaching conversations in the context of a video club. Mentors intentionally set out to experience video as a tool for learning, so teacher candidates may emulate the practice of learning through video during coaching conversations. Mentors modeled video club practices such as contextualizing, highlighting,

reasoning and defining practice in coaching conversations with teacher candidates. As such epistemic mentoring can be defined as *intentional modeling of evidence-based learning in the context of a mentor video club*. It is a dynamic, responsive process of mentors learning both the constraints and the affordances of video based coaching conversations with beginning teachers.

To put it differently, the term epistemic mentoring generally refers to what mentors know and how they came to know it through participation in the video club. Reflexive thematic analysis pointed to several aspects of video club practice in the context of induction that can potentially connect mentor theory and practice. First, video club meetings afforded mentors the opportunity to investigate how their peers leveraged video in coaching conversations with teacher candidates. For instance, mentors were very intentional about taking an inquiry stance in the video club, discussing problems of practice and asking for specific feedback from colleagues.

Second, the video club produced new knowledge about coaching conversations. Results indicated mentors approached coaching conversations differently because of the video club meetings. Mentors resisted the impulse to provide teacher candidates with strategies or techniques that would have taken learning in a predetermined direction. This ability to bracket out a priori knowledge, to pause and allow teachers time to process and press on, is a hallmark of constructivist practice and expert mentoring. Owing to the productive struggle experienced by mentors in the video club, the *ability to apprentice* transferred to their conversations with teacher candidates. Therefore, epistemic mentoring is the growing knowledge that mentor learning in a video club setting is transferable to mentor practice in the induction context.

Third, analysis of coaching conversations empowered mentors to effectively respond to individual teacher needs while staying focused on the goals of induction to improve teacher practice. The video club environment afforded participants the ability to refine mentor practice

and to intentionally shape learning for novice teachers. In other words, epistemic mentoring is a reflective and responsive practice.

Intentional Practice

The following exchange between Renae and Leigha illustrates how mentors were intentional about how to approach video club practices with teacher candidates. Renae believes a mentor's role is to build confidence in their teacher candidate by allowing them to set up the video recording themselves because it is "better" for candidates to control their own learning. Renae said:

On that piece of what she just mentioned about setting the candidate up to take the video, really, even though that is hard to get it going and it does require that trust, that is the better [way] because that keeps that locus of control with that candidate, what they video what they want to show you versus "I'm coming to you, pick something now that we could use."

Leigha agreed this approach might lead to more meaningful coaching conversations but viewed a mentor's role as more hands on. Leigha said:

Yeah, I like that idea. I do want the buy-in there because I think that the quality of the [coaching] conversation and what they get out of it overall would be better. But you know it's like anything when you are a teacher in the classroom you can't just give a kid an assignment and say do this, you have to talk them through everything you have to show them examples. I mean if you want to do it properly. So, it's the same scenario.

Although Leigha agreed with Renae on the issue teachers' recording themselves for "buy-in," she added that they also need direct instruction in how to use the technology. Leigha drew on her

experience as a classroom teacher when she suggested, “you have to talk them through everything” and “you have to show them examples” for teacher candidates to “do it properly.”

The extract above shows how video club practices became part of induction mentors’ professional discourse as they appropriated video technology and developed new ways to talk about mentoring with video. It also illustrated how intentionally, or thoughtfully, they approached the practice of video recording classroom instruction. It illustrates how mentors support teacher candidates in their ability to choose what to record and what to focus on for their coaching conversation. Mentors recognized teacher candidates needed support with the technical aspects of video recording classroom practice for them to focus on teaching. At the same time, mentors noted the instructional focus of the video would influence the teacher candidate’s experience during their coaching conversations. In any case, mentors agreed a teacher centered approach to mentoring in the video club context would be optimal.

Responsive Evidence-Based Practice

An example of epistemic mentoring as evidence based practice is when mentors highlighted and discussed significant encounters in their coaching conversations in video club meetings. In the next extract, Liza recalled how she encouraged her teacher candidate to observe a particular student whose back was turned—a behavior that may have gone unnoticed without the video. The teacher candidate noticed the issue and shared several strategies that might help the student to stay engaged in the lesson. Liza described their interaction as follows:

The video gave me like more focus, and it helped me have a more direct conversation about a particular issue that I noticed. But instead of talking around it, I could just, “Let’s watch this, and just kind of say, you know, what do you see?” You know? And hopefully they see it but yeah, I mean I think it really helped Sonia [teacher candidate] see that.

She's like, "Oh yeah, I guess [the student's] back is like . . ." even though she didn't really like full on respond, she just was like . . . "and I'm going to move him just so that he's facing me and I'm going to have him with peers that he can talk to, that you know maybe help translate a little bit too, but then also have a response for him." And like she kind of came up with that stuff. So that was good, it was her idea, but I kind of was like I was expecting her to have more of a [emotional] reaction. She just . . . but she did. She did come up with something that she wanted to change based on that video. It was perfect.

From Liza's point of view, the teacher candidate grew silent as she reasoned about the interactions in the classroom. For Liza, her teacher candidate's response was unexpected, and it gave her pause (e.g., she did not "full on respond"). Liza did not make assumptions about the subjectivity of the teacher candidate—her attitudes, dispositions or thinking in response to these discussions—as reflected in her pause. This is a good example of how mentors in this study refrained from judgement and asked open-ended questions that enabled novice teachers to reflect on practice. Liza first highlighted a salient feature in the video but allowed the teacher candidate to interpret the clip on her own (e.g., "she came up with that stuff").

Likewise, focusing on coaching conversations in the context of a video club allowed mentors to evaluate the effectiveness of these conversations. Specifically, the passage above demonstrated the importance of non-evaluative conversations with mentees. Rather than identifying the problem and providing a solution *for* her teacher candidate, Liza took an epistemic mentoring approach—by referring back to evidence in the video to reason about practice when she prompted her teacher candidate: "Let's watch this . . . what do you see?" Liza's confidence in her ability to apprentice contributed to the beginning teacher's ability to find the learning *within herself*.

To clarify, Liza supported her beginning teacher by modeling a knowing confidence in her ability to use video as a tool for problem solving. This is clearly a strengths-based approach that is consistent with constructivist practices driven by an intrinsic desire to know on the part of the novice teacher. As Liza noted, her teacher candidate, without saying too much, rather jumped into action.

Finally, the video club enabled mentors to link coaching conversations to evidence based practices for beginning teachers. In the following excerpt, Leigha discusses the potential for video to shift conversations from informal “teacher talk” to formal conversations about instructional practice. She stated:

I think that videoing helped breaking down the lessons and picking and choosing concrete examples and places for us to discuss. But oftentimes I think, maybe because I have a teacher candidate who is already very skilled and very good and very confident that sometimes our sessions turned into like teacher talk. And in the schedule we have, and it's not just my school, there is like no time here to talk to other adults on campus. Teacher talk, like you know, just venting or just sharing about your day, I think is lacking where there's space for that with induction. And so, our conversations often turned into that part of community [building], which again is valid, but using the video, can bring it back to what we need to be doing more specifically.

Ultimately, epistemic mentoring is a highly adaptive process that honors the needs of adult learners and sensitizes teachers to the demands of the profession by highlighting, interpreting and shaping instructional practice through the use of video-based coaching conversations. The video club model provided mentors with a forum to address the diverse needs and strengths of novice teachers with the aim of improving mentor practice.

Affective Mentoring: Prioritizing Relationships

The theme of affective mentoring, or relational knowledge, represents the notion that mentoring is a deeply relational practice. The relational and dialogic nature of mentor practice in the context of induction was a key theme to emerge from analysis. Additionally, key concepts in this theme are peer feedback, personal connections and reciprocity. This theme featured prominently across all cases. Comments in the interview data showed mentors leveraged the rapport they had developed with their teacher candidates to stimulate reflective practice.

Specifically, building and developing a positive rapport with their teacher candidates was a priority for mentors and a prerequisite to cultivating instruction. For example, Renae reflected that professional development for mentors must do more than provide mentors with effective strategies to model for beginning teachers. She stated:

So that really is my philosophy that we need to build the coaches up with a range of strategies and then give them a lot of practice and mentoring in how to know when to use which one, how to signal it, how to evaluate it that it's being effective. Of course, none of that is effective if you don't have a positive personal relationship with the person.

The words “build” and “signal” and “evaluate” are mentor practices. Assessing whether or not a strategy is effective can also be learned through practice. Renae made it clear that mentors need support and practice in developing these skills. However, as she quickly pointed out, teachers are more amenable to learning instructional strategies when they have a good relationship with their mentor.

There was a tendency on the part of mentors in the video club to assume the humanistic side of mentoring, the development of the whole teacher, comes naturally. For example, Renae stated:

Ninety nine percent of the cases you know, the personal relationship seems to be great and easy, in general, for people to build [the relationship] with the coach and the mentee. For the people that I oversee, I mean there's a couple situations we have, but it's rare, that's usually not the issue, people that pursue [mentoring] tend to gravitate, to like to have connections!

According to Renae, conflict between a mentor and a teacher candidate is an exception rather than the rule because mentors are predisposed to relationship building. She stated people who pursue mentoring “tend to gravitate” toward making personal connections. Nevertheless, Renae asserted, when there is conflict, mentors have specific skills for addressing the challenge of working with beginning teachers including modeling a strengths-based approach. She stated:

So that's challenging. That takes a long time just kind of like pick away at that and build them up a little bit. You know, I guess I had to learn to do that more no matter how bad the situation is to find some positives and build up with them because if you can't do that in there, they aren't listening to anything that you got going on, it's less about identifying the problem areas but identifying some assets. And then getting them to work on it.

