Impacts of Participating in a Tailored

Community of Practice for Newly Hired Teachers

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Approved October 2023 by the
Graduate Supervisory Committee:

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ARIZONA STATE UNIVERSITY

December 2023

ABSTRACT

The issue of teacher shortages has been a national crisis in the United States. Teachers have expressed feeling exhausted and burnt out from the profession. The COVID-19 pandemic made these feelings worse, with the rates of teachers leaving the profession being higher than what has occurred in the past. Teachers' sense of belonging at their schools and their professional identities as educators can have an impact on their decisions to stay in or leave the field of education. Participation in a community of practice has been shown to have a positive impact on teachers' sense of belonging and identities. This qualitative study cultivated a community of practice composed of teachers who were new to their schools but not necessarily new to teaching. Data collected included interviews, recordings of community of practice meetings, participant reflection documents, and a researcher journal. Results suggested that teachers valued getting to know their colleagues, learning unique classroom practices, and that their participation in the community of practice had a positive impact on their sense of belonging at their new schools. The impacts of the community of practice on teachers' professional identities were inconclusive. The discussion included an analysis of themes that emerged from the data, limitations of the study, and recommendations for researchers and practitioners.

DEDICATION

Thank you to my wife, family, and friends for your unwavering support throughout this journey. I would not have made it this far had it not been for your patience during the hours and hours I spent in front of a computer, your encouragement when I felt overwhelmed, and your unconditional love at all times.

ACKNOWLEDGMENTS

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CHAPTER 1

National Context

Teacher attrition is a national problem in the United States. In 2018, the United States Bureau of Labor Statistics predicted that, on average, more than 250,000 teachers would leave the field of education annually by 2026 (Torpey, 2018). Researchers from the Learning Policy Institute shared similar projections in 2016, estimating that, by 2021, the need for classroom teachers would be nearly 100,000 higher than the number of teachers available to fill the positions, meaning that there would be an estimated 100,000 unfilled teaching positions in the country (Sutcher et al., 2016). Predictions of teacher shortages appear to be coming to fruition (Chernikoff, 2023; Ingersoll & Tran, 2023). In March 2022, close to half of public schools in the United States had unfilled teaching positions (National Center for Education Statistics, 2022). At the end of the 2021-2022 school year, the Florida Education Association (2021) shared on Twitter that the state lacked 9,000 teachers.

The COVID-19 pandemic has exacerbated the issue of teacher shortages. The majority of schools with unfilled teaching positions cited COVID-19 as the reason for teaching vacancies (National Center for Education Statistics, 2022). The National Education Association (NEA) echoed these findings, stating in January 2022 that 55% of its members reported sentiments of earlier-than-planned retirement or plans to leave the education field entirely (GBAO Strategies, 2022). By comparison, only 18 months earlier, in July 2020, only 28% of NEA members reported similar plans.

The issue of teacher shortages is so ubiquitous in the United States that individual states have created campaigns and policies in an attempt to address it. For example, on

June 9, 2022, Florida governor Ron DeSantis signed into law CS/SB 896, a bill that allows veterans with at least 60 hours of college credit and a grade point average of at least 2.5 to be issued a temporary teaching certificate (S. 896, 2022). In July 2021, California Governor Gavin Newsom approved the spending of $350 million dollars over the course of five years on programs aimed at attracting more individuals into the field of teaching (California Commission on Teacher Credentialing, 2021).

Many factors can contribute to teachers' decisions to retire early or leave the profession. According to a survey completed by over 3,500 NEA members, 90% of respondents reported burnout as being a serious problem (GBAO Strategies, 2022). Brown and Roloff (2011) describe symptoms of teacher burnout as "emotional exhaustion, depersonalization, and diminished personal accomplishment" (p. 453). Indeed, some burnout symptoms are correlated with individuals' decisions to leave their current jobs (Lee & Ashforth, 1996). Exhaustion, a symptom of burnout, has been found to be linked to teachers' sense of belonging within their schools (Skaalvik & Skaalvik, 2021). Teachers have reported feeling burnt out when they feel that they are not meeting the needs of their students, specifically due to increasing job demands with no monetary compensation for the extra hours of work (Santoro, 2019). These claims echo the symptoms of burnout described by Brown and Roloff (2011). It appears that feelings of burnout among teachers in the United States are ever-present. These findings present a need for schools to mitigate any potential feelings of burnout that their staff may experience.

Feeling isolated as a teacher may result in teachers choosing to work at a different school district or to leave the profession entirely (Sleppin, 2009). Isolation can come

about due to the limited time in a normal school day (Ostovar-Nameghi & Sheikhahmadi, 2016). Teachers spend most of the day in classrooms with students, not colleagues. The COVID-19 pandemic presented more challenges for educators in terms of isolation. Many schools pivoted to online learning. If school was in-person, most districts enacted physical distancing measures. As a result, the amount of time that teachers were able to interact with each other was even less. Through meta-analysis, García-Carmona et al. (2019) explored the three previously described symptoms of teacher burnout (emotional exhaustion, depersonalization, and diminished personal accomplishment) and found that secondary school teachers are most at-risk for experiencing burnout. Perhaps the most problematic finding is that over 40% of teachers reported feeling little personal accomplishment (p. 201). If nearly half of teachers continue to experience burnout, then it is possible that the teacher shortage crisis may remain an issue.

One way to reduce feelings of isolation is to establish working mentor groups among novice and more experienced teachers. Bressman et al. (2018) surveyed and interviewed 20 teachers who had between 4 and 45 years of classroom experience to learn more about their mentoring experiences. Researchers found that beginning teachers and the majority of experienced teachers desire to be mentored in order to continue improving at their professional practice. This research highlights the need for schools to implement support for teachers at all levels of experience.

In an effort to address teacher burnout, I developed an innovation to address factors that influence teacher attrition. As this was an action research project, meaning I studied a problem of practice within my locus of control (Mertler, 2020), I concentrated

on factors where I had some form of influence such as exhaustion, isolation, and mentoring.

Teacher Communities

Vangrieken et al. (2017) identified three types of teacher communities: formal, member-oriented with pre-set agendas, and formative (p. 52). Each type of teacher community varies in its structure and processes. The primary goal of formal teacher communities is for groups of trained professionals, such as teachers or government workers, to tackle certain issues or work on specific projects (p. 53). An example of formal teacher communities would be teachers and state education representatives coalescing to create new state standards that are aligned with national standards. Following this example, formal teacher communities are more like working groups. On the other hand, member-oriented teacher communities with pre-set agendas are most similar to professional learning communities (PLCs), in which teachers gather as a means of professional development, with topics of discussion typically focused on student learning (Hord & Sommers, 2008). As the name suggests, formative teacher communities are more informal in nature. Key characteristics of formative teacher communities include the members setting the agenda for subsequent meetings and topics of discussion emerging from the conversations held by its members.

In their meta-analysis, Vangrieken et al. (2017) found that when a top-down approach is utilized in forming teacher communities, as is typical of formal and member-oriented teacher communities, the result was not an actual community. In other words, once the prescribed goals have been met or project completed, the individuals typically do not convene again to work on future projects, reflect on implementation or

effectiveness of projects, etc. Once the work that brought members together was complete, individuals go back to their individual contexts to conduct business as usual.

