Engaging in Practitioner Inquiry in a Professional Development School Internship

Mary Higgins, The University of Colorado, Colorado Springs

ABSTRACT: In this article, the author briefly describes her efforts to explore the lived experiences of teacher candidates (interns) completing an internship in a K-4 Professional Development School (PDS), while engaged in practitioner inquiry. This phenomenological study followed five interns' engagement in practitioner inquiry to investigate how their inquiry experiences influenced their belief development. The findings were organized into five overall themes in which inquiry supported the authenticity, complexity, enactment, empowerment, and transferability of beliefs. Knowledge gained from this study provides new insights into preservice teacher learning in a PDS setting.

NAPDS Essentials addressed: 2. A school-university culture committed to the preparation of future educators that embraces their active engagement in the school community; 4. A shared commitment to innovative and reflective practice by all participants; 5. Engagement in and public sharing of the results of deliberative investigations of practice by respective participants; 6. An articulation agreement developed by respected participants delineating the roles and responsibilities of all involved.

Engaging in Practitioner Inquiry During a Professional Development School Internship

Teachers' beliefs are "tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught" (Kagan, 1992, p. 65). When preservice teachers enter teacher education programs, their initial beliefs often clash with their classroom experiences and coursework (Richardson, 2005). The tensions between personal schooling experience, theoretical knowledge presented in coursework, and observations in the field create opportunities for meaningful preservice teacher learning. Furthermore, engaging preservice teachers in activities that collide past experiences with new experiences may encourage the re-examination of one's beliefs about teaching and learning.

Löfstrom and Poom-Valickis (2013) argue for research on how preservice teachers' beliefs change over time. Specifically, there is a need for further research that examines the relationship between instructional activities in teacher education programs and preservice teachers' belief development (Pilitsis & Duncan, 2012). One form of professional learning that may provide insights into teacher's belief development is practitioner inquiry. Practitioner inquiry is defined as the systematic, intentional study by educators of their own practice (Cochran-Smith & Lytle, 1993, 2009). Inquiry wonderings stem from problems of practice and tensions in the classroom, as teachers evaluate and assess their own practice. Educators gather data to explore their wonderings, analyze data, and making changes in practice based on new knowledge, and share their learning with others (Dana & Yendol-Hoppey, 2014). Through the process of problematizing one's practice, educators gain new understand-

ings of their beliefs and are able to make more informed professional decisions that shape their practice (Oberg, 1990).

Many scholars argue that there is a need for preservice teachers to think critically about their instructional practices in order to challenge assumptions, identify problems of practice, and take on leadership roles (Cochran-Smith & Lytle, 1999; Darling-Hammond & Bransford, 2005; Dawson, 2007; Wolkenhauer & Hooser, 2017). By developing an inquiry stance, preservice teachers can better connect their beliefs about teaching and learning with concrete teaching practices. Through this process, preservice teachers learn that problematizing one's practice is a normal part of teaching (Cochran-Smith & Lytle, 1999′ 2009; Dana & Yendol-Hoppey, 2014; Feiman-Nemser, 2001). Practitioner inquiry gives preservice teachers the tools to challenge previously-held assumptions and initial beliefs, while taking on a more active role in their learning.

Rationale for the Study

The literature supports that using practitioner inquiry with preservice teachers can encourage the problematizing of one's practice (Cochran-Smith & Lytle, 1993; Keating, Rosario, Diaz-Greenberg, Baldwin, & Thousand, 1998), increase awareness of students' needs (Dawson, 2007; Hyland & Noffke, 2005; Levin & Rock, 2003), and strengthen understandings about teaching (Schulz & Mandzuk, 2005). Despite the amount of research that has conceptualized and described the use of inquiry at the teacher education level, there is a need in the literature for more reports of research on the influence of inquiry on preservice teachers' belief development (e.g., Parker, Bush, & Yendol-Hoppey, 2016; Rock & Levin, 2002). In support of this need in the literature, Parker et al. (2016) stated "there is a pressing need to more closely examine inquiry in teacher education,

particularly the ways in which teacher candidates engage in inquiry and the resulting degree of quality that emerge from this work" (p. 224). In response, the purpose of this phenomenological study was to investigate the way in which one teacher education program within a PDS engaged preservice teachers in practitioner inquiry during an internship seminar and how those inquiry experiences influenced the preservice teachers' belief development.