Renae's strengths-based approach to resolving conflict is evident in her language: “find some positives,” “build up” and “identify some assets.” The video club supported mentors in developing a strengths-based approach to professional learning.

Similarly, Sarah noted safety was a primary concern when she shared her video with her peers. She said:

I will say that there are certain people that I don't know if I would feel as comfortable in a group with . . . I don't mind sharing. But there's, like the people who were in there I felt comfortable with, like ok even if I showed them something that's not great it's not going

to be blasted across the district or whatever. Where there are some people that are like that, that's unfortunate.

This excerpt shows the importance of relationships based on reciprocity and trust, where both mentor and teacher take a learner stance. Sarah's comment about feeling comfortable with the group of mentors shows how the video club structure can create a safe environment for risk taking. Another key finding was that, when working with beginning teachers, mentors modeled the same risk taking and vulnerability on display during the video club. For the most part, mentors sought to capitalize on failure as an opportunity for learning and as a way of countering self-defeating behaviors or internalized negative thinking rooted in deficit theories of knowledge. The following excerpt is especially poignant because it illustrates how mentors leveraged video to normalize mistakes. Sarah described how she models learning from her own miscues:

You think it's going to go beautifully. And you did everything right. But it blows up in your face. And that's OK. Because they're kids. Yeah. And you're human. And so, I try to use that kind of story and just try to model that same attitude. Yeah, I'm a coach. But it doesn't mean everything I do is perfect. We're like colleagues. I'm gonna come in here and demo this. You know how it should be done. But it could blow up in my face too. Let's learn from that. So, I think just getting [teacher candidates] to feel that way like comfortable that it's not [perfect]. I got you right now.

Basically, Sarah explained to the group how she coaches her teacher candidates to be compassionate toward themselves “because they’re kids . . . and you’re human” and to be realistic about their expectations in the classroom. She models how to be comfortable (e.g. comfortable that it’s not perfect) when things do not turn out as planned and that they can count on her support when they fail, saying “I got you right now.” This example illustrates how the

video club supported and encouraged mentors to have high expectations while at the same time providing the support necessary for teachers to feel good about their successes and their challenges.

In fact, Sarah's recorded coaching conversation with her teacher candidate was the first to be analyzed among the group of mentors. True to form, Sarah again modeled for her colleagues and showed how she leveraged video to challenge her teacher candidate. Analysis of mentor reflections after the meetings indicated Sarah's vulnerability was a turning point in the study. As Lynn candidly observed:

So, I think it was just mostly like having somebody be the guinea pig first and see what it was like and watch her struggle with being uncomfortable in front of us watching her video and you know seeing how everybody else reacted to the fact that she was a little bit nervous about it. It just helped to norm the room a little bit for me a little bit more because I think I have pretty good relationships with most of the people that were in there. But it's still a fairly intimidating thing anyway.

Lynn felt uneasy, or "intimidated" about sharing her coaching conversation with the group. But these feelings were alleviated after Sarah allowed others in to see her own coaching conversation. Lynn said watching her struggle "helped to norm the room," meaning Sarah's vulnerability and risk taking served as an example for the rest of the group. The video club formed a safe space for reflection, which is a necessary skill for mentors. And while discussing how contextual factors shape new teachers' experiences, Renae provided insight into why beginning teachers are stressed and how mentors can alleviate that stress. She said:

I think in our educational community we have tried to meet all needs. And so sometimes that means that teachers, a lot is put upon them and then every curriculum piece they get,

there are a lot of options available to them, which if you are a 20-year veteran is maybe not that hard to sift through what are the most important things to do and what are the least important. But if you're a brand-new teacher and you're presented with all of this your tendency is to want to do too much and not do it in a high-quality way. So, I think that's the single biggest problem for most of our educators, our new ones at least.

Mentors can mitigate stress for new teachers by helping them “sift” through curriculum and prioritize what is “most important.” Getting new teachers to slow down and not try to do too much is also a radical shift from the frenetic pace of day-to-day teaching in the current policy environment. Significantly, in the quote above, Renae affirmed that professional acumen develops over time, so “veteran” teachers can better prioritize and organize curriculum. In fact, they can be selective because their professional identities as experienced educators allows them to negotiate curriculum.

To clarify, Renae stated there are many curricular options, often with conflicting theoretical underpinnings, competing for teacher time and attention. She also noted it is more difficult for novice teachers to determine which program will best serve their students. Mentors can help novice teachers understand that curriculum programs often have competing agendas by highlighting and making sense of the features—lesson plans, tasks and activities, topics—that reveal a particular curriculum’s underlying assumptions. Mentor efforts to ease tensions by making processes transparent for beginning teachers are a critical part of mentors’ work as change agents.

Although the mentor video club study does not attempt to explicate the asymmetrical relations of power, a claim can be made about how the dynamics of mentor and teacher candidate interactions shaped the induction context. For example, Liza described an instance

when she realized, after viewing one of Sarah's coaching conversations during a video club meeting, that she had been losing patience with her teacher candidate and defaulted to a more traditional, top-down approach instead of a more dialogical, open-ended educative approach. She explained:

Yeah, Sarah asked a lot of questions, a lot more than I have, and the questions were stated in a way that I think her teacher candidate was able to like stop and think about her teaching. You know and, like I said, I feel like I was very bossy with my other teacher candidate. I was very . . . like it's almost like I didn't have patience to wait for her to find it because I'm like she's not going to answer it, so I need to just tell her.

Liza identified in this quote some of the key tenets of educative mentoring. Pausing to “stop and think,” “probing questions,” “patience,” and “waiting for her to find it” are all aspects of an educative approach to mentoring. Mentors in the video club helped beginning teachers appreciate teaching as a process of inquiry.

Previous mentor trainings at Citrus Unified involving teachers focused on simulating coaching conversations. Teachers alternated between the role of mentor and the role of beginning teacher. However, because cognition is situated (Putnam & Borko, 2000), teachers did not see the relevance of having time to rehearse by pretending to be mentors. Leigha compared this kind of training to the coaching conversations afforded by the video club. She stated:

But then you get to the classroom and like everything you actually know as a teacher is learned on your feet. And so, I think a lot of people, there are grumblings about mentors, like people, you know, come to the meetings that we have, that are separate from ours, because they're [role playing] being teachers for our own training and they're like, “Oh I know all this, this is a waste of time I don't need this” But like seeing the practical

applications like seeing those conversations [on video] makes way more sense to a teacher brain I think.

Leigha stated discussing the actual coaching conversations based on classroom practice observed in the video afforded more realistic professional learning for teachers and mentors than having to role play different coaching scenarios. She understood the difference between professional practice, learning by engaging in intellectually challenging, authentic tasks versus contrived approaches that decontextualize learning activities. Words such as “grumbling about mentors” and “waste of time” underscore Leigha’s point that professional development can be disconnected from practice: Statements such as “seeing those conversations [on video] makes way more sense to a teacher brain” and “everything you actually know as a teacher is learned on your feet” repudiate professional development disconnected from classroom practice.

A video recorded coaching conversation made more sense to Leigha because it was an authentic tool for learning. It was a common reference point for both the mentor and the teacher where both are situated as learners. The following quote further illustrates how video recorded coaching conversations facilitated dialogue between mentor and teacher candidate. Sarah observed:

I've learned by being a coach, you're sitting back, and you see things they don't. And as a coach that can be difficult because you don't want to point it out. So, with a video you don't have to it's very natural it's like you don't have to be like oh look at that. I mean they see it, and you can see their reaction and I think that was probably the most powerful is like seeing them like all of a sudden get a little uncomfortable because they're noticing the things that they know that you're noticing but then the next powerful point is, is

saying hey that happens to everybody. But how great that you're noticing that. And now can do something about it.

Sarah was aware that her professional vision is broader than her teacher candidate's, but she refrained from "pointing out" what her candidate could not yet see because it was beyond her ability to see it. Then Sarah observed that a video made it easier to highlight a particular event in a way that is less threatening (e.g. "natural") but can still elicit feelings of discomfort enough to get their teacher to attend to significant features in the video clip—like when Sarah said, "they're noticing the things you're noticing" and to motivate change or "do something about it." Significantly, Sarah first validated the teacher's noticing by saying "hey, that happens to everybody."

The next quote demonstrates the interrelated dynamic between the video club, induction, and mentor practice. Sarah presented her video recorded coaching conversation to the group. During the coaching conversation, she was very self-aware yet very empathetic toward her teacher candidate. The video clip showed a confident teacher candidate and her mentor guiding her through the lesson. Sarah had previewed the segment and planned several pause points to highlight the effective aspects. She planned as well to leverage the video clip to point out specific areas for instructional improvement, which presumably had gone unnoticed by the teacher candidate.

In the video clip, Sarah is very confident and conscientious. Her concerns for epistemic—evidence based—mentoring did not overshadow the affective needs of her teacher candidate. But Sarah misjudged the situation and her teacher candidate visibly lost confidence. Sarah wanted to know from the other mentors how she might have approached the problem differently. Reflecting on that experience Sarah stated:

I push too, push too far and I thought, you know, because of pushing her too far, did I take away from some of the work we've done? I don't think it did because of who she is. But I think it could have if it was a different teacher. And so, I think that was a really big aha moment for me as a coach, for the teacher, and about the video itself because I've had tons of reflective conversations with teachers, and they do pick up on the things that they need to work on or the things that went really well. But sometimes how they remember it is different or slightly different and that can mean a whole different result.