For my intervention, I implemented a formative teacher community with the intention of teachers feeling a sense of ownership of the meetings. I wanted teachers to have voice and choice in the topics that they were discussing at each meeting so that the time spent together was meaningful.

Personal Context

I began my teaching career in August 2016 in the southern region of the United States. During the first five years of my career, I taught at the same school, and over time, I formed relationships with my colleagues. These relationships created a sense of belonging for me in the building and strengthened my identity as a teacher. Specifically, I felt like I was an integral part of the school and that I was doing what I was meant to do—teach. After the 2020-2021 school year, I made a professional transition and was hired to teach at a different school district. My decision to transition to a new school was unrelated to burnout. My first school was close to where I grew up and attended high school, and I wanted a change of atmosphere. Although I still had the content knowledge for my subject area, at my new school, I felt like I was effectively starting over as a teacher, having to build relationships with my new colleagues and learn a new school culture. This proved to be difficult during Fall 2021. Most of my time was spent with students. When I attended monthly faculty meetings, they were mostly in the form of transmitting important information and dates, with little to no time in the agenda for teachers to talk to and get to know each other. While I was able to get to know the other two teachers in my content area, I had minimal interaction with most faculty members.

In January 2022, I attended a district-mandated professional development about social and emotional learning practices to implement in the classroom. The facilitator gave space for us to practice these strategies with each other, and, as a result, I started to get to know several colleagues with whom I did not regularly talk or collaborate. This was the first time I was able to start to build a sense of community with my new colleagues. Finally, I felt seen and heard; strangers became acquaintances who became friends. I talked with other teachers who were new to the building like myself, and they echoed my perception of the social benefits of the professional development. Being given time and space to get to know colleagues and talk about school or our personal lives was important to us as new hires because it lessened the anxiety of approaching colleagues and collaborating with them.

Brief Innovation and Research Questions

The social and emotional learning training, as well as follow-up conversations, particularly those I had with fellow new hires, inspired my innovation: I wanted to create a community of practice (CoP) for recently hired teachers. While more detail is provided in Chapter 2, a CoP is a group of individuals who share a common practice and face similar challenges working together to collaboratively problem solve and become better practitioners (Wenger-Trayner, et al., 2023). It was my hope that by creating a CoP of recently hired teachers, I could have a positive impact on their sense of belonging at their new school and on their professional identities as teachers. In order to determine the impacts of my CoP on newly hired teachers, my research concentrated on four primary questions:

RQ 1: In what ways does participation in a community of practice affect classroom routines?

RQ 2: What role does a structured community of practice play in cultivating feelings of camaraderie among participants?

RQ 3: Does participation in a community of practice lead to a greater sense of belonging? If so, what elements of the CoP are perceived as most important to this development?

RQ 4: Does participation in a community of practice impact teacher identity? If so, what elements of the CoP are perceived as most important to this development?

CHAPTER 2

As mentioned in Chapter 1, I was interested in creating a community of practice (CoP) composed of new teachers who have been recently hired by the district, specifically teachers who were new to one particular school in the district. I defined "new teachers" to be those who were in their first, second, or third year in the building but who were not necessarily new to the field of teaching. I focused my innovation on new teachers for two primary reasons. First, the school at which the research project was conducted was one of the largest in the state. There were over 300 certified and classified staff members in the building. In a building this large with such a large staff, it can be difficult to get to know colleagues on a level deeper than passing by each other in the hallways. Secondly, recent hires have been greatly impacted by the COVID-19 pandemic. With social distancing restrictions and remote learning, it was possible that recent hires might have felt even more isolated from their colleagues who have known each other since pre-pandemic times. For these reasons, I created a CoP for recent hires who met regularly to engage in topics which were most pressing to them. Topics included student engagement strategies, unique methods of assessing student understanding, and student cell phone use in classrooms.

In the sections that follow, I first explain *identity* and *sense of belonging*, followed by sharing previous studies that explore how to improve these constructs among teachers. Next, I discuss literature explaining what a CoP is and what the benefits are, and I conclude with the effect CoPs had for individuals in education on their professional identities and sense of belonging, as well as best practices for implementing a CoP.

Identity

Identity is a concept that is relevant to how researchers analyze and understand the experiences of teachers. Wenger (1998) concluded that "issues of identity…are inseparable from issues of practice, community, and meaning" (p. 145). Gee (2000) argues that there are four facets to one's identity and that these characteristics are interconnected: nature, institution, discourse, and affinity. Nature-identity is one that individuals are born with, such as relation to family members. Institution-identity refers to one's position within a system (e.g., the superintendent of a school district). Discourse-identity stems from interactions with others and their perceptions of the individual. One way to think about discourse-identity is character traits, such as introverted or hardworking. Finally, affinity-identity pertains to one's membership within a particular community, one in which individuals opt-in. Table 1 provides an example of Gee's (2000) identity theory as it relates to my own identity.

Table 1

Example of My Identity as it Relates to Gee's (2000) Identity Theory

Facets of Gee's (2000) identity theory	Example
Nature	I am the second oldest sibling in my family.
Institution	I am a chemistry teacher.
Discourse	I am outgoing.
Affinity	I am a doctoral student in the fall 2020 cohort for the ASU Leadership and Innovation program.

My research project primarily focused on affinity-identity because this was the facet of teacher identity that was most within my locus of control. Gee (2000) defines

affinity-identity as "experiences shared in practice," (p. 100) which is also the goal of a CoP, defined by Wenger-Trayner et al. (2023) as a group of individuals who share a common practice and face similar challenges as they collaboratively problem solve and become better practitioners.

Teacher Identity

Richardson (2019) utilized Gee's (2000) concept of identity to understand how teachers' identities are shaped and found that affinity-identity was the most influential form of identity in teachers' decisions to remain a teacher or leave the profession. Twenty secondary teachers who had 6-15+ years of teaching experience were interviewed to uncover how their identities were related to their retention or attrition decisions. Participants ranked 10 factors in order of relation to their choice to remain in the teaching profession. All 20 participants chose "relationships with colleagues or relationships with students" as one of their top five reasons for staying in the profession (p. 69). Richardson (2019) concluded that teacher identity and sense of belonging was heavily influenced by teachers' relationships with colleagues, leaders, and students (p. 115). This research project built on these findings in that it created a community of newly hired teachers who learned from each other, sharing their classroom experiences and challenges in order to collaboratively work on solutions. I predicted that listening to and sharing lived experiences would foster relationships among my research participants and cultivate feelings of belonging within the school.

Teacher identity is a multifaceted concept that is dynamic in nature, changing over time as teachers continually interact with their colleagues, students, and contexts. Kelchtermans (1993) identified five components of teacher identity: self image, self

esteem, job motivation, task perception, and future perspective (p. 449-450). Similarly, Hanna et al. (2019) performed a meta-analysis to identify common themes utilized when measuring teacher identity with survey instruments: self-image, motivation, commitment, self-efficacy, task perception, and job satisfaction. The overlap in findings from researchers illustrated that four tenets (self-image, self-efficacy, job motivation, and task perception) were most important for measuring teacher identity. As a result, these constructs, defined below, were the focus of my measurements and data collection efforts.