Methodology

The intent of qualitative research is to examine social situations or interactions in order to develop a holistic understanding of one's experiences (Bogdan & Biklen, 2007; Maxwell, 2013). Qualitative methodology emphasizes discovery and description with a focus on understanding the meaning of a phenomenon. Rather than testing a hypothesis, the objective of quantitative research, the present study was interested in the relationship between engaging in practitioner inquiry and teacher candidates' belief development. Using strictly qualitative methods allowed the author to elicit rich data, which was necessary to address the proposed research purposes.

Within the framework of a qualitative approach, the study was most suited for a phenomenological design. Phenomenology is focused on analyzing human experiences in order to understand the structures that make up a phenomenon (Moustakes, 1994; Sohn, Thomas, Greenberg, & Pollio, 2017; Vagle, 2016; Van Manen, 1990;). The purpose of this research methodology is to grasp the meaning of an experience from the participant's point of view (Sohn et al., 2017). The present research fits well with this research methodology because it sought to better understand how the phenomenon of conducting practitioner inquiry influences teacher candidates' beliefs about teaching and learning. Furthermore, every effort was made to use the research participants' own words to describe their inquiry experiences. By using the participants' voices, the essence of one's lived experience was more clearly articulated in the study's findings and contributed to the implications for teacher education programs.

Study Context

This study investigated the experiences of elementary teacher candidates in their final semester of their elementary education teacher education program within a PDS. The year-long PDS internship provided interns an opportunity to experience a full year of co-teaching, while observing best practices to support student learning with the support of master teachers, expert supervisors, and skilled methods instructors (PDS Essential #2). This specific PDS uses unique terms to describe the commitment and expertise of members within the partnership (See Table 1) (PDS Essential #6).

Inquiry was a theme that ran through the PDS curriculum from the first day of the internship. Instead of the typical capstone experience, the inquiry cycle was first introduced in
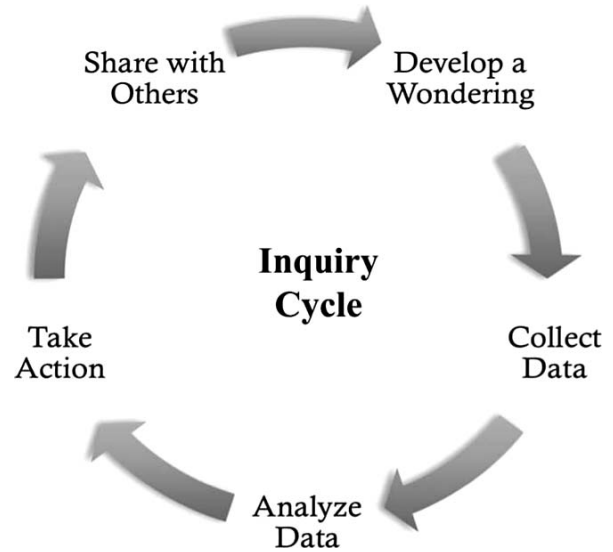

Figure 1. Inquiry Cycle (Adapted from Dana, Thomas, & Boynton, 2011, p. 5)

methods courses during the fall semester of the year-long PDS experience and continuously referenced and applied to classroom experiences throughout the interns' fall coursework (Cochran-Smith & Lytle, 2009) (PDS Essential #4). PDAs offered a clear definition of the inquiry process, explained how the process can serve as a catalyst for future wonderings, and provided explicit instruction on the inquiry cycle with examples of previous teacher inquiries (See Figure 1). Scaffolding two smaller cycles of inquiry in the fall semester invited interns to problematize their own practice to improve instructional practices and enhance student learning. Through this guided experience, interns started to develop ownership over their inquiry wonderings, which helped them realize how inquiry can address practical concerns and lead to an inquiry stance toward teaching (Cochran-Smith et al., 2009; Donnell & Harper, 2005).