The interactions between mentors and teachers are a delimitation of this study, but it was clear from watching the video that the teacher felt dejected when an area for improvement was brought to her attention. Sarah leveraged the trust she had worked hard to establish on this particular instance of teaching. Yet, she defended her decision because she knows her teacher candidate is resilient, saying “because of who she is.” On the other hand, she gained valuable insight on how to use video to focus conversations about practice. Specifically, when she said, “that sometimes how they remember it is different...and can mean a whole different result.” Nevertheless, she felt she was successful in helping her teacher candidate notice an area of growth.

To be sure, this study cannot draw conclusions about the impact the mentor video club had on teacher candidates; this study examined the case of a group of mentors. However, the coaching conversations the mentors recorded and shared during the video club meetings provided a window into the ways mentors leveraged video to support their teachers and one another. Recording coaching conversations for analysis later in the video club meetings provided insight and motivation for not just Sarah, but mentor colleagues as well. For example, in the

following excerpt, reflecting on Sarah's coaching conversation with her teacher candidate, Liza said:

I think watching her coaching conversation has really, really impacted me because as soon as we left there and I had coaching conversation, it kind of changed the way I coached my induction person.

Liza also then shared her thoughts about how video had impacted her practice, how video helped focus the conversation with her teacher candidate:

I just feel a little bit more confident you know and actually having the video to talk from. I think that's helpful because sometimes it's hard to find like where you want to go with the teacher. Whereas like I think the video helps. Like I can go back and re-watch and say OK this is an area of need. This is what I want to watch with them. So, it just gives me a target. You know so that's helped me a lot.

This quote captured how mentors were able to push their practice beyond empathy and compassion to reflective practice in the service of high-quality instruction. Video facilitated dialogue because Liza had "video to talk from." It also afforded confidence because it helped Liza identify features in the video to challenge the teacher candidate's perceptions and providing a "target" area. The purposeful use of video provided mentors with many opportunities to connect with novice teachers in meaningful ways, ways that developed both their interest in, and ability to teach.

Mentor Noticing

As pointed out previously, induction mentors adopted new ways of thinking and discussing practice in the context of the video club. The results shared to this point show the

potential of video clubs to promote evidence based coaching conversations and improved mentoring relationships with teacher candidates.

Another way of thinking about video clubs in the context of induction is to think of mentor learning as social engagement. It is possible for mentor video clubs to make induction more relevant and accessible to beginning teachers by considering the sociocultural dimensions of schooling. A definition of mentor noticing that does not include contextual factors in the field would not be complete. For example, mentors studied video recorded coaching conversations, as well as video of novice teachers' instructional practice and identified significant interactions within the video club context. In this way mentors enacted their professional vision by marking and coding practice in a social context (i.e., the mentor video club).

It follows from this that mentor noticing both shapes and is shaped by context. The theme of mentor noticing grew out of the *potential* for video clubs to foster critical reflection and action on the part of induction mentors to change the status quo of teaching. Results indicated mentors in the video club noticed—highlighted and discussed—salient interactions in coaching conversations that resisted the desire to “fix” teachers and instead demonstrated confidence in teachers' abilities to improve. Although this study is limited to induction and surrounding activities at school sites, it is possible to infer that mentors were aware that teachers are not the only variable affecting student outcomes and that out-of-school factors play an important role in educational attainment.

The study does demonstrate, however, that mentors were fundamentally aware of their own agency in the process of training and retaining high quality teachers. For example, in the following extract, Sara used the word “longevity” three times, underscoring the need to make teaching and inviting profession:

The video was a good reminder to like, facilitate the change, which I know and do my thing, but I oftentimes feel that pressure which then can quickly have me change. And so, I think video is reminding me to slow down—that change takes time. If I can facilitate it with my teacher, back to that whole longevity, that then she will have some longevity and with that longevity you have a bigger impact.

Sara reminded herself to “slow down” and “that change takes time.” She was aware of the social “pressure” that can have her “quickly change” from constructivist coaching (e.g., facilitate the change) to prescriptive practices. She saw herself as a change agent when she said video reminds her to model intentional practice (e.g., slowing down) for her teacher candidate. From her comment that “longevity can have a bigger impact” it can be inferred that new teacher induction is foundational for long term teacher development. This kind of noticing can be called critical because it is a form of reflection in action or *praxis*. The video club afforded her the opportunity to critically examine her role in the process of educating teachers. Moreover, as illustrated in this extract, mentors balanced the requirements of the induction program with responsive mentor practice by prioritizing constructivist teacher learning.

Although this study does not explore teacher perspectives per se, it can be inferred from mentors’ discussions in the video club that teachers were empowered to make decisions regarding classroom practice. In the following extract, Leigha recalled a coaching conversation with her teacher candidate in which she did not have an agenda, but rather enabled the teacher to select the issue to focus on. She stated:

I recall watching that and having the experience of being able to say like, “I’m not sure.” I was asking for ideas; she’s asking and I’m not sure what to tell her. I really enjoy the

coaching aspect of teaching, like, that's kind of where I'm thinking of really going in education and that was an interesting, practical discussion.

By taking a learner stance she encouraged her teacher to highlight a significant feature of the video. To Leigha coaching is a process of asking questions rather than providing answers, and it is also a process of learning as evidenced in her comment pursuing coaching as a field of study. Leigha viewed coaching and teaching as reciprocal processes as she was both mentor and learner while encouraging her teacher candidate to engage in inquiry about practice.

Similarly, Liza experienced uncertainty and had the courage to share about it openly. Referring to her colleagues in the video club as a supportive group of mentors and the video club as a safe space to process learning she stated: “So, you're finally with people where you can say like, I don’t . . . I don't know.” The video club facilitated this type of self-disclosure by providing mentors a safe space to analyze coaching conversations.

In another example, Brooke explained how she reinforced the importance of reflective practice and inquiry with her teaching candidate. In the following extract, she connects reflective practice in induction to university-based teacher education programs.

We're going to have a conversation intermittently about it, but just making it like a regular thing to reinforce the importance of reflection so that people can see that it doesn't just stop when you leave your teacher prep program, or you leave your induction program that it's something that good educators do regularly.

She discussed the importance of reflection in teacher education, in induction and after induction stating “good educators” reflect “regularly.”

Sara added, “No, we don't record ourselves regularly, but good teachers are always reflecting no matter what it is. And if you happen to capture it on film, awesome!”

There is potential for video clubs to foster leadership practice. Specifically, Renae, the induction program director, reported that the video club process provided a much needed window into mentors' experiences with induction:

My biggest focus right now is being attuned to my coaches you know if I really think about my role, it's really coaching the coaches. So, the more I can hear about what their actual experiences the better and this gave me an excellent avenue to do that because it's not always a transparent process and people don't always tell you exactly what they're experiencing.

The professional practice of mentoring documented through the video club study can potentially inform new practices for both mentors and leaders in induction. Mentors found purpose in supporting novice teachers in their professional development while leadership supported mentors with professional development experiences such as the video club. The video club highlighted activities that may lead to structural changes (i.e., leadership practice) and the potential for mentors to adopt a critical lens by connecting induction activities to broader systemic issues. Ultimately, is potential for video clubs to support mentors and novice teachers in the development of a professional vision that is egalitarian and socially just.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this qualitative case study was to examine how a video club professional development model might influence mentor knowledge and practice in the context of induction. Very few video club researchers have designed studies to understand mentor practice, and even fewer have studied video clubs in the context of induction (Barnhart & Vega, 2021). This study asked: (a) How do mentors understand video club practices in the context of teacher induction? (b) How do mentors' understandings of teacher induction influence video club practices? and (c) How does video club participation influence mentor practice in teacher induction?

A reflexive thematic analysis within a case study approach enabled the researcher to understand the experiences of mentors participating in the video club by using multiple sources of data including policy documents, interview data and video recorded mentor meetings. Reflexive thematic analysis is a flexible, intuitive and iterative process which allowed for in depth analysis of the relationship between mentoring for induction and video club practices. Given the current teacher shortages, this study aimed to contribute new insights from video club practice to assist researchers, educational leaders and teacher educators in the design of professional learning for mentors of beginning teachers.

The next section presents a comprehensive summary of the findings from Chapter 4 and conclusions. First, significant themes are synthesized and discussed in light of the video club research reviewed in Chapter 2. Next, the research design and methodology that framed the mentor video club study are briefly outlined. Then, video club theory such as the construct of teacher noticing is discussed in support of findings that answer the research questions. Lastly, the

section concludes with a summary of the findings in relation to the problem of induction in the context of teacher shortages.

The remainder of Chapter 5 will address implications for theory and practice, and future directions for research. Chapter 5 concludes with policy recommendations for teacher education and induction program reforms in educational contexts.

Summary of Study

Findings indicated video club practices influenced learning for both mentors and novice teachers in the context of induction. Specifically, coaching conversations became the focal point of the video club discussions. Mentors characterized conversations with teachers as intentional, evidence-based practice. This agrees with video club scholarship that is grounded in classroom practices such as teacher noticing and sociocultural theories of learning such as situated cognition (van Es et al., 2008, 2010). Mentors engaged novices in analysis of classroom learning activities by highlighting significant encounters in video recorded lessons. Although teacher and student interactions were not the focus of the study, results indicated that mentors' use of *teacher noticing*—highlighting and discussing classroom interactions—during coaching conversations, may have led to changes in teacher practice and more importantly, to opportunities for student learning. Results also showed mentors approached coaching conversations differently because of the video club meetings.