Self-Image

The self-image facet of teacher identity refers to how one views or describes themselves as an educator (Hanna et al., 2019; Kelchtermans, 1993). Self-image for novice teachers can be shaped by their interactions with more experienced colleagues. Qadeer et al. (2018) conducted a study in Pakistan with post-secondary English teachers and found that beginning teachers view themselves in a positive light when they have help from veteran educators as they navigate their new professional landscapes. Similarly, Friesen and Besley (2013) employed a quantitative study to understand how teacher identity develops in pre-service teachers and concluded that, for most participants, a sense of being a teacher (i.e., teacher self-image) is formed during their time in teacher preparation programs. There is a significant amount of research about teacher identity development in pre-service and first-year teachers; however, there is a gap in the literature in terms of how teachers' self-image continues to develop for teachers who are new to a school, but not necessarily new to the profession and if participation in a teacher community has any impact. While my study did not explicitly

employ a mentoring aspect, as Qadeer et al. (2018) did, I predicted that participants' self-images as teachers would be impacted by their interactions with members of the CoP.

Self-Efficacy

The theory of self-efficacy was coined by Albert Bandura (1977) and refers to individuals' perceptions of their ability to successfully accomplish particular tasks. As it relates to teaching, self-efficacy is one's belief that they are an effective teacher. Teacher communities have been shown to have a positive impact on teachers' perceptions of self-efficacy. Salas (2016) created a teacher community composed of Spanish immersion teachers. Through discussion-based problem solving and classroom observations, teachers reported that their self-efficacy increased as a result of their participation in the study. Hakkola et al. (2020) formed a community of international teaching assistants at the graduate level and found that when community members share issues they are facing in their practice, individuals perceive an increase in self-efficacy from the collaborative discussions.

This research project was unique in that the CoP was formed not based on common teaching subjects, but rather the commonality that participants were recently hired by the school. The teachers who participated in the research project represented diverse subject areas: career and technical education, mathematics, science, and special education. Although participants were not able to discuss how to teach specific skills or concepts in their classes, due to the diverse content areas represented in the CoP, they chose to dive into topics that transcend subject areas, such as student motivation strategies and team-building activities for students. I am a chemistry teacher, and, before the research project began, I met a colleague who teaches mathematics. We had a long

discussion about teaching, specifically about a book, *Building Thinking Classrooms in Mathematics* (Liljedahl, 2021), that she read which was specific to mathematics instruction. She shared a practice from the book with me that can be done in any classroom: randomly grouping students each day. I implemented this practice in my classroom on the second day of class with the goal of students becoming comfortable with sharing their thinking with their peers. I randomly assigned student groups every day during the 2022-2023 school year, and within two weeks, I started to see results. The atmosphere of my classes began to shift from only a couple of students volunteering to share their thoughts to multiple students eager to verbalize their thinking and get feedback. This new practice shared from a colleague outside of my content area made me feel like I was becoming more effective as a teacher and was part of the motivation for the research project.

Job Motivation

In Chapter 1, I discussed the phenomenon of teacher burnout and why some teachers choose to leave the profession. In this section, I explore literature that explains why individuals elect to become teachers and why they remain in the field. Kelchtermans (1993) describes teacher job motivation as "the motives someone has to choose the teacher job, to stay in the job, or to leave it" (p. 449), noting that motivation is correlated with teachers' self-esteem as practitioners, i.e., how effective they perceive themselves to be as teachers, which is self-efficacy by a different name.

The reasons for individuals choosing to become teachers and to stay in the field are varied: having a positive impact on the lives of students and consistent working hours (Roth, 2014) and a sense of personal accomplishment (Butler, 2014), to name a couple.

As noted by Butler (2014), there exists extensive literature on factors that motivate students to learn but little research on what motivates teachers to teach. However, Hull (2013) addressed this gap by creating a CoP composed of English teachers in Russia. The study was part of a professional development program in which teachers were working toward recertification. The structure of the CoP was a class in which teachers were required to complete both in-person and online assignments. One assignment asked teachers to create and maintain a blog about an overarching question and commenting on their peers' blogs to give feedback and reflect. The researcher concluded that the mandated assignments had a positive impact on teachers' extrinsic and intrinsic motivation–the course was required to gain hours of professional development and teachers saw the value in collaborating with peers, navigating successes and failures, respectively.

One critique of the Hull study (2013) is that the projects teachers worked on were created by the facilitator and not by the participants, which is atypical of a CoP. In my study, participants had choice over the problems they discussed and aimed to solve. As a result, I hoped to instill a sense of motivation to continue in education. This is not to say that my participants were not already highly motivated to remain in the teaching profession. Rather, it was my goal that by fostering relationships among recently hired teachers, their self-efficacy (as described previously) and in turn their motivation to remain in the profession would be positively impacted.

Wang and Zhang (2021) conducted a study to examine how teacher identity development influences teacher candidates' motivation to become teachers. The study was qualitative in nature; data were collected through journals written by participants and

interviews that took place at different points throughout the study. Through narrative inquiry, the researchers concluded that developing a strong teacher identity during post-secondary education may result in individuals' decisions to enter and remain in the classroom. These findings are interesting, but they only focused on one thread of teacher identity–motivation. As noted earlier, the concept of teacher identity is not a simple one, and examining this phenomenon through only one lens (i.e., motivation) may not paint the fullest picture. For this reason, I studied four facets of teacher identity: self-image, self-efficacy, job motivation, and task perception.

Task Perception

Richter et al. (2021) sought to create survey instruments in order to measure four aspects of teacher identity: task perception, self-efficacy, job satisfaction, and beliefs on teaching, similar to the instruments developed and identified by Kelchtermans (1993) and Hanna et al. (2019), respectively. They define task perception as "the individual understanding of the tasks for which a person feels responsible" (p. 2). Examples of differing perspectives of teacher task perception include sharing content knowledge with students and assisting students in developing their social-emotional competencies (Jacobs & Struyf, 2015). The instruments created by Richter et al. (2021) were tested and validated utilizing a sample of nearly 150 post-secondary educators in teacher preparation programs. Their results showed that teachers perceived a stronger sense of self-efficacy when they view their jobs as a support system for their students. Although this research project did not utilize surveying techniques, the aforementioned studies were inspiration for questions asked to participants during pre- and post-interviews.

In my study, I explored teachers' task perceptions through semi-structured one-on-one interviews. Specifically, I asked questions about if their participation in a CoP increased their professional identities as teachers, and if so, which elements were most important to this development.

Additional Aspects of Teacher Identity Development

Brown (2009) studied teacher candidates and their interactions with their mentor teachers and found that reflecting on what was learned and how it could fit into one's teaching practices in the classroom is an important piece of developing one's teacher identity. Since reflection and interactions with fellow teachers has been shown to positively influence pre-service teachers' identity development, then it is possible that similar results would be observed for teachers who are new to the building and not necessarily new to the teaching profession. These findings are supported by Wenger (1998), who claimed that individual identity is shaped through interactions with members of a community. Thus, when studying identity development or changes in identity, one cannot isolate the individual from the community.