At the end of the fall semester, the PDS revisited the inquiry cycle and interns engaged in a semester-long inquiry that extended through the duration of the spring semester. Using Dana and Yendol-Hoppey's (2014) *The Reflective Educator's Guide to Classroom Research: Learning to Teach and Teaching to Learn Through Practitioner Inquiry* as one of the primary texts guided the interns through the inquiry process as they considered problems of practice and conducted a critical analysis of their teaching. Throughout the spring semester (January-April), interns engaged in the inquiry cycle: finding a focus, collecting data, making sense of data, presenting, and developing an inquiry stance with the support of their triads, schools, and larger PDS community (Dana & Yendol-Hoppey, 2014). Towards the end of the spring semester, interns finalized an inquiry report with learning statements that responded to their inquiry wonderings. Along with a general reflection on their specific inquiries, interns shared possible directions for their future practice and new wonderings. In April, all interns prepared a visual presentation of their semester-long inquires to share at a conference held by

Table 1.   PDS Terms

PDS Term	Term Definition
Interns	Senior preservice teachers in this context are known as ''interns'' to emphasize the year-long commitment interns make to the learning community and their own professional learning.
Professional Development Associates (PDAs)	University supervisors in the PDS are known as ''Professional Development Associates'' (PDAs) to acknowledge PDAs various supervisory roles as hybrid educators within the PDS (Zeichner, 2010). PDAs consist of current classroom teachers, university faculty, graduate students, and retired teachers. PDAs also teach methods coursework and lead professional development sessions for educators in the PDS.
Mentors	Clinical teachers in this context are referred to as ''mentors''. Mentors are one of the most essential parts of the school-university partnership due to the daily support they provide interns.
Triad	Teams of an intern, PDA, and mentor create a collaborative ''triad'' that meet frequently throughout the internship year to establish collegiality, promote professional growth among all members, and support the intern's development into a reflective practitioner.

the PDS. All members of the PDS community including classroom teachers, school district administration, and university faculty were invited to attend the culminating experience and engage in scholarly conversations with other educators (PDS Essential #5).

Participants

Through purposeful sampling, the researchers identified five willing interns to participate in the research study: Maddie, Ben, Jane, Liz, and Carrie (pseudonyms). In Table 2, each intern's grade level and inquiry wondering is provided.

Data Sources and Analysis Procedures

As the five interns systematically and intentionally studied their practices through practitioner inquiry, they shared thoughtful insights into how their beliefs on teaching and learning developed throughout their internship year. Data from semi-structured interviews along with a review of relevant artifacts from the PDS internship provided insights into how practitioner inquiry influenced the development of interns' beliefs. In Table 3, each component of the data collection is further explained.

The data sources were approached using thematic analysis (Braun & Clarke, 2006). Throughout the thematic analysis process, every effort was made to use the interns' own words to

describe their PDS experiences. Using the research participants' voices ensured that the essence of the interns' experiences with inquiry in a PDS was more clearly articulated in the study's assertions and contributed to the implications of those findings.

Findings

The data obtained from this qualitative study offered rich insights about the role of practitioner inquiry for preservice teacher learning in a PDS setting. The findings indicate that engaging in practitioner inquiry during the year-long internship supported interns' belief development and helped interns see inquiry as an integral part of their daily teaching practices. When reflecting back on their spring inquiries, interns saw inquiry as a part of their decision-making process, which informed the ways in which they evaluated student learning and their own teaching practices. Rather than seeing inquiry as an university assignment, interns felt that their inquiries blurred the boundaries between theory and practice (Cochran-Smith & Lytle, 2009).

Five major assertions about preservice teaching learning emerged from this study. Due to page constraints, a brief description of how each overall theme connected to the intern's experiences with practitioner inquiry support belief development is provided. A further explanation with illustrative examples for each assertion can be found in the author's dissertation (Higgins, 2017). Overall, there were themes related

Table 2.   Intern Wondering Chart

Intern	Grade Level	Inquiry Wondering
Maddie	3rd Grade	How does incorporating Genius Hour into my third-grade classroom benefit my students' curiosity and knowledge in science and social studies by engaging in their own inquiry process?
Ben	2nd Grade	What does teaching leadership skills look like in a second-grade classroom?
Jane	2nd Grade	How can I help my second-grade students develop empathy and tolerance for one another when working collaboratively in the classroom?
Carrie	4th Grade	How can classroom environment and routines support the development of positive conflict resolution for fourth graders?
Liz	3rd Grade	How does providing my third graders with a variety of ways to demonstrate their learning impact their motivation to complete quality work?