Mentoring as inquiry was a key theme emerging from the data. Analysis revealed constructivism emerged as the primary epistemological orientation for mentors to engage candidates. Mentors were apprenticed in video club practices and modeled video inquiry for novice teachers. Mentors intentionally set out to experience video as a tool for learning, so teacher candidates may emulate the practice of learning through video during coaching

conversations. In other words, mentors deliberately positioned themselves as co-learners in the process of video based professional learning.

The theme of epistemic mentoring was designated to capture learning as evidence based practice situated in the video club; and situated learning can be understood from the perspective of an apprentice appropriating the tools of the broader community. The potential of video clubs to apprentice both mentors and beginning teachers in the induction context is supported by previous scholarship that highlights the potential for video clubs to support communities of practice (Barnhart & van Es, 2020; Lefstein et al., 2020; Popp & Goldman, 2016).

The potential for video clubs to improve teacher practice by providing practical social support for mentors was another key theme discussed in Chapter 4. The theme of affective mentoring captured the potential for video clubs to promote strong relational bonds between mentors and teacher candidates. Mentors forged new alliances grounded in reciprocity and trust with their colleagues in the video club study. They were intentional in their coaching conversations because they planned to share the results with their peers in the video club. There was ample evidence that mentors were motivated by the video club to share collegially and receive critical feedback.

A key assumption in this study, based on situated learning theory (Lave, 2011), was that mentor learning in a video club setting would translate to improved mentor practice, that is, that learning would *transfer*. A key insight derived from the study is that mentor practices such as contextualizing teacher practice, highlighting segments of video and dialogic inquiry closely paralleled the practices in coaching conversations with teacher induction candidates. This has important implications for the design of future research projects involving mentor video clubs.

The research design for this study is based on van Es et al.'s (2016) video framework for teacher education. This framework was the heart of the meetings because it provided specific facilitation moves that mentors would emulate and practice in their coaching conversations. The case study centered on the group of mentors participating in a video club professional development model. Induction policies that require mentor training and provide specific protocols for teacher certification limited the scope of the study to activities surrounding the induction program. A reflexive thematic analysis allowed for an in-depth study of a group of mentors participating in a video club in the context of induction.

As the theory of teacher noticing continues to evolve and expand (Abdulhamid & Venkat, 2018), it has proven to be a rich pedagogy to explore in diverse educational contexts. The teacher noticing framework has changed from the straightforward framework first proposed by van Es and Sherin (2004) of highlighting and interpreting classroom interactions to expanded definitions such as highlighting, interpreting and responding, and most recently to models that discuss how teachers actively shape learning and the learning environment (Louie et al., 2021; van Es et al., 2021). Moreover, scholars have advanced antideficit noticing to address explicitly the sociocultural dimensions of teaching and learning to remedy inequities in education. These studies leverage the intellectual resources of minoritized communities to instruct students in math and science (Hand, 2012; Jilk & Crespo, 2015; Louie, 2018).

In Chapter 1, it was argued that there is an urgent need for mentoring practices that encourage teachers to stay in the teaching profession (Bleiberg et al., 2023; Carver-Thomas et al., 2020). Although this study cannot claim more teachers will make teaching a lifelong vocation, it can be asserted that the video club led to innovations in mentor practice. It can also be claimed that video clubs are a viable and relevant professional development model for

mentors in the context of induction. The discussion of a video club for induction mentors is in fact addressing the larger matter of professionalizing teachers.

Implications for Theory and Practice

Coaching conversations between mentors and novices emerged as a key construct in this study, and mentor reflections into this practice proved very insightful. To date, video club scholarship has emphasized teacher noticing in classroom practice (Barnhart & van Es, 2020; Sherin et al., 2009; van Es et al., 2019; van Es et al., 2014; 2021). Future inquiry into mentor video clubs is needed to refine the idea of coaching conversations between mentors and beginning teachers in induction contexts. The mentor video club study leveraged coaching conversations as a vehicle for understanding mentor practice. However, future video club research in the context of induction can include both mentors and teacher candidates to examine how both mentor and novice attend to relational practices and how relational practices shape teacher learning. For instance, Noddings's (1986) theory of care and the concept of fidelity to persons applied to video club practices such as coaching conversations may support mentors and teachers in all phases of the mentoring relationship.

Although the video club developed mentors' conceptual and relational understanding in guiding novices through induction, contextual factors also shaped mentor practice. An important insight to come from mentor observations was that video club practices, specifically the practice of video recording, may have caused additional stress with some novices. Mentors agreed more time was needed to establish trust before approaching teacher candidates about video recording classroom practice.

Beginning teachers may suffer from assessment fatigue from the many hours spent recording, editing, and analyzing video in teacher education programs prior to induction. More

research is needed to understand how contextual factors beyond school sites and local education agencies, and, particularly, how educational policy shapes mentor practice at the local level. Moreover, critical policy analysis may help mentors in realizing the potential of ambitious and equitable teacher noticing (Hand, 2012; Jilk, 2016; Louie, 2018).

Implications for Practice: Advancing Teacher Noticing in Reading Instruction

To illustrate the critical role mentors may play in the development of a pedagogical content knowledge, a subject area conspicuously absent from the video club literature, teaching reading, will be used. Little (1990) referred to pedagogical content knowledge as the missing paradigm in teacher education. Pedagogical content knowledge refers to the teaching practices that are specific to a particular discipline or subject area. The video club literature has amply demonstrated the critical link between pedagogy and subject matter knowledge (Hand, 2012; Jilk & Crespo, 2015; van Es et al., 2004). The construct of teacher noticing has provided educators with a tool for more sophisticated interpretations of student disciplinary thinking and the teaching practices specific to that discipline (Barnhart & van Es, 2015, 2018). The term disciplinary thinking refers to the language of a particular discipline and the ways experts in a given field create new knowledge, solve problems, and communicate ideas (Edwards, 2007). The goal of teacher noticing practice is to assist students in learning that language and using that knowledge in authentic, purposeful, and innovative ways.

Interestingly, few video club studies inquire into the practice of teacher noticing in the context of teaching reading. Future research on teacher noticing can focus on which aspects of reading instruction teachers highlight and their interpretations of student reading processes. More importantly, teachers' responses to student offerings or in-process reading strategies are key to the development of theories of reading instruction. Often, determining the best course of action

in response to students' personal sense making requires that teachers attend to the pragmatic aspects of reading such as the type of text, the purpose for reading, and students' background knowledge and cultural resources. Effective reading teachers attend to these pragmatic dimensions of children's reading development. Learning to read is an inventive, social practice and teaching reading is a complex and nuanced process. To clarify, developmental factors and student familiarity with text influence how students learn to read as well. Students' experimentation with text and meaning making strategies may be stifled by overt correction of errors that are often decontextualized and based on partial renderings of students' readings, or as has become common practice, student readings of partial and incomplete texts.

Current views of reading instruction rest on narrow interpretations of reading research, often reinforcing deficit models of student learning (Ruiz et al., 2024; Welner et al., 2020). These "scientific" approaches to reading are presented to policymakers who lack the background to authoritatively critique it. Nonetheless, decisions made by legislators relying on common sense assumptions about reading instruction continue to shape teacher professional development. Reading teachers can benefit from the student-centered, strengths-based, and equity-oriented instructional approaches applied to math and science which have been investigated in the context of video clubs. Video clubs for reading instruction can help teachers see in-process reading strategies and how their responses shape the reading development of children.

Mentors are a critical component of professional development for new teachers as they embark on their journey as reading teachers. Mentors are uniquely positioned to offer alternative paradigms to novice teachers that can equip them with tools for evaluating curriculum and pedagogical approaches. Mentors can help to reverse the de-professionalization of teaching reading (Mathis & Welner, 2015).

Implications for Teacher Development

Research into one's own practice is a foundational tenet of noticing (Mason, 2002). In this study, mentors were introspective and self-aware, when highlighting a salient feature in teacher candidates' work. Following the teacher noticing framework, mentor noticing involved instances of mentors marking or highlighting a significant feature of classroom instruction in their candidate's video recorded lesson. Mentor noticing diverged from teacher noticing when mentors attended to their own practice in coaching conversations. In video club meetings, mentors referenced specific mentor knowledge and skill when making sense of their coaching practice. For example, after highlighting specific moments in their conversations with beginning teachers, mentors discussed the events with other mentors and solicited feedback.

The mentor video club study allowed mentors to practice new approaches that seemed counter intuitive. Pausing before providing direct instruction in a new teaching skill was an ongoing challenge for induction mentors because of habitual responses during coaching conversations which curtailed dialogic inquiry. Mentors were aware that, for a new teacher, developing new skills demanded rehearsal and authentic practice, whereas for experienced mentors the practice seemed to suggest itself. Along the same lines, mentors were working against the clock as they were assigned to candidates for 1 year only without any guarantee that they would be with the same novice in Year 2 of induction. Hence, they felt an urgency about moving novices forward in their instructional practice.