Day et al. (2006) add to the literature, noting that teacher identities are also influenced by personal factors, things that occur outside of the walls of the school. In terms of the relationship between teacher identity and membership in a CoP, Yazan (2018) studied world language teachers (teaching a non-native language to students) and found that world language teacher identity is intricately linked to membership in a CoP. Although Yazan (2018) selected teachers from the same content area for research, I argue that teachers who do not teach the same subject yet share a common thread (i.e., are new to the building) would produce similar results. Teachers across different content areas are

still in the same profession and face common challenges, such as engagement, meaningful assessment, parental involvement, discipline, etc. Yazan's (2018) findings are supported by the literature review conducted by Cardoso et al. (2014), who found that teachers' identities are shaped when working together with colleagues toward a common goal, which is a characteristic of CoPs. Further research is needed to investigate if membership in a CoP leads to a greater identity as a teacher, and if so, which elements are most important to this development.

Existing research on teacher identity development primarily focuses on pre-service and novice teachers; however, Wenger (1998) states that "identity exists…in the constant work of negotiating the self" (p. 151). This is one reason why I wanted to create a CoP for teachers new to the building and not necessarily new to the profession. Identity development is an ongoing, continuous process, one that is molded by interactions with peers who are similar to ourselves. It is interesting and necessary to study if participation in a CoP composed of teachers in their first, second, or third year in the building increases their professional identities as teachers, and if so, how.

Teacher identity is worth studying because prior research has shown that strong teacher identities are related to retention (Arroyo, 2020). In fact, being a member of a community of teachers has been shown to positively influence one's identity development as a teacher (Freedman & Appleman, 2008). This led me to believe that teacher communities can have a positive impact on teacher retention.

Sense of Belonging

The desire to belong within a community is a fundamental need for all human beings (Baumeister & Leary, 1995). From a human evolution perspective, feelings of

belonging most likely increased one's chances of survival, while in modern times, a sense of belonging has a strong influence over whether or not individuals are motivated to carry out particular tasks (Baumeister & Leary, 1995). The need to belong is ubiquitous to the human experience and is relevant to understanding the experiences of teachers.

According to Wenger (1998), sense of belonging can manifest in three ways: engagement (collaborating with peers to problem solve), imagination (visualizing how one's work contributes to the bigger picture, beyond the constraints of the here and now), and alignment (the work of CoP members becomes congruent with the system in which they are situated). Though belonging can take on three forms, Wenger (1998) explains the importance of fostering all three types of belonging and the limitations if only one form is developed. Focusing purely on engagement can be restricting; it could limit who has access to the community and its knowledge, as well as the types of knowledge that are constructed. Alignment can be frustrating; if individuals are solely shaping their practice to match the already-existing practices, individuals may be constrained. Imagination can be too abstract; by only imagining possibilities of meaning, members of a CoP may never accomplish their goals or mold their energy into actual, tangible work. In my innovation, I addressed engagement, imagination, and alignment modes of belonging by asking participants to share challenges they are facing in their practice so the group can help problem solve, reflect on if and how what is learned at each community meeting impacts students' lives after graduation or participants' practice beyond the current school year, and reflecting on how what was learned at each meeting can be implemented in their classrooms or modified to better meet the needs of their students, respectively.

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Sense of belonging has been studied in other contexts as well. For example, Thomas et al. (2014) concluded that student perceptions that one belongs within a specific context have been shown to improve retention rates for online students in post-secondary contexts. First-year college students who took online classes experienced feelings of belonging in the community when instructors were intentional with integrating "get-to-know-you" activities in the curriculum (Thomas et al., 2014). It is possible that similar results may be observed when studying teachers in a CoP who have recently been hired and how their membership and participation in the community impacts their sense of belonging at their new schools. This suggested that icebreaker activities were important to include in the CoP that I created. I asked participants to be vulnerable and share their successes and challenges as teachers. It is likely that participants may not feel comfortable doing so until a sense of trust is established within the group, and one way to facilitate trust is to engage teachers in "get-to-know-you" activities.

When teacher candidates perceive that they belong to a community and to the education profession, they believe that they are more effective in their practice. Bjorklund et al. (2020) surveyed nearly 250 pre-service teachers to understand if any correlation exists among students' perceptions of belonging to their pre-service program, their relationships with peers, and their sense of self-efficacy. Researchers concluded that belonging and self-efficacy are related and that these two factors cultivate students' identities within the program (Bjorklund et al., 2020). It is possible that similar results may be observed when studying belonging with teachers who have been recently hired to a school district. Teachers who have been recently hired by a school district, although

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perhaps not new to the world of education, share similarities with pre-service and novice teachers in that they are effectively forced to create new professional relationships. This is why it is important to create space for new teachers such that connections among colleagues and feelings of belonging within the school can be cultivated.

Support within an educational system facilitates teachers' feelings of belonging within the organization. Kachchhap and Horo (2021) surveyed 186 teachers to investigate how and to what extent two variables influence their sense of belonging at school and found that "organizational climate" (p. 784) was the most significant. In other words, teachers who felt school leaders created time for meaningful collaboration across content areas had a strong sense of belonging, resulting in improved student achievement. Skaalvik and Skaalvik (2011) found that collegiality among coworkers is a reliable predictor of teachers' sense of belonging within their school. This warrants a need for recently hired teachers to engage in a supportive network with their colleagues, where ideas can be shared and knowledge co-constructed in a safe environment free from judgment, as suggested by Snow-Gerono (2005).

In a related study, Alpaslan et al. (2018) surveyed 357 pre-service teachers about their perceptions of belonging within their teacher education class and found a correlation between sense of belonging and self-efficacy (one of the facets of teacher identity, as noted previously). These findings suggest a relationship between teacher belonging and teacher identity, again supporting the importance of creating a CoP for newly hired teachers.

Communities of Practice

The concept of a CoP stems from situated learning theory, which claims that meaningful learning takes place when individuals take an active position in the construction of knowledge (Lave & Wenger, 1991). CoPs refer to groups of individuals who align in their devotion to or excitement about a particular problem of practice, who meet regularly to work on solving the problem, thereby co-constructing knowledge and meaning within their particular context. Wenger et al. (2002) give an example of parents of student athletes who regularly meet to collaborate on strategies for their children to improve at the sport. Membership in a CoP may be a powerful method of establishing individual identity and belonging for teachers who are new to the building. In my experience as a teacher, problem solving has been most efficient when discussing the issues with my colleagues. For example, when I was struggling to engage a class in my lessons prior to the research study, I was able to lean on my colleagues for help, both colleagues within and outside of my content area. Together we created solutions to my problem. I view the practice of teaching as one that requires a spirit of continuous improvement. Each school year presents a unique set of challenges as faculty, the student body, and systems within the school change. As such, I argue that it is necessary to frequently work with colleagues to mutually support each other and improve our teaching practices. This requires a network of peers, which newly hired teachers may be lacking or still developing.

CoPs have three essential components: domain, community, and practice (Wenger et al., 2002). The domain is the reason individuals come together, the topics that people view as problematic or worth the time spent discussing. The community refers to the

people who meet regularly and the relationships among all parties. Finally, practice is the skills or resources that members develop or co-construct in an effort to tackle the central problem.