Table 3. Data Collection Sources

Data Collection Source	Description of Data Source
1. Semi-Structure Interviews	Two rounds of semi-structured interviews were conducted (March and May) to gain insights into interns' initial and refined beliefs (Seidman, 2013).
2. Teaching Platforms	Interns developed an espoused teaching platform, a written set of beliefs based on ten prompts, to highlight each intern's key beliefs about teaching and learning (Sergiovanni & Starratt, 2007). Interns submitted four versions of their platforms over the course of the internship year and by the final version illustrated their ability to put these beliefs into practice through evidence gathered. Versions 2 and 4 were analyzed.
3. Inquiry Reports	Similar to a formal research paper, each intern described the process of conducting their inquiry including their methods, learning statements, and implications for practice. My analysis focused on the conclusion section of the inquiry reports where interns were asked to draw conclusions from their inquiry journeys and consider how inquiry influenced their practice.
4. Analytic Researcher Memos	Researcher memos provided a space for me to reflect on the interviews conversations, make note of initial codes and themes, and check my own researcher bias. The first researcher memo reflected on the first round of interviews and additional researcher memos were developed after each second-round interview.

to the: authenticity, complexity, enactment, empowerment, and transferability of beliefs.

Theme One: Supporting the Authenticity of Beliefs

At the start of their inquiry journeys, interns developed a wondering based on a problem of practice or passion connected to teaching. Structured seminars and workshop activities helped interns generate authentic wonderings about their students and teaching practices. Data analysis of the interns' inquiry reports and interviews revealed strong connection between the interns' wonderings and individual teaching passions. For example, Jane's commitment to student diversity and inclusion led her to inquire into how collaborative work could develop empathy and tolerance among her second-graders. Jane described her investment in the following way:

> I believe it is important to maintain building community throughout the school year...I also see the importance of struggling together. Fostering an inclusive classroom will influence how I design my future instruction and classroom (Jane, Inquiry Report).

Jane wanted all of her students to have a voice and feel that they belonged in the classroom. Throughout her inquiry into fostering an empathic and inclusive classroom community, Jane let her student take a role in shaping her inquiry. Engaging in classroom inquiry offered an opportunity for interns to select wonderings based on their teaching passions, interests, and felt-tensions.

Theme Two: Supporting the Complexity of Beliefs

Practitioner inquiry provided interns an opportunity to explore their own initial understandings and develop more complex beliefs about teaching and learning. Throughout their intern-

ship, interns were able to expand upon and deepen these initial beliefs by systematically and intentionally studying their practice. Initially, the interns conducted student surveys and other forms of preassessment to learn more their students' current understandings. From this baseline data, interns formatively analyzed the student data to think deeply about their beliefs and classroom practices. The inquiry process allowed interns to make more informed instructional decisions based on knowledge gained from critical studying their practice. For instance, Maddie shared how inquiry provided opportunities for her to enact her initial beliefs about student-centered teaching.

> My beliefs have gotten stronger. Not that they have changed necessarily, but just that they have been reinforced by what I have done in my classroom this school year. I believe in making my teaching student-centered, through my inquiry I am doing a lot of student-centered activities like Genius Hour. (Maddie, Round 2 Interview)

By inquiring into the implementation of Genius Hour, a student-centered approach that allows students to explore their own passions and interest (Kesler, 2017), Maddie was able to affirm her belief about student-centered learning with practices in her classroom. She had evidence from her classroom to justify her belief. The inquiry process encouraged interns to put their beliefs into action, which supported the development of more complex beliefs about teaching and learning.

Theme Three: Supporting the Enactment of Beliefs

Investigating into their practices through practitioner inquiry, encouraged interns to critically analyze their beliefs about teaching and learning. The inquiry process provided a space for interns to make stronger connections between theories introduced in their university coursework and classroom experiences

(Parker et al., 2016). Throughout the internship year, there was a clear shift in the language used in the interns' belief statements and interns' instructional practices. In several interview interns reflected on their inquiries and spoke to examples of implementing differentiating instruction in their classrooms. Interns described how practitioner inquiry encouraged them to think more deeply about their students' learning styles and needs. From Ben's inquiry field notes and other data sources, he saw the need to connect more with his students through different learning styles and their interests. He explained this new understanding in the following way:

> During my inquiry, I thought about my students' baseball cards and Pokémon cards and how they organize them in their binders. I now try to apply what they like to do at home to my instruction. I think about making learning visible and taking it home with them rather than just using these isolated worksheets because it is a part of the curriculum. I think that's where the real art of teaching comes in. Through inquiry, I can adjust my plans to be responsive to what my students need. (Ben, Round 2 Interview)

Ben saw the importance of connecting student leadership activities for his inquiry to his students' personal interests. Furthermore, his inquiry data helped Ben notice things about his students' understandings and through his data analysis, he was able to grasp how he could respond to the needs of his students. Gathering and analyzing data about his students helped the interns be responsive to student' needs in their practice.