Mentor practice reflected constructivist approaches emphasizing inquiry and co-learning. Personal reflection on practice during video club meetings was important to mentors. Each mentor had multiple opportunities to inquire into their own practice even as they critiqued their colleagues' work. They found providing feedback about their peers' coaching conversations was

a valuable process for reflection into their own practice. Mentor noticing went beyond a form of self-inquiry, allowing mentors to make sense of practice in community with others in preparation for their formal conversations with induction teachers. The coconstruction of meaning added another layer of trustworthiness in the study and was a form of mutual accountability experienced by mentors in the video club.

During the cultivation phase, mentoring partnerships can extend beyond the 2-year induction program when teachers are in the “sweet spot” of professional learning. Finally, more research is needed as well to understand how the redefinition phase of a mentor-teacher relationship can help set the stage for critical policy analysis.

Mentors in this study developed strong relationships and coalesced around the project of inducting new teachers. They affirmed video club research on the effectiveness of teacher noticing when they embedded reflection and inquiry into their own practice. Mentors adopted constructivist practices such as dialogue, collaboration and exhibiting a personal interest in their peers inclusive of teacher candidates. Moreover, they leveraged these meaning making skills to move the induction process and instructional practices forward.

When professional development is embedded as part of the culture of learning for all stakeholders’ *and* professional growth activities are tied to restructuring efforts schoolwide, teachers are incentivized by social supports to try new pedagogical approaches. In this context, video clubs can support structural efforts to move teaching forward. Moreover, mentoring is most effective when it is explicitly connected to educational reform, when it addresses the needs of teachers beyond induction, and when it is viewed as way to professionalize teaching (Popp & Goldman, 2016; Sorenson, 2012). By embedding a mentor video club strategy in already existing structures for professional learning such as lesson studies or professional learning communities,

mentors can instill insights and motivate changes in teacher practice. More research is needed to understand how mentor video clubs can become a strategic and critical component of professional development for educational reform and equity.

Policy Implications

In discussions about educational equality, a common view is that teaching for equity means sacrificing teacher quality (McCambly & Quinn, 2024). Therefore, video club research may be developed around a framework of critical policy analysis that situates mentoring in the context of policy discourses that equate equity with diminished quality in teacher education. Video clubs and mentor noticing can be conceptualized as a process of inquiry that leads to more equitable ways of seeing and new questions about how to negotiate policy and practice. Critically, mentor noticing, would entail an intentional shift in attention to contextual factors including educational policy considerations.

Likewise, attending to relational caring in mentoring and teaching practice is an important concept for promoting an equity stance (Feiman-Nemser & Rosaen, 1997; Noddings, 1986). More research is needed to realize the potential of video clubs to foster critical awareness within and throughout the mentor–teacher relationship during induction. A lens that synthesizes a critical constructivist perspective as suggested by Crow (2012) and Tang (2012), and the mentor relationship process in four phases (Mullen, 2012) can be used to contextualize video club research and practice. For example, future mentor video club research can focus on how to establish a critical orientation during the initiation phase of the mentoring relationship and embed a critical discourse as the relationship unfolds. The critical initiation phase may include mentors sharing backgrounds, ideological perspectives and conversations with teacher-candidates about the relationship between equity and quality in teaching practice.

During Phase 2, which may be called the critical cultivation phase, mentors can model how to teach from a strengths-based orientation, calling attention to the ways policy discourse has made it difficult to be intentional about this practice. Moreover, mentors may communicate the importance of contextual factors in schools such as the effects that testing requirements have on teaching, students and their families. Finally, as mentors and teacher candidates enter the critical redefinition phase of their relationship, between Years 3 and 5, video clubs can include induction candidates in thoughtful ways to organize teaching practices locally, and to critically analyze policy. In this light, mentoring for induction has the potential to become an emancipatory project of interrogating policy at school, district and state levels.

Policy Recommendations: Eliminating High Stakes Assessments for Teacher Certification

In discussions of education policy reform, one controversial issue has been teacher evaluation. Obama Era policies brokered deals with 42 states to base teacher evaluation policies on student test scores in exchange for federal funding. The current teacher shortage, reflected in the number of “interim” teachers hired in place of highly qualified teachers, is a consequence of waivers provided to states that agreed to “reform” teacher evaluation by connecting performance to student achievement (Mathis & Welner, 2015). Thirty-seven percent of new teachers in Citrus Unified were hired with substandard credentials compared with 34% across the state (Learning Policy Institute, 2019).

It is not surprising that these policies did not lead to increased outcomes for students and have been associated with increased attrition and decreased job satisfaction among teachers (Bleiberg et al., 2023). Teachers are weary of policies that connect performance evaluations to increased student achievement as measured by standardized test scores. Moreover, expert

teachers feel constrained by the narrow, scripted curriculum aligned to such policies (Mathis & Welner, 2015).

High stakes accountability policies were also implemented in teacher education programs. To become certified, aspiring teachers are required to demonstrate competency on the teacher performance assessment (TPA): the Stanford Educational Teacher Performance Assessment (edTPA) or the California Teacher Performance Assessment (CalTPA). However, high stakes assessments such as TPA have disproportionately failed students of color (Ruiz et al., 2024). TPAs are part of a decades long pattern of policies that deprofessionalize teachers and serve as barriers to teacher diversity in California schools (Mathis & Welner, 2015).

Subsequently, enrollment in teacher preparation programs in the United States has decreased steadily for the past 2 decades. Since the inception of TPAs in California in 2008, enrollment in teacher education programs has decreased over 50% (Mathis & Welner, 2015). This has led to widespread “teacher shortages” across the United States and a burnished image of teaching as a profession.

By contrast, induction programs offer beginning teachers a research-based pathway to full certification and tenure in the teaching profession. Teacher induction programs with a strong mentoring component have demonstrated increased levels of job satisfaction and teacher retention (Carver-Thomas et al., 2020; Rippon & Martin, 2006).

The standard way of thinking about teacher induction has been as that of a probationary period for assessing beginning teachers on their way to full certification or even tenure. However, an explicit goal of induction programs is to extend and work toward mastery of the teacher performance expectations (TPEs), which are covered extensively in initial teacher preparation programs. Teacher preparation programs approved by CTC are required to design

courses based on the California TPEs. The California Standards for the Teaching Profession (CSTPs), which are used in developing induction learning goals, extend this knowledge base.

This study conceptualized induction as a form of mentor professional development delivered in a video club format. The role mentors played in the development of topics and issues related to induction was a key driver of the video club experience. Expert mentors embodied the knowledge, skill, and dispositions described in the TPEs and CSTPs. As reflective practitioners they are well positioned to nurture and assess through induction the professional growth of beginning teachers.

Noticing in the context of video club mentoring can be a reliable means of assessing new teachers' progress. The noticing construct is a powerful lens for gathering formative assessment data that teachers and educational leaders can use to inform policy and practice. In other words, policymakers would do well to formally recognize mentors, as primary stakeholders in the professional development of new teachers. Mentors are well positioned to ease the transition for novice teachers from university teacher preparation programs to classroom teaching further strengthening the teacher pipeline.

Video club research affirmed that professional development is most effective when it is contextualized and relevant to all stakeholders (Barnhart & van Es, 2020). Significantly, video club scholars also have shown how sustained partnerships between university researchers and local education agencies have led to professional development that encourages new teachers to innovate and develop new practices. The collaboration between Citrus USD and this researcher's institution established the effectiveness of video clubs for induction and mentor professional development. The mentor video club study benefitted immensely from administrative support. In fact, the director of induction was instrumental in shaping the direction and content of the video

club meetings. This is congruent with research showing novice teachers benefit from administrative support and teacher collaboration in the context of induction (Ingersoll & Strong, 2011).

Legislators and educational leaders should consider the potential of formative assessment data, such as that developed in video clubs, to inform evaluation policy and practices. Video clubs capture classroom activities and interactions between students and teachers and mentor-guided teacher learning both inside and outside the classroom in professional development settings. Likewise, video club scholars assert learning embedded in context with authentic tools and artifacts lead to a better understanding of tasks and activities taking place in classrooms (van Es, 2002). The mentor video club study embedded learning in context with video, coaching stems and notes. Evidence of these were seen in their coaching conversations and discussion during video club meetings. Also, video club scholarship has provided multiple frameworks for understanding teacher learning, expectations and values.

Currently, there is a policy correction taking place, which seeks to bolster the ranks of high-quality teachers. The California teachers' union, prospective teachers, and researchers are behind SB 1263 introduced by California Senator Newman (Ruiz et al., 2024). SB 1263 eliminated the TPA assessments as a requirement for obtaining a preliminary teaching credential. Ruiz et al. (2024) observed California teacher preparation programs already have rigorous standards for evaluation of teacher candidates. The California teacher performance expectations (TPEs) and the extensive assessments within coursework to document how candidates meet the TPEs are powerful measures of initial teaching practice. Additionally, university supervisors and mentors evaluate candidates on the TPEs in their student teaching, including a minimum of six documented observations and an extensive written exit evaluation connected to TPEs.

Significantly, teacher education programs are subjected to an intense accreditation evaluation process every 5 years by legitimate United States accrediting organizations such as the National Council for Accreditation of Teacher Education.

Policy Recommendations: Using Video Clubs to Professionalize Mentor and Teacher Practice

This study showed how professional mentoring for induction can be enhanced through a video club professional development model. Video clubs can potentially offer evaluators the meaningful formative assessment data to balance the already rigorous state teaching standards. The following policy recommendations can become part of ongoing efforts to eliminate high-stakes assessments in education.