CoPs may be particularly effective for new teachers, and it is important that certain conditions are met, particularly a sense of trust and vulnerability in order to foster meaningful collegial relationships. Wenger et al. (2002) state that trust is necessary in order to move a community of teachers toward continued learning. Hord and Sommers (2008) note that trust within a teacher community is established and cultivated when individuals spend time around each other, opening up about hesitations, excitement, and worries. This is supported by the work of Shank (2006), which showed that when teachers share stories about or ask for help on their practice, strong interpersonal relationships are established which creates a culture of trust. With regard to a CoP composed of teachers who may be strangers to one another, it is critical to make time and space for trust and respect to be fostered. Trust is developed when participants in a CoP open up about their practice with fellow members, being vulnerable in sharing their successes, failures, and things they need help with (Wenger-Trayner et al., 2023). In my innovation, I created an environment of trust among CoP members by asking participants to share their stories about their practice, ones in which they perceived positive outcomes (which could give ideas to others who are struggling with similar issues) and ones in which they need help, so that CoP members can provide novel insight and potentially create solutions for these problems. Wenger et al. (2002) list several benefits for individuals who participate in CoPs, including cultivating a sense of belonging, engaging in a space where questions can be asked and risks can be taken, thereby increasing

competency in their field, and developing a solid perception of themselves as professionals.

Community of Practice Best Practices

        The activities and discussions that take place within CoPs are emergent, meaning that I, the researcher, did not pre-select topics to discuss. Instead, CoP members set the agenda for each meeting. Prior to the intervention, I spoke with a colleague, and she told me about a strategy she learned over the summer about students taking notes. Specifically, she learned about the importance of modeling how to take effective notes in class and how to consolidate learning by annotating notes at the end of class or the following class period. A topic such as this could be shared with CoP members. It is possible that a participant tells a story that their students do not know how to take notes, and the formerly mentioned colleague could share this practice. Gallagher et al. (2011) found that when teachers within CoPs make themselves vulnerable by opening up about their professional experiences, meaningful learning occurs, both for those who are sharing their stories and who are listening. Sharing experiences about successes and areas for improvement in teaching may lead to a sense of trust within the CoP as participants hear that they are not alone in their struggles. It was believed that these shared experiences would result in teachers' experiencing a stronger sense of belonging both within the CoP and the larger school community and a greater identity as teachers.

        Teacher CoPs are meaningful and effective when members have differing levels of experience. From my own professional experience, more experienced teachers taught me important things such as common misconceptions in student understanding and building-level protocols (e.g., what materials to leave for substitutes, how to submit final

grades, etc.). I was also able to share methods for teaching specific skills and engaging students in the classroom with veteran teachers. Eshchar-Netz and Vedder-Weiss (2021) showed that when first-year and veteran teachers collaborate on lesson planning, professional learning occurs for both sides. Although more experienced teachers may play a mentoring role for novice teachers, the reflective and discussion-based nature of CoPs benefit veteran teachers as well. Both first-year and experienced teachers engage in dialogue in issues in which multiple solutions are presented. The reflective piece of CoPs is key to ensuring that all teachers in a CoP, no matter their level of experience, benefit. These findings imply that teacher CoPs should have a variety of years of teaching experience so as to bring multiple perspectives into the learning process. This diversity of perspectives is why my innovation, while focusing on teachers new to the school, brought together both novice and more experienced educators.

Wenger's (1998) concept of CoPs has been used to examine the experiences of teacher candidates as they navigate the landscape of their teaching placements or final coursework prior to student teaching (Cumming-Potvin & Sanford, 2015; Johnston, 2015; Paulsen et al., 2015; Warner & Hallman, 2017). Cumming-Potvin and Sanford (2015) found that frequent engagement in the activities of a CoP facilitates one's identity as a core member of the CoP. It is possible that, for newly hired teachers, a sense of identity as a CoP member could translate to the development of an identity as a teacher at their new schools. Johnston's (2015) research focused on pre-service teachers who had negative experiences during their internships. One key takeaway from this study was that meaningful membership in a CoP can diminish feelings of isolation. A similar result may be observed for newly hired teachers and their involvement in a CoP. Warner and

Hallman (2017) suggest that teacher preparation programs should be modified to include time for meaningful collaboration between teaching interns and mentor teachers, as this creates a space to imagine novel teaching methods. Although the participants in my innovation were newly hired and not pre-service teachers, it was possible that they would still benefit from the collaborative nature of the CoP.

When the actions of CoP members evolve over time to align with the needs and work of their institutions, individuals experience Wenger's (1998) alignment mode of belonging, described earlier in the chapter. However, this mode of belonging alone comes with limitations. This is supported by the work done by Vallente (2020), who found that as teacher interns spend more time in their placement schools, some of their teaching practices begin to model the school's extant practices. As a result, most of the CoP members reported feelings of belonging both in the school and within the broader context of education. The shortcoming of only experiencing the alignment mode of belonging is that CoP members may feel disagreement between what they want to do and what their institution wants them to do. This warrants a delicate balance in constructing CoPs, such that all three modes of belonging are intertwined.

Goodnough's (2010) study focused on K-12 science teachers who participated in a collaborative action research study. Teachers met with each other to decide on problems of practice relevant to their practice, such as creating assessments that were used by both the teachers and their students, and conducted action research within their classrooms. Relationships were formed between teachers as a result of their continuous involvement in the CoP. When teachers within a CoP have voice and choice in the projects that they collaborate on, not only do they experience all three modes of belonging (Wenger, 1998),

their identities as professionals are molded as well. This study elucidates an important factor in the facilitation of CoP: choice. Participants must be given space to decide on topics they want to study or projects they want to embark on (Wenger et al., 2002).

CoPs have the potential to facilitate feelings of belonging in the teaching profession and foster beginning teachers' identities as professionals. Cuddapah and Clayton (2011) explored CoPs with first-year teachers and found that belonging is shaped when teachers get together to talk about their teaching experiences and that teacher identity manifests from the interactions teachers have with all stakeholders, such as colleagues, supervisors, students, and parents. While this study does shed light on the positive impact CoPs can have on teachers, there are limitations. This study focused solely on first-year teachers. This is limiting because not only are teachers new to the building, but they are also new to the profession. I wanted to explore a CoP with teachers who were new to the building and had differing levels of experience.

Another critique of Cuddapah and Clayton's (2011) study is that facilitators used pre-set agendas and activities during the meetings with novice teachers. This is not a characteristic of a CoP. Instead, members of CoPs come together to discuss similarities in issues they are facing and decide on activities and projects that they are excited to work on. In my study, CoP members met once a month after school for an hour at a time. The only meeting that required a pre-set agenda was the first one so that I could briefly introduce CoP, the impact they can have on teachers, and outline my goals for the study. After that, each meeting's agenda was determined by participants, which manifested in a couple of different ways. The topics of each CoP meeting are described in Chapter 3.

Format of CoP Meetings

Members of a CoP decide which types of activities they want to engage in when they meet; however, Wenger-Trayner et al. (2023) suggest eight potential activities, one of which is storytelling. Storytelling is defined as "sharing stories of practice as a way to convey or trigger learning" (p. 154). Shank (2006) created a community of high school teachers and found that storytelling was the catalyst that both established focus for the group and served as a means of learning. Teachers shared the problems they were facing in their classrooms, such as creating meaningful rubrics and engaging students in their specific content areas. Through sharing stories, colleagues were able to problem solve and share insights into the storyteller's problem.