Theme Four: Supporting the Empowerment of Beliefs

The PDS Spring Inquiry conference offered interns a chance to share their new and more complex beliefs with other educators in the PDS community. Many interns had to reach outside of their comfort zones to formally present their findings. Yet, this culminating experience supported the development of the interns' professional positioning in a larger community of educators throughout the school district. As interns reflect on their inquiry experiences, they spoke directly about how inquiry supported the refinement of their beliefs about teaching and learning. They expressed how the inquiry process gave them a voice in educational conversations within the PDS community and in other professional settings. After presenting at the inquiry conference, Liz reflected on what she gained from the inquiry process.

> It was nerve-wracking to have so many people listening, especially mentors I look up to. At the same time, it was very exciting and rewarding. I was really able to dig deep into what I did with my inquiry on students' conflict-resolution skills. I shared the specific choices

that I made during my inquiry, the results of my data analysis, and my reflections. Presenting my inquiry was exciting, because the inquiry process was a lot of hard work. It was nice to have the inquiry conference experience to kind of close it all. (Liz, Round 2 Interview)

After months of intentionally studying her practice, Liz was able to look back on her experiences and share her new understandings with other educators in the local community. The inquiry process supported interns' professional positioning within a PDS community and empowered their beliefs.

Theme Five: Supporting the Transferability of Beliefs

Engaging in practitioner inquiry during the year-long internship experience helped interns see inquiry as an integral part of their daily teaching practices. When reflecting back on their engagement with practitioner inquiry, interns felt that inquiry was becoming a part of their daily practice. Instead of viewing their inquiries as a separate event, most participants felt that their inquiries were integrated into their instruction, which blurred the boundaries between theory and practice (Cochran-Smith & Lytle, 2009). Interns shared examples of how they were continuing their inquiries after the inquiry conference and how inquiry was spreading to different aspects of their instruction (Inquiry Reports). For Maddie, inquiry became embedded into her growth as an educator and she began to envision inquiry as a practice she would engage in throughout her career as a mechanism to remain innovative, reflect critically on her beliefs, and to be a leader in her profession.

> Inquiry is a stepping stone into future teaching practices. I have the chance to explore something that I am passionate about and feel is going to be beneficial in my classroom. Through my inquiry, I am learning more with my students and helping them through the process. In the future, it might not necessarily be something I implement like a Genius Hour, it could be something more behavioral. I want to figure that out with [my students] and then share what I am learning with other teachers. (Maddie, Round 2 Interview)

Beyond learning about Genius Hour, inquiry became a means for Maddie to analyze her enacted beliefs and continuously learn more with and from her students. She reflected on how going through the process of analyzing her inquiry data was helping her to critically think about how her inquiry experiences could shift her future instructional decision-making skills and support the continuous refinement of her beliefs about teaching and learning. Through the multiple inquiries the PDS interns engaged in throughout their internship year, most interns were able to describe the ways the inquiry process supported a critical analysis of their initial beliefs and instructional practices. The interns noted the

importance of taking an inquiry approach when reflecting on their daily instruction and professional interactions (Inquiry Reports). The interns saw practitioner inquiry as a critical and reflective process that was embedded into their practice.

Discussion and Implications

The study investigated the experiences of elementary teacher candidates (interns) in a year-long PDS, which offers several implications for PDS partnerships. The study's broad themes support that practitioner inquiry may be used as a powerful opportunity to support preservice teachers' belief development (PDS Essential #2). Interns reconsidered previously held beliefs by enacting their beliefs through classroom inquiry. As interns engaged in interventions and other classroom activities related to their inquiry topics, their initial beliefs were challenged as more authentic beliefs about teaching and learning developed.