- In California, extend induction service from 2–5 years with a higher rate of pay for teachers that continue induction past the 2-year threshold.
- Professionalize teaching by offering college credit or guaranteed higher wages for each year of induction up to 5 years and guaranteed permanent status in Year 3 of induction.
- Make use of established professional development approaches such as video clubs to create the supports and incentives necessary to improve teaching and learning.
- Mentor video clubs can support other initiatives meant to increase the ranks of teachers, especially teachers of color, such as Grow Your Own (Gist, 2022) programs and internships as a pathway to certification.
- Mentors can be dually hired by school districts and universities to provide a meaningful and seamless transition from preservice to in-service teaching.

- A pathway from teacher preparation program through teacher induction can be supported by video club participation with mentors as a vehicle to recruit and hire quality teachers.
- Decisions about tenure, certification and career advancement should rely on formative assessments that capture the multiplicity of ways that teachers document their own learning, rather than rely on summative assessments. Video clubs embedded into already established professional learning cycles such as lesson studies or professional learning communities can facilitate appropriate decision-making processes.
- Video clubs can support the professional development of mentors as they support teachers in their progress toward mastery of the California TPEs. Video clubs can provide mentors with time and resources to reflect and analyze teacher practice and artifacts of teaching.
- Teacher education programs should prioritize the development of pedagogical content knowledge. Video clubs provide a context for mentors and teachers to investigate teacher and student thinking in specific content areas.

REFERENCES

- Abdulhamid, L., & Venkat, H. (2018). Primary mathematics teachers' responses to students' offers: An 'elaboration' framework. *Journal of Mathematical Behavior*, 51, 80–94.
<https://doi.org/10.1016/j.jmathb.2017.08.007>
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners toward a practice-based theory of professional education. In G. Sykes & L. Darling-Hammond (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3–32). Jossey-Bass Publishers.
- Barnhart, T., & van Es, E. (2015). Studying teacher noticing: Examining the relationship among pre-service science teachers' ability to attend, analyze and respond to student thinking. *Teaching and Teacher Education*, 45, 83–93. <https://doi.org/10.1016/j.tate.2014.09.005>
- Barnhart, T., & van Es, E. (2018). Leveraging analysis of students' disciplinary thinking in a video club to promote student-centered science instruction. *Contemporary Issues in Technology and Teacher Education*, 18(1), 50–80. <https://citejournal.org/volume-18/issue-1-18/science/leveraging-analysis-of-students-disciplinary-thinking-in-a-video-club-to-promote-student-centered-science-instruction/>
- Barnhart, T., & van Es, E. (2020). Developing a critical discourse about teaching and learning: The case of a secondary science video club. *Journal of Science Teacher Education*, 31(5), 491–514. <https://doi.org/10.1080/1046560X.2020.1725724>
- Barnhart, T., & Vega, V. (2021). Induction coaches' experiences with video-augmented coaching in a video club model. *Professional Development in Education*, 1–14.
<https://doi.org/10.1080/19415257.2021.1955734>

- Bleiberg, J., Brunner, E., Harbatkin, E., Kraft, M., & Springer, M. (2023). *Taking teacher evaluation to scale: The effect of state reforms on achievement and attainment* (NBER Working Paper No. 30995). National Bureau of Economic Research.
<https://doi.org/10.3386/w30995>
- Boaler, J. (2022). *Mathematical mindsets: Unleashing students' potential through creative mathematics, inspiring messages and innovative teaching* (2nd ed.). Jossey-Bass Publishers.
- Borko, H., Jacobs, J., Koellner, K., & Swackhamer, L. E. (2015). *Mathematics professional development: Improving teaching using the problem-solving cycle and leadership preparation models* (1st ed.). Teachers College Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2021a). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. <https://doi.org/10.1037/qup0000196>
- Braun, V., & Clarke, V. (2021b). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352.
<https://doi.org/10.1080/14780887.2020.1769238>
- Carver-Thomas, D., Kini, T., & Burns, D. (2020). *Sharpening the divide: How California's teacher shortages expand inequality*. Commission on Teacher Credentialing.
<https://www.ctc.ca.gov/commission/reports/data/edu-supl-ipw>
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications.

- Cherian, F. (2007). Learning to teach: Teacher candidates reflect on the relational, conceptual, and contextual influences of responsive mentorship. *Canadian Journal of Education*, 30(1), 25–46. <https://doi.org/10.2307/20466624>
- Cochran-Smith, M., Stern, R., Sánchez, J. G., Miller, A., Keefe, E. S., Fernández, B. M., Chang, W.-C., Carney, M. C., Burton, S., & Baker, M. (2016). *Holding teacher preparation accountable: A review of the claims and evidence*. National Education Policy Center. <http://nepc.colorado.edu/publication/teacher-prep>
- Cohen, E. G., Lotan, R. A., Scarloss, B. A., & Arellano, A. R. (1999). Complex instruction: Equity in cooperative learning classrooms. *Theory Into Practice*, 38(2), 80–86. <https://doi.org/10.1080/00405849909543836>
- Commission on Teacher Credentialing. (2016). *Teacher induction program preconditions and program standards*. <http://www.ctc.ca.gov/>
- Creswell, J. W., & Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Crow, G. M. (2012). A critical-constructivist perspective on mentoring and coaching for leadership. In S. J. Fletcher & C. A. Mullen (Eds.), *SAGE handbook of mentoring and coaching in education* (pp. 228–241). SAGE Publications.
- Dewey, J. (1938). *Experience and education: The Kappa Delta Pi lecture series*. Collier Books.
- Diliberti, M. K., & Schwartz, H. L. (2023). *Educator turnover has markedly increased, but districts have taken actions to boost teacher ranks: Selected findings from the sixth*

- American school district panel survey*. RAND Corporation.
https://www.rand.org/pubs/research_reports/RRA956-14.html
- Doan, S., Greer, L., Schwartz, H. L., Steiner, E. D., & Woo, A. (2022). *State of the American Teacher and State of the American Principal surveys: 2022 technical documentation and survey results*. https://www.rand.org/pubs/research_reports/RRA1108-3.html
- Edwards, A. (2007). An interesting resemblance: Vygotsky, mead, and American pragmatism. In *The Cambridge companion to Vygotsky*. <https://doi.org/10.1017/CCOL0521831040.004>
- Feiman-Nemser, S., & Rosaen, C. (1997). *Guiding teacher learning: Insider studies of classroom work with prospective & practicing teachers* (1st ed.). AACTE Publications.
- Gist, C. D. (2022). “Grow your own” programs: *Examining pitfalls for a new generation of Black, Indigenous, and people of color community teachers*. National Education Policy Center. <https://nepc.colorado.edu/publication/grow-your-own>
- Goodwin, C. (1994). Professional vision. *American Anthropologist*, 96(3), 606–633.
<https://doi.org/10.1525/aa.1994.96.3.02a00100>
- Hand, V. (2012). Seeing culture and power in mathematical learning: Toward a model of equitable instruction. *Educational Studies in Mathematics*, 80(1/2), 233–247.
<https://doi.org/10.1007/S10649-01>
- Hatch, J. A. (2002). *Doing qualitative research in educational settings*. State University of New York Press.
- Healy, C. C., & Welchert, A. J. (1990). Mentoring relations: A definition to advance research and practice. *Educational Researcher*, 19(9), 17–21.
<https://doi.org/10.3102/0013189X019009017>

- Hollingsworth, H., & Clarke, D. (2017). Video as a tool for focusing teacher self-reflection: supporting and provoking teacher learning. *Journal of Mathematics Teacher Education*, 20(5), 457–475. <https://doi.org/10.1007/s10857-017-9380-4>
- Hutchins, E. (1995). *Cognition in the wild*. MIT Press.
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81(2), 201–233. <https://doi.org/10.3102/0034654311403323>
- Jacobs, V. R., Lamb, L. L. C., & Philipp, R. A. (2010). Professional noticing of children's mathematical thinking. *Journal of Research in Mathematics*, 41(2), 169–202. <https://doi.org/10.5951/jresematheduc.41.2.0169>
- Janssen, F., Westbroek, H., Doyle, W., & van Driel, J. (2013). How to make innovations practical. *Teachers College Record*, 115(7), 1–43. <https://doi.org/10.1177/016146811311500703>
- Jilk, L. M. (2016). Supporting teacher noticing of students' mathematical strengths. *Mathematics Teacher Educator*, 4(2), 188–199. <https://doi.org/10.5951/mathteaceduc.4.2.0188>
- Jilk, L. M., & Crespo, S. (2015). Teacher noticing students' mathematical strengths. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *37th Annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1046–1053). Michigan State University.
- Kang, H. (2022). Teacher responsiveness that promotes equity in secondary science classrooms. *Cognition and Instruction*, 40(2), 206–232. <https://doi.org/10.1080/07370008.2021.1972423>