Wenger (1998) refers to CoP members' engagement in discussions about their stories, collaborative problem solving, and sharing of resources as "developing their repertoire, styles, and discourses" (p. 95). This is supported by the research conducted by Bell-Robertson (2011), who created an online CoP for beginning music teachers and found that new teachers value the emotional support afforded by peers who are in similar teaching situations. Although my research focused on teachers new to the building across content areas rather than a single subject, it was possible that my participants also perceived emotional support as a benefit from their participation in the CoP.

When creating agendas for each meeting, Wenger-Trayner et al. (2023) and Boudett and City (2014) recommend including time at the beginning to talk about what was learned at the previous meeting. This helps to form continuity between meetings, rather than making meetings seemingly disparate, such that learning and improving one's practice are viewed as a process. Most of the meeting time of a CoP needs to be spent on

engaging in learning activities or discussions. This can be done through storytelling, as mentioned earlier, role playing, or discussing topics that are pertinent to all members of the group (Wenger-Trayner et al., 2023).

In any meeting and especially meetings with CoP, it is imperative to give individuals time and space at the end of the meeting to reflect on their learning and what was discussed (Boudett & City, 2014; Wenger-Trayner et al., 2023). This can be done privately, such as on paper or on an online survey platform such as Google Forms, or participants can reflect on collaborative documents, such as a Google Doc or writing their reflections on paper and taping them to a board so that everyone can see their colleagues' learning. I incorporated reflection into my innovation by concluding each meeting with individual writing time on a Google Doc. The writing prompts include topics such as what they learned at the meeting, how they can take what they learned and implement it in their classroom, and more. (Refer to Appendix A for a complete list of reflection questions.)

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Implications for Research

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It is clear that belonging is a critical piece of community and that participation in a CoP can shape teacher identity. As described throughout Chapter 2, research about teacher belonging, teacher identity, teacher CoPs, and the intersection of all three is extensive, especially in regards to teacher candidates and novice teachers. This makes sense because pre-service and novice teachers are new to the teaching profession. However, there is a gap in the literature in terms of CoPs, belonging, and identity for teachers who have been recently hired to a district. There is a need to investigate if and how, when teachers are new to a building (especially a large school building) and not

necessarily new to the profession, membership in a CoP impacts teachers' sense of

belonging within the community and teachers' professional identities.

CHAPTER 3

In Chapter 1, I detailed the need for creating a community of practice (CoP) for

teachers in their first, second, and third years at the school. Chapter 2 outlined the

theoretical framework for the study and prior research that illustrated the efficacy of CoP

in building both teachers' sense of belonging and professional identities. In this chapter, I

describe my research plan, which includes setting and participants, procedure, data

instruments. and analysis.

Research Questions

RQ 1: In what ways does participation in a community of practice affect

classroom routines?

RQ 2: What role does a structured community of practice play in cultivating

feelings of camaraderie among participants?

RQ 3: Does participation in a community of practice lead to a greater sense of

belonging? If so, what elements of the CoP are perceived as most important to

this development?

RQ 4: Does participation in a community of practice impact teacher identity? If

so, what elements of the CoP are perceived as most important to this

development?

There is limited research on how CoPs can be used for teachers who have been

recently hired at a new school building. That being said, the research on CoPs for pre-

service teachers provided meaningful insights into constructing my innovation. First,

qualitative data are necessary to understand the stories and perspectives of participants,

more so than quantitative data alone can tell. Second, borrowing from Warner and

Hallman (2017) who interviewed participants at different points in time throughout their study, I conducted individual semi-structured interviews at the beginning and end of my study to see how participation in a CoP composed of teachers who were new to the building (and not necessarily new to the teaching profession) influenced their sense of belonging in the school and professional identities as teachers. In addition, I asked participants to write reflections after each meeting.

Setting and Participants

This study took place at a large suburban public high school in the southern region of the United States. Although the school's teacher turnover rate was not high, several new hires were employed each year. For example, during the 2020-2021 school year, seven teachers were hired, during the 2021-2022 school year, 15 teachers were hired, and 21 teachers were hired for the 2022-2023 school year.

Teachers who were in their first, second, or third year at the school were recruited for this study. Eligibility to participate was based on the number of years taught in the building and not necessarily years of experience in the teaching profession. For example, an individual who had been teaching for 10 years but had taught at the school for two years was eligible to participate in the study. This study targeted teachers new to the school because of the potential challenges faced integrating into a new school during the COVID-19 pandemic, such as feelings of isolation or a weak sense of belonging, as described in detail in chapters 1 and 2, respectively. Recruitment strategies included emails and talking to eligible teachers both in small groups and individually.

Although there is no "perfect" number of participants required to form a CoP (Wenger et al., 2002; Wenger-Trayner et al., 2023), I aimed to recruit between five and

ten teachers to participate in the study. I wanted a minimum of five participants in order to have a diverse population within the CoP, such as differing levels of experience in the field of education. I set the maximum number of participants at ten due to feasibility of the action research study. Wenger-Trayner et al. (2023) state that the size of a CoP is less important than the roles each individual plays. Ultimately, I recruited 10 recently hired teachers to participate in the study. The teachers who participated in the study represented a wide range of content areas: mathematics, science, special education, and career and technical education. The range of years in teaching experience for participants was one to 26 years, and the average for the group was 7.2 years of experience. Participants chose pseudonyms in order to maintain anonymity. Table 2 groups participants by the number of years of teaching experience they had at the research site during the time of the study.

Table 2

Participant Pseudonyms and Years of Experience at the Research Site

First year	Second year	Third year
Anne	Celia	Juliana
Audrey	Chloe	Martha
Hendrix	Millie	
Goose		
Rodrigo		

Due to the limitation of time for this action research study, I wanted the CoP to be composed solely of core members, which Wenger-Trayner et al. (2023) describe as individuals who participate regularly and keep the momentum of the group going. Some CoPs involve "peripheral participants" (p. 77) who are members who have little or

irregular involvement. For this reason, I chose to recruit between five and ten teachers to participate in the study.

Role of the Researcher

My role in the study was that of an observer-participant. During the year the study was conducted, I was in my second year at the school, meaning I was part of the target group for the study. This was partly responsible for my motivation to conduct the study. My duties as an observer-participant included facilitating each meeting, asking questions to get discussions started and joining into the conversations when appropriate.

Procedure

The study ran from October 2022 to May 2023. Participants met in person once a month for an hour at a time. The group did not meet during March due to time conflicts with spring break. The format of the meetings that took place from November to May were as follows: The first ten minutes of each meeting were allotted for icebreaker activities. The next 45 minutes were when the majority of the learning took place, which varied at each meeting. Some teachers shared activities they facilitated in their classrooms that went really well, while others shared a problem they were facing and garnered ideas and feedback from the group. Finally, the last five minutes were set aside for participants to answer the reflection questions on a Google Doc. Participants had their own document that were shared with me. Table 3 provides a timeline for the research project.

Table 3

Timeline of the Study

Sequence	Actions	Procedures
Late September 2022	• Recruit participants	• Email and talk to eligible teachers
October to November 2022	• Informational meeting about the research study • Semi-structured interviews	• Hand out consent forms • Interviews were one-on-one and lasted 15 to 20 minutes
November 2022 to May 2023	• Monthly meetings with the CoP (except for March 2023)	• Facilitate meetings • Audio record whole group interview
May 2023	• Individual teacher interviews	• Audio record individual interviews

October

Eight interested teachers attended the October meeting. Two teachers were interested in participating in the study, but due to scheduling conflicts they were unable to attend. For these two teachers, I met with them individually and gave them a summary of the meeting. After hearing about the format and intended outcomes of the research study, these two teachers consented to participate.