This study emphasizes the need to explore the role that PDSs might play in identifying preservice teachers' beliefs and helping them consider alternative perspectives by challenging their previously assumptions. Educational researchers argue that there have not been many credible and systematic assessments of PDS' impacts (Clift & Brady, 2005; Fullan, 1995; Teitel, 2000). Teitel (2000) suggests that "credible, systematic documentation of the impacts of professional development schools is critical to the growth and sustenance of the partnerships themselves and the PDS movement" (p.1). This study addresses the need for more research on PDS impact by providing new insight into the use of practitioner inquiry in a PDS context. Specifically, the assertions from this study provide insights for university faculty, supervisors, and mentor teachers guiding interns as they systematically inquire into their practice throughout the internship year.

The findings from this study support that engaging in inquiry within a school-university partnership encourages interns to develop teaching stances in which they see their practice as ever-changing. Through intentional and systematic study, interns saw their practice from a new perspective and became more action-orientated in the classroom. Nolan and Hoover (2011) argue that "without consciously articulating and probing into the assumptions underlying their philosophies, teachers have little hope of sustained change in perspective or teaching practice" (p. 27). Therefore, using their teaching platforms as a tool, interns in this particular PDS uncovered their espoused and enacted beliefs about teaching and learning. Throughout the internship year, interns created four versions of their teaching platforms, which allowed them to visually see changes in their beliefs over time and promoted theory-to-practice connections. This scaffolded process in a PDS context allowed interns to take ownership of their thinking and encouraged interns to problematize their own practice.

As interns were engaged in practitioner inquiry in the spring semester, they were asked to provide justification and artifacts to support their beliefs in their teaching platforms. Hence, it was noticeable during data analysis of the interns'

teaching platforms that they used evidence from their practitioner inquiries to support their beliefs about teaching and learning. As seen through the participants' teaching platforms, the overlap between the interns' teaching platforms and inquiries may have encouraged interns to investigate more specifically into beliefs that connected with their own inquiries and teaching passions. As they engaged in practitioner inquiry, interns tried new teaching strategies based on their initial understandings about teaching and learning. Through systematic and intentional study of their practice, the developed refined and deeper beliefs about their profession. In the course of doing this research, the author recognized that writing a platform of beliefs while practicing inquiry was a powerful combination to support preservice teacher belief development. Writing espoused platforms and engaging in practitioner inquiry are complementary in that they both record and potentially call into question what teachers believe. Together they offer a powerful means to support preservice teacher development.

How this particular PDS used teaching platforms as a tool to develop teacher candidates' beliefs about teaching and learning offers insights for other teacher education programs. The curriculum design was not by accident, rather it was intentionally created to support preservice teacher belief development. The espoused platforms gave mentor teachers and PDAs a starting place in understanding interns' initial beliefs about teaching and learning. As seen through the intern's revised belief statements, when espoused platforms are compared to enacted practices, contradictions between beliefs and practices often surface. Requiring multiple versions of one's teaching platform throughout an intensive, year-long field experience encouraged interns to examine their own beliefs about teaching and learning. Furthermore, the inquiry process allowed interns to take ownership over questioning their practices in ways that they had not done before their classroom inquiries.

Conclusion

Studying the ways in which preservice teachers engaged in inquiry provides new understandings for the field of teacher education, specifically in clinically-rich PDS contexts, by adding to the growing body of literature around the influence of practitioner inquiry on preservice teacher development (e.g., Dawson, 2007; Levin & Rock, 2003). Further research must look more closely at how teacher candidates in school-university partnerships develop an teaching stance through which they challenge previously held beliefs and learn to continuously problematize their practice. Longitudinal studies that follow PDS internship program graduates into their early teaching experiences can help the field further explore the extent to which the inquiry process supports the development of authentic beliefs about teaching and learning and leads to the development of an inquiry stance among beginning teachers. SUP

References

Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Pearson.

Braun, V., & V. Clarke, (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Clift, R. T., & Brady, P. (2005). Research on methods courses and field experiences. *Studying teacher education: The report of the AERA panel on research and teacher education*, 309-424.

Cochran-Smith, M. & Lytle, S. L. (1993). *Inside/outside: Teacher research and knowledge*. New York, NY: Teachers College Press.

Cochran-Smith, M., & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education, 24*, 249-306.

Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York, NY: Teachers College Press.

Dana, N. F., & Yendol-Hoppey, D. (2014). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry* (3rd edition). Thousand Oaks, CA: Corwin Press.

Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.

Dawson, K. (2007). The role of teacher inquiry in helping prospective teachers untangle the complexities of technology use in classrooms. *Journal of Computing in Teacher Education, 24*(1), 5–12.

Donnell, B. K., & Harper, K. (2005). Inquiry in teacher education. *Competing Agendas, 32*(3), 153-165.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record, 103*(6), 1013-1055.

Fullan, M. (1995). The school as a learning organization: Distant dreams. *Theory into practice, 34*(4), 230-235.

Higgins, M. (2017). *The influence of practitioner research on teacher candidates' beliefs* (Unpublished doctoral dissertation). The Pennsylvania State University.

Hyland, N., & Noffke, S. (2005). Understanding diversity through social and community inquiry. *Journal of Teacher Education, 56*(4), 367-381.

Kagan, D. M. (1992) Professional growth among pre-service and beginning teachers. *Review of Educational Research, 62*(2), 129–169.

Keating, J., Diaz-Greenberg, R., Baldwin, M., & Thousand, J. (1998). A collaborative action research model for teacher preparation programs. *Journal of Teacher Education, 49*(50), 381-390.

Kesler, C. (2017). *What is genius hour?* Retrieved from https://geniushour.com/what-is-genius-hour

Levin, B., & Rock, C. (2003). The effects of collaborative action research on pre-service and experienced teacher partners in professional development schools. *Journal of Teacher Education, 54*(2), 135-150.

Löfström, E., & Poom-Valickis, K. (2013). Beliefs about teaching: Persistent or malleable? A longitudinal study of prospective student teachers' beliefs. *Teaching and Teacher Education, 35*, 104–113.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, Calif: SAGE Publications.

Moustakes, C. (1994). Chapters 6 & 7. In *Phenomenological research methods* (pp. 103-154). Thousand Oaks, CA: SAGE Publications.

Nolan, J. F., & Hoover, L. A. (2011). *Teacher supervision and evaluation: Theory into practice* (3rd ed.). Hoboken, NJ: John Wiley.

Oberg, A. (1990). Methods and meanings in action research: The action research journal. *Theory Into Practice, 29*(3), 214-221.

Parker, A., Bush, A., & Yendol-Hoppey, D. (2016). Understanding teacher candidates' engagement with inquiry-based professional development: A continuum of responses and needs. *The New Educator, 12*(3), 221-242.

Pilitsis, V., & Duncan, R. G. (2012). Changes in belief orientations of preservice teachers and their relation to inquiry activities. *Journal of Science Teacher Education, 23*(8), 909–936.

Richardson, V. (2003). Preservice teachers' beliefs. In J. Raths & A. McAninch (Eds.), *Teacher beliefs and classroom performance: The impact of teacher education*. Greenwich, CT: Information Age Publishing.

Rock, T., & Levin, B. (2002). Collaborative action research projects: Enhancing pre-service teacher development in professional development schools. *Teacher Education Quarterly, 29*(1), 7-21.

Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.

Sergiovanni, T. J., & Starratt, R. J. (2007). *Supervision: A redefinition* (8th ed.). Boston, MA: McGraw-Hill.

Sohn, B. K., Thomas, S. P., Greenberg, K. H., & Pollio, H. R. (2017). Hearing the voices of students and teachers: A phenomenological approach to educational research. *Qualitative Research in Education, 6*(2), 121-148.

Teitel, L. (2000). *Assessment: Assessing the Impacts of Professional Development Schools. AACTE Professional Development School Practice Series*. Washington, DC: American Association for Colleges of Teacher Education

Vagle, M. D. (2016). *Crafting phenomenological research*. New York, NY: Routledge

Van Manen, M. (1990). Hermeneutic phenomenological reflection. In *Researching lived experience: Human science for an action sensitive pedagogy* (pp. 77-109). Albany, NY: State University of New York Press.

Wolkenhauer, R., & Hooser, A. (2017). "Inquiry is confidence": How practitioner inquiry can support new teachers. *Journal of Practitioner Research, 2*(1), 5.

Zeichner, K. M. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education, 61*(1-2), 89-99.

❖ ❖ ❖

Dr. Mary Higgins is a researcher and teacher educator at the University of Colorado, Colorado Springs. Her research interests include practitioner inquiry, teacher education, and clinically rich contexts often found in school-university partnerships.