- Kazemi, E., & Hubbard, A. (2008). New directions for the design and study of professional development: Attending to the coevolution of teachers' participation across contexts. *Journal of Teacher Education*, 59(5), 428–441.
<https://doi.org/10.1177/0022487108324330>
- Kram, K. (1988). *Mentoring at work: Developmental relationships in organisational life*. University Press of America.
- Kuhn, C., Hagenauer, G., Gröschner, A., & Bach, A. (2024). Mentor teachers' motivations and implications for mentoring style and enthusiasm. *Teaching and Teacher Education*, 139, Article 104441. <https://doi.org/10.1016/j.tate.2023.104441>
- Lampert, M., & Ball, D. L. (1990). *Using hypermedia technology to support a new pedagogy of teacher education*. National Center for Research on Teacher Education.
- Lave, J. (2011). *Apprenticeship in critical ethnographic practice*. The University of Chicago Press.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate peripheral participation*. Cambridge University Press.
- Learning Policy Institute. (2019, December 5). *Understanding California teacher shortages*.
<https://learningpolicyinstitute.org/product/interactive-map-understanding-teacher-shortages-california>
- Lefstein, A., Louie, N., Segal, A., & Becher, A. (2020). Taking stock of research on teacher collaborative discourse: Theory and method in a nascent field. *Teaching and Teacher Education*, 88, Article 102954. <https://doi.org/10.1016/j.tate.2019.102954>

- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teacher College Record*, 91(4), 509–536.
<https://doi.org/10.1177/016146819009100403>
- Louie, N. (2016). Tensions in equity- and reform-oriented learning in teachers' collaborative conversations. *Teaching and Teacher Education*, 53, 10–19.
<https://doi.org/10.1016/j.tate.2015.10.001>
- Louie, N. (2018). Culture and ideology in mathematics teacher noticing. *Educational Studies in Mathematics*, 97(1), 55–69. <https://doi.org/10.1007/s10649-017-9775-2>
- Louie, N., Adiredja, A. P., & Jessup, N. (2021). Teacher noticing from a sociopolitical perspective: the FAIR framework for anti-deficit noticing. *ZDM – Mathematics Education*, 53(1), 95–107. <https://doi.org/10.1007/s11858-021-01229-2>
- Louie, N., & Zhan, W. (2022). A socio-ecological framework for research in mathematics. *Journal for Research in Mathematics Education*, 53(5), 365–371.
<https://doi.org/10.5951/jresematheduc-2022-0003>
- Mason, J. (2002). *Research your own practice: The discipline of noticing*. Routledge.
- Mathis, W. J., & Welner, K. G. (2015). *Reversing the deprofessionalization of teaching*. National Education Policy Center. <https://nepc.colorado.edu/>
- Matusov, E., Bell, N., & Rogoff, B. (1994). Situated learning: Legitimate peripheral participation. JEAN LAVE and ETTIENE WENGER. *American Ethnologist*, 21(4), 918–919. <https://doi.org/10.1525/ae.1994.21.4.02a00340>
- McCambly, H., & Quinn, M. (2024). Constructing an educational “quality” crisis: (E)quality politics and racialization beyond target beneficiaries. *Educational Evaluation and Policy Analysis*, 46(2). <https://doi.org/10.3102/01623737231189478>

- Meschede, N., Fiebranz, A., Möller, K., & Steffensky, M. (2017). Teachers' professional vision, pedagogical content knowledge and beliefs: On its relation and differences between pre-service and in-service teachers. *Teaching and Teacher Education*, 66, 158–170.
<https://doi.org/10.1016/j.tate.2017.04.010>
- Mullen, C. A. (2012). Mentoring: An overview. In S. J. Fletcher & C. A. Mullen (Eds.), *Mentoring and coaching in education* (pp. 7–23). SAGE Publications.
- Mullen, C. A., & Schunk, D. H. (2012). Operationalizing phases of mentoring relationships. In S. J. Fletcher & C. A. Mullen (Eds.), *SAGE handbook of mentoring and coaching in education* (pp. 89–104). SAGE Publications.
- Noddings, N. (1986). Fidelity in teaching, teacher education, and research for teaching. *Harvard Educational Review*, 56(4), 496–510.
- Oakes, J. (2008). Keeping track: Structuring equality and inequality in an era of accountability. *Teachers College Record*, 110(3), 700–712.
- Park, V., & Datnow, A. (2017). Ability grouping and differentiated instruction in an era of data-driven decision making. *American Journal of Education*, 123(2), 281–306.
<https://doi.org/10.1086/689930>
- Popp, J. S., & Goldman, S. R. (2016). Knowledge building in teacher professional learning communities: Focus of meeting matters. *Teaching and Teacher Education*, 59, 347–359.
<https://doi.org/10.1016/j.tate.2016.06.007>
- Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4–15.
<https://doi.org/10.3102/0013189X029001004>

- Rippon, J. H., & Martin, M. (2006). What makes a good induction supporter? *Teaching and Teacher Education*, 22(1), 84–99. <https://doi.org/10.1016/j.tate.2005.07.004>
- Ruiz, M., Gleason, T., Vaughn, T. K., & Kumashiro, K. (2024, April). *Racial disparities in high-stakes assessments in California teacher education: Analysis of 2018–2023 data on edTPA, CalTPA, and RICA*. https://www.care-ed.org/_files/ugd/1e0c79_f359e7d06cca442294cbeebce27af30e.pdf
- Russ, R. S., & Luna, M. J. (2013). Inferring teacher epistemological framing from local patterns in teacher noticing. *Journal of Research in Science Teaching*, 50(3), 284–314. <https://doi.org/10.1002/tea.21063>
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). SAGE Publications.
- Santagata, R. (2009). Designing video-based professional development for mathematics teachers in low-performing schools. *Journal of Teacher Education*, 60(1), 38–51. <https://doi.org/10.1177/0022487108328485>
- Schwille, S. A. (2008). The professional practice of mentoring. *American Journal of Education*, 115(1). <https://doi.org/10.1086/590678>
- Sedova, K., Sedlacek, M., & Svaricek, R. (2016). Teacher professional development as a means of transforming student classroom talk. *Teaching and Teacher Education*, 57, 14–25. <https://doi.org/10.1016/j.tate.2016.03.005>
- Shah, N., & Coles, J. A. (2020). Preparing teachers to notice race in classrooms: Contextualizing the competencies of preservice teachers with antiracist inclinations. *Journal of Teacher Education*, 71(5), 584–599. <https://doi.org/10.1177/0022487119900204>
- Sherin, M. G., & Han, S. Y. (2004). Teacher learning in the context of a video club. *Teaching and Teacher Education*, 20(2), 163–183. <https://doi.org/10.1016/j.tate.2003.08.001>

- Sherin, M. G., Jacobs, V. R., & Philipp, R. A. (2010). Situating the study of teacher noticing. In M. G. Sherin, V. Jacobs, & R. Philipp (Eds.), *Mathematics teacher noticing: Seeing through teachers' eyes* (pp. 3–13). Routledge.
- Sherin, M. G., & van Es, E. A. (2009). Effects of video club participation on teachers' professional vision. *Journal of Teacher Education*, 60(1), 20–37.
<https://doi.org/10.1177/0022487108328155>
- Shulman, J. H. (2004). From inspired vision to impossible dream: The dangers of imbalanced mentoring. *Journal of Teacher Education*, 55(5), 393–406.
<https://doi.org/10.1177/0022487104269652>
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14. <https://doi.org/10.3102/0013189X015002004>
- Sims, S., Fletcher-Wood, H., O'Mara-Eves, A., Cottingham, S., Stansfield, C., Goodrich, J., van Herwegen, J., & Anders, J. (2023). Effective teacher professional development: New theory and a meta-analytic test. *Review of Educational Research*.
<https://doi.org/10.3102/00346543231217480>
- Sorenson, P. (2012). Mentoring and coaching for school teachers' initial teacher education. In S. J. Fletcher & C. A. Mullen (Eds.), *Sage handbook of mentoring and coaching in education* (pp. 201–214). SAGE Publications.
- Stockero, S. L., Rupnow, R. L., & Pascoe, A. E. (2017). Learning to notice important student mathematical thinking in complex classroom interactions. *Teaching and Teacher Education*, 63(4), 384–395. <https://doi.org/10.1016/j.tate.2017.01.006>
- Sundhi, L. (2007). “Mentoring—a new mantra for education?” *Teaching and Teacher Education*, 23(2), 210–214.

- Tang, S. Y. F. (2012). Knowledge base of mentoring and mentor preparation. In S. J. Fletcher & C. A. Mullen (Eds.), *The SAGE handbook of mentoring and coaching in education* (1st ed.). SAGE Publications. <https://doi.org/10.4135/9781446247549.n32>
- Tekkumru-Kisa, M., & Stein, M. K. (2015). Learning to see teaching in new ways: A foundation for maintaining cognitive demand. *American Educational Research Journal*, 52(1), 105–136. <https://doi.org/10.3102/0002831214549452>
- Tekkumru-Kisa, M., & Stein, M. K. (2017). Designing, facilitating, and scaling-up video-based professional development: Supporting complex forms of teaching in science and mathematics. *International Journal of STEM Education*, 4, Article 27. <https://doi.org/10.1186/s40594-017-0087-y>
- Thomas, G. (2013). From question to inquiry: Operationalising the case study for research in teaching. *Journal of Education for Teaching: International Research and Pedagogy*, 39(5), 590–601. <https://doi.org/10.1080/02607476.2013.852299>
- Thomas, G. (2016). *How to do your case study* (2nd ed.). SAGE Publications.
- van Es, E. A. (2004). *Learning to notice: The development of professional vision for reform pedagogy* (Publication No. 3132618) [Doctoral dissertation, Northwestern University]. ProQuest Dissertations and Theses Global.
- van Es, E. A. (2012). Examining the development of a teacher learning community: The case of a video club. *Teaching and Teacher Education*, 28(2), 182–192. <https://doi.org/10.1016/j.tate.2011.09.005>
- van Es, E. A., & Sherin, M. G. (2002). Learning to notice: Scaffolding new teachers' interpretations of classroom interactions. *Journal of Technology and Teacher Education*, 10(4), 571–596. <https://www.learntechlib.org/noaccess/9171/>