No data were collected during the October meeting as the research study had not begun. The purpose of the October meeting was to explain what CoPs are and how powerful they can be for professional learning, provide space for potential participants to begin to get to know each other, and to distribute consent forms. At the beginning of the meeting, participants created name tents and shared with the group what subject they teach. The introductions were followed up with an icebreaker. Participants were divided

into two groups and given a recipe for potato soup that was printed on paper with the steps cut individually and shuffled. Participants were challenged to work with their peers to determine the correct order of the recipe's steps. After the icebreaker, I moved into a brief explanation of CoPs and informed participants of my three primary goals for the study: cultivate a community of new teachers, increase their sense of belonging within the school, and strengthen their teacher identities. During the next portion of the meeting, I facilitated another icebreaker activity in the form of a discussion in which I asked participants, "What brings you joy in your work?", inspired by Schwanke and Deagle (2022), to set a positive tone for the group.

At the end of the meeting, I assisted participants with setting the agenda for the November meeting by asking them three questions: What problems are you facing? What do you need help with? What are you doing successfully that you want to share? The group landed on student motivation/engagement strategies as the topic of discussion for the next meeting. I encouraged participants to come to the November meeting prepared to share a strategy that they tried in their classroom or that they want to pilot.

November

Nine participants were present at the meeting. For the icebreaker, teachers were divided into one group of four and one group of five and were challenged to identify 10 commonalities among everyone in the group. After the icebreaker, participants took turns sharing a student engagement/motivation strategy that they already do in their classroom or that they had found online. After discussing, the group shared feedback about how the strategy could work in their classrooms. Strategies that were shared included choice boards, game-based learning, randomly grouping students each day, and more. Each

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participant was charged with choosing a strategy they learned from the meeting and implementing it in their classroom prior to the December meeting. I provided participants with questions to reflect on after implementing their chosen strategy. The reflection questions were: Which strategy did you try out and why? How did the students respond to the strategy? What evidence do you have to support this? Is there anything you would change about this strategy to better meet the needs of your students? Why or why not?

December

Eight participants were present. The icebreaker was a game of "two truths and a lie". Participants wrote down two things that were true about themselves and one thing that was not true. Each teacher took turns reading to the group what they wrote, and the group had to identify which of the three statements was the lie. Once the icebreaker concluded, I divided participants into two groups. The two small groups discussed which engagement strategy they implemented in their classroom and how they perceived it went. The small group discussion lasted approximately 10 minutes. After that, I facilitated a whole group discussion over the same topic.

December was the last meeting of the semester before a two-week winter break, and for this reason, I did not ask participants to set the agenda for the January meeting at the end of the meeting. Rather, I sent an email to participants in January approximately two weeks before the meeting asking what they wanted to discuss or work on. I included the following questions in my email to probe them for agenda items: Have you tried anything new in your classroom this semester that went well (or didn't go well) that you want to share with the group? Is there anything you need help with in your classroom?

Different strategies, tools, resources, etc.? What do you want to learn from members of the group? What do you want other members of the group to learn from you?

January

Seven participants were present. The icebreaker activity involved participants writing down one fact about themselves that others may not know. After everyone wrote down their personal fact, participants crumpled their papers into a ball, and we had a "snowball fight" where teachers tossed their "snowballs" at each other for 20 seconds. When the 20 seconds had elapsed, each participant had a fact from a different individual that they read aloud, and participants guessed which teacher the fact was about.

Topics that were discussed during this meeting included exciting things that teachers were doing in their classroom, such as team-building strategies for students, and logistical items such as tips for managing the process of assisting students with requesting courses for the next school year. The latter was a time relevant discussion because all teachers in the building were charged with helping students select courses for the next school year a few weeks after the January meeting.

I observed that I received more responses from participants in terms of creating the agenda when I asked them via email one to two weeks before the meeting as compared to asking them at the end of the meeting—and one month before the next meeting—what they wanted to add to the agenda. I decided to start garnering agenda items in this manner for the subsequent meetings.

February

Five participants were present. The icebreaker was a discussion centered around the following prompt: When you were in 10th grade, what did you want to be when you

grew up? Did you always want to be a teacher? What made you want to be a teacher? The icebreaker was followed up by Martha sharing a name tent strategy that she used in her classroom. After that, the group discussed means of assessing student learning other than typical tests and quizzes and team-building activities for homeroom students.

April

Five participants were present. For the icebreaker, I asked teachers to draw a picture of how they were feeling at that time with the end of the school year approaching. Teachers took turns displaying their drawings to each other and explaining the choices they made in their drawings. Martha shared with the group a webquest activity that she assigned to her students and she explained how she made it more engaging. Next, the group discussed ideas for end-of-year projects for students, as well as strategies for reviewing for final exams.

May

Eight participants were present. Teachers were asked to share "something good" with the group as the icebreaker. Juliana sought out feedback from the group about how to structure a one-pager assignment for her students as their final project. Some members of the group had their students do a similar project in the past and shared their ideas as to what worked and what did not work. Afterwards, the group discussed student cell phone use in the classroom. Millie shared that she enacted a no phone policy in her classroom, as well as how she communicated her new policy with parents and the impact it had on student learning and engagement.

Instruments and Data Collection Procedures

In order to address the research questions, I collected the following data:

- Audio recordings of each CoP meeting

- Researcher journal for notes, observations, and key moments that took place during each meeting. Journal entries were written immediately after each CoP meeting focusing primarily on observed impacts of community and practice aspects

- Participant reflection journals: Participants were asked to reflect on each meeting during the last 5-10 minutes of the meeting. (See sample reflection questions in Appendix A)

- Pre-intervention and post-intervention one-on-one semi-structured interviews (audio recorded). Pre-intervention interviews took place between the first and second CoP meetings. Post-intervention interviews took place after the final CoP meeting in May 2023. Refer to Appendices B and C for interview protocols.

Table 4 illustrates how my choices of data collection are aligned with my three research questions.

Table 4

Data Alignment with Research Questions

Research question	Data source
1. In what ways does participation in a community of practice affect classroom routines?	• Recordings of CoP meetings • Participant reflections • Researcher journal • Semi-structured one-on-one interviews
2. What role does a structured community of practice play in cultivating feelings of camaraderie among participants?	• Participant reflections • Researcher journal • Semi-structured one-on-one interviews
3. Does participation in a community of practice lead to a greater sense of belonging? If so, what elements of the CoP are perceived as most important to this development?	• Semi-structured one-on-one interviews • Participant reflections • Researcher journal
4. Does participation in a community of practice impact teacher identity? If so, what elements of the CoP are perceived as most important to this development?	• Semi-structured one-on-one interviews

Data Analysis

I conducted semi-structured interviews with each participant at the beginning of the research project in order to establish a baseline for a sense of belonging at their school. The bulk of the data was collected through my researcher journal, participant reflection documents, and semi-structured interviews that took place after the final CoP meeting. To address the research questions, I chose in vivo coding as the initial coding process due to its straightforward and streamlined nature and especially because I wanted to use the participants' words as a means of uncovering themes (Saldaña, 2021). For

example, during her post-interview, I asked Millie to share some highlights from her experience with the CoP. Part of Millie's response is shown below:

> I feel like I know more people, which is nice, outside of my hallway and my department because I do feel like it's easy to get lost in a sea of people. It's nice to actually really know a few more people because I feel like I know them beyond just their name. I feel like I have just really gotten to know some of these people through our meetings.