- van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers' "learning to notice" in the context of a video club. *Teaching and Teacher Education*, 24(2), 244–276.
<https://doi.org/10.1016/j.tate.2006.11.005>
- van Es, E. A., & Sherin, M. G. (2010). The influence of video clubs on teachers' thinking and practice. *Journal of Mathematics Teacher Education*, 13(2), 155–176.
<https://doi.org/10.1007/s10857-009-9130-3>
- van Es, E. A., & Sherin, M. G. (2021). Expanding on prior conceptualizations of teacher noticing. *ZDM – Mathematics Education*, 53(1), 17–27. <https://doi.org/10.1007/s11858-020-01211-4>
- van Es, E. A., Tekkumru-Kisa, M., & Seago, N. (2019). Leveraging the power of video for teacher learning. In S. Llinares & O. Chapman (Eds.), *International handbook of mathematics teacher education* (Vol. 2, pp. 23–54). BRILL.
https://doi.org/10.1163/9789004418967_002
- van Es, E. A., Tunney, J., Goldsmith, L. T., & Seago, N. (2014). A framework for the facilitation of teachers' analysis of video. *Journal of Teacher Education*, 65(4), 340–356.
<https://doi.org/10.1177/0022487114534266>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Welner, K., Mathis, W., Director, M., & Molnar, A. (2020). *Policy statement on the science of reading*. National Education Policy Center. <http://nepc.colorado.edu/publication/fyi-reading-wars>

- Wenger, E., & Wenger-Trayner, B. (n.d.). *Introduction to communities of practice: A brief overview of the concept and its uses*. <https://www.wenger-trayner.com/communities-of-practice/>
- Willig, C. (1999). Psychology and health promotion. *Journal of Health Psychology*, 4(2), 275-276. <https://doi.org/10.1177/135910539900400202>
- Yin, R. K. (2018). *Case study research and applications: Design and methods*. SAGE Publications.
- Zhang, M., Lundeberg, M., & Eberhardt, J. (2011). Strategic facilitation of problem-based discussion for teacher professional development. *Source: The Journal of the Learning Sciences*, 20(3), 342–394. <https://doi.org/10.1080/10508406.201>
- Zhang, M., Lundeberg, M., Koehler, M. J., & Eberhardt, J. (2011). Understanding affordances and challenges of three types of video for teacher professional development. *Teaching and Teacher Education*, 27(2), 454–462. <https://doi.org/10.1016/j.tate.2010.09.015>

APPENDIX A: SAMPLE MEMOS AND CORRESPONDING EXTRACTS

Memo	Corresponding Extract
<p>Kuhn et al. (2024) quoted Hobson et al. (2009, p. 213) that educative mentoring 'has the potential to facilitate the early professional learning of beginning teachers' "it may also facilitate mentors' learning and generate a relationship of co-learners. . . . In such cases, mentoring is also a form of professional development for [mentors]" (p. 3).</p>	<p>They all have different personalities, so your approach has to be different. And with a video that complicates things because it's very, it requires them to be in a really vulnerable place. So, I think that would be a challenge with the videos like just making sure you manage the emotions and the expectations correctly and, and differentiate based on who you're working with, right? Alma was totally fine videoing that whole lesson and letting me kind of pick where we're going to, based on her goal where we're going to kind of focus where another teacher it might just be like five minutes of something very specific that they felt maybe more confident in but wanted to ramp it up a little bit so I think just how you use it with each teacher like it can't be a blanket, process.</p>
<p>Originally coded as paperwork, or ILP paperwork, I considered too the generic "induction" code, but after rereading the quote, I noticed Brooke was really saying video allowed her to provide input on a TC with whom she only knows through paperwork and now the video. There are more eyes, more expertise on the TC than if only a single coach worked with a TC one on one. This is an instance of when video facilitated collaboration.</p>	<p>I had two that I was actually coaching, and they had two other ones that I was just looking at their paperwork, trying to make sure...making sure but also giving them some coaching ideas if I saw some areas.</p>
<p>Conversations, reflections and questions about mentoring: Mentor practice in video club development model . . . an outline is taking shape. Conversations are the thread that connect mentors to each other, to their TC's and to themselves. It is the primary tool for learning...the primary tool for mentoring. Mentors ask a lot of questions, many that they answer themselves when they are reflecting. The idea of mentor noticing is annotated in one of the excerpts</p>	<p>I videotaped her again to see if we could find some evidence of that student who was like putting his head on his hand and just not paying attention, his back was to her . . . videotaped her again and then we had a conversation about the video . . . she actually said, "I used some of the questioning." She was able to see that the student because she saw the first video, that the student's back was to her and he was by himself, he wasn't participating and so she</p>

linked to this code. The definition of mentor noticing is starting to form.	made changes. And so, we saw that he was with the group and they're communicating, and he was actually writing things and she had sentence stems for him. I just I just thought it was just so powerful for her to see what it looked like before and what it looks like now with the changes that she made and based off of it.
Brooke views video as an opportunity to reinforce positive developments in the classroom with beginning teachers. Critical mentor noticing?	New teachers I think are so focused on, hear so much about how they need to improve their practice, improve their practice. I like to really go in and go, "Well let's see what's going good because there is good stuff happening." Might be little spurts but it's not all bad. And I don't think they hear that enough in there in their programs. They're so focused on writing the perfect lesson plan and executing it and meeting your standards and your pedagogy and all that kind of stuff but not actually looking at what makes your classroom pretty cool right now.
Be intentional with video, have a plan of what the teacher wants to work on, what to notice, ask the teacher what she will be noticing, or focusing on and record that.	
What is the "disconnect"?	There's like this disconnect that's out there and I think the videos can help be a bridge to connect those two together.
A "bridge to connect" coded in vivo.	

Appendix B: Four Themes and Candidate Themes (Bulleted) From Mentor Video Club Study With Data Extracts

Theme 1: community of practice (mentor guild)	Theme 2: pedagogical knowledge epistemic mentoring	Theme 3: relational knowledge	Theme 4: Critical mentor noticing
<ul style="list-style-type: none"> • collaboration • Inquiry • leadership 	<ul style="list-style-type: none"> • high quality teaching • experiential learning • situational 	<ul style="list-style-type: none"> • cultivating instruction • coaching conversations • reciprocity 	<ul style="list-style-type: none"> • reflective practice • remaining teachable • intentionality
<p>In induction they just know they need help...</p> <p>Seeing other peoples' conversations...</p> <p>Feel connected, we're in a similar coaching situation</p> <p>Colleagues...sharing expertise</p> <p>Kind of a cohort rather than just me and my candidate be intentional with video, have a plan of what the teacher wants to work on, what to notice, ask the teacher what she will be noticing, or focusing on, and record that.</p>	<p>Changes...students communicating and writing things with sentence stems, powerful for teacher to see what it looked like before and what it looks like now with the changes that she made based off video.</p> <p>I'm going to try this [lesson] today, we're gonna talk about it for 20 minutes after school, then you're gonna try it and we'll record you tomorrow and then we'll have a conference about it</p> <p>Sometimes you have to like back pedal a little bit to go forward, with video you don't have so much of the backpedaling you have it. Here it is, from this snippet.</p>	<p>Video made it genuine, peer to peer and less programmatic</p> <p>Relationship developed faster when it was site-based</p> <p>Conversations are the thread that connect mentors to each other, to their teacher candidates and to themselves. It is the primary tool for learning...the primary tool for mentoring.</p> <p>Excited to see what teachers...could do with that video.</p> <p>Conversations kind of changed the way I coached induction</p>	<p>Showing us different types of questions you can ask beginning teachers</p> <p>Understanding the types of questions to ask novices and where they lead you.</p> <p>Sometimes you have to be clear about what your goal is as a coach as well, because not everybody who goes into teaching wants to be a leader.</p>

Appendix C: Sample Extracts and Codes

Data extract	Coded for
It makes me be more focused myself because I kind of tend to like when I watch someone or really be with someone I take a very maybe holistic, wide view of them and I know for me, sometimes it's very hard to go, Oh and just what we're going to do this for a while and we're going to ignore the rest of it because I keep looking at the bigger picture, because everything fits into it and then [the video] helps me to identify, now let's kind of rank what needs to be worked on first so that clarifies the coaching aspect more where you can just build on one thing after another.	<ol style="list-style-type: none"> 1. Holistic-big picture 2. Reflective practice 3. Noticing detail 4. Prioritize
It helps me get more focused a little bit more purposeful in everything we're doing. I don't I don't mind having a hard talk, discussion with somebody that's never really affected me and everything. I think that it's just like okay. I know I need to have that conversation with them, I need to stop everything else because that needs to be fixed before anything else can happen.	<ol style="list-style-type: none"> 1. Focused and purposeful coaching 2. Difficult conversations 3. Intervention
It was interesting coaching someone that you're videoing and coaching someone that you're not...it made me realize that it took me longer to really focus myself into being more purposeful in how I was coaching them than the [one with the] video because the video was made immediately right there because I would have to remember what I wrote in my notes. And sometimes my notes are all over the place and they don't make any sense.	<ol style="list-style-type: none"> 1. Focused and purposeful coaching 2. Coaching with and without video 3. Immediacy of video/leveraging 4. Remembering 5. Notetaking