I used Millie's words "really gotten to know some of these people" as the code for this quote because I felt that they captured the essence of what she was saying in her statement. Rather than creating unique codes for participants' responses, I used excerpts from their quotes as codes.

Once quotes from participants' reflections and post-interviews were selected, I used focused coding as the second cycle of coding. I made this choice in order to group participants' responses into categories that addressed the research questions (Saldaña, 2021). For example, I grouped the in vivo codes "really gotten to know some of these people," "stronger connection because I have familiar faces," "energy of 'hello' is a little bit higher," and the 35 other codes created during the in vivo coding process under a new code, which ultimately became a theme, titled "new connections."

CHAPTER 4

There were 10 participants in this study, all of whom were in their first, second, or third year of teaching at the school but were not necessarily new to the field of education. See Table 2, page 32, for a summary of teacher participants. I met with participants monthly for an hour at a time, and teachers were able to create the agenda for each meeting. This study aimed to answer four research questions:

1. In what ways does participation in a community of practice affect classroom routines?

2. What role does a structured community of practice play in cultivating feelings of camaraderie among participants?

3. Does participation in a community of practice lead to a greater sense of belonging? If so, what elements of the CoP are perceived as most important to this development?

4. Does participation in a community of practice impact teacher identity? If so, what elements of the CoP are perceived as most important to this development?

Initial Interviews

I conducted one-on-one semi-structured interviews with participants toward the beginning of the study to establish a baseline for participants' sense of belonging and professional identity as teachers. Nine out of 10 participants described their network at the school as being limited to colleagues in their PLC or teachers whose classrooms were physically close to their own. Celia said, "I feel like there's a few people who I do know well, but like I wouldn't say I can walk down the halls and find people I'm comfortable being open with." Chloe shared a similar perspective: "I feel like I have really great

relationships with the people that I have relationships with, but…I know very few people which is different than any experience I've had." Juliana shared that she felt like she was at "the acquaintance level for the majority of people that I know, not everybody but a majority…I see other people are connected. And so I think there's a little bit of like. I might be a little jealous, because I don't know how they did that."

Although participants expressed feeling connected only to certain groups of teachers, specifically teachers in close proximity or colleagues in their PLCs, teachers said that they felt welcomed at the school. Both Goose and Rodrigo said that the administrative team had been very welcoming. Goose shared, "I think that they did a good job of trying to make everybody feel welcome the best that they can," and Rodrigo stated that he appreciated the regular check-ins that one of the administrators did with teachers who had been hired to the school that year.

In terms of their sense of belonging at the school, the common theme among teachers' responses was that they felt welcomed at the school and that their networks of colleagues mainly included teachers in the same subject area and teachers whose classrooms were near their own. While these findings did not illustrate a low sense of belonging at the school, they show that there was room for growth. I speculated that, as a result of their participation in the community of practice (CoP), teachers would be able to expand their professional networks which would increase their sense of belonging as a result.

When asked how they would describe themselves as teachers, participants used words such as "empathy" and "flexible," while also highlighting how important they view building and maintaining relationships with students to be. It was evident that

teachers prioritized creating a supportive classroom environment for students. These findings were shown again when participants explained why they chose to become teachers and what they view their role as educators to be. Teachers expressed finding joy in guiding students through difficult tasks and making a difference in their students' lives. Anne shared that she "wanted to work in some capacity making the world a little bit of a better place."

Many participants had difficulty in describing their effectiveness as teachers. Findings from teachers' views of their self-efficacy included feeling effective some days but not others. Hendrix said, "I don't know if I can call myself effective, but when it comes to relationship-building that may be the only thing. But content-wise, I mean, I deliver. That's a very hard question." Rodrigo stated that, rather than gauging his effectiveness based on grades, he judges his self-efficacy based on how engaged his students are in class and their attendance rates. "If I can see the participation, I can see the effort, then I can know that they feel invited, and that's what I look for as a teacher."

Researcher Journal

There were eight participants present at the December meeting. I split the group into two groups of four, and they had eight minutes to discuss which engagement strategy they implemented in their classrooms. When I separated the whole group into two groups to discuss what engagement strategy they implemented, I could see that both groups were engaged. Both groups were talking about what they implemented and how it went. It sounded like both groups finished the engagement/motivation strategy conversation before the eight minutes had elapsed, and everyone was still talking to one another. It seemed like this was evidence of community forming. Most of the teachers in the CoP

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were not near each other in the school. The fact that participants were still talking to each other about something that I did not ask them to talk about, they were continuing the conversation, this seemed to be evidence that a community was forming. An example of a conversation I heard was Audrey and Chloe discussing similar observations of student behavior in their classrooms. Although Audrey and Chloe did not teach the same subject, they taught students who were in the same grade level.

The December meeting was the first time a member sought out help from members of the CoP. Martha asked her peers for advice on how she can review classroom norms in a meaningful way at the beginning of the second semester. This was exciting to me because it was the first time someone from the CoP went out of their way to ask for help on something, being vulnerable in that way.

I provided food for participants at each meeting. During the December meeting, the food arrived later than planned. Several participants stayed well after the end of the meeting, ate food, and had conversations with one another. It was interesting to see that some participants did not take the food with them at the end of the meeting. Instead, they stayed together when they didn't have to; they continued to talk with everybody. To me, this was evidence of a community forming.

During the first couple of meetings, I found myself frequently having to lead the conversations, make suggestions for the agenda, and probe people to keep the conversations going, but the January meeting agenda was the first one completely created by participants. What was especially striking was teachers were beginning to take the lead on the community, meaning during most of the meeting I was observing rather than leading the conversations. I started seeing evidence of practice, specifically participants

talking about strategies that they tried out in their classrooms that they learned about from the CoP.

I also saw a little bit of community building, mainly because participants told me that they really enjoyed getting to come to the meetings. For example, Audrey said that she got really excited seeing that it was a meeting day because she was excited to get to see everybody again.

At the end of the February meeting, I reminded everybody that we had a couple of meetings left in this study and also that I would follow up with a post-interview. The participants who were present at the February meeting suggested that we all have dinner after the conclusion of the study. The fact that they still wanted this community or this group to continue to hang out was showing evidence of community building.

Post-Interviews and Participant Reflections

The following section reviews participants' responses to questions during their individual semi-structured interviews that took place after the final meeting, as well as relevant findings from their reflection documents. I conducted interviews with participants after the conclusion of the study in order to uncover what aspects of the CoP impacted teachers' feelings of camaraderie among members of the CoP and their professional practice, as well as to find out whether or not their participation in the CoP had an impact on their sense of belonging at their school and their teacher identities.

After analyzing data from the post-interviews and participants' reflection documents, five themes emerged: sharing professional practice, new connections, cross-subject relatability, valuing autonomy, and productive and safe atmosphere. A brief

discussion of these themes with supporting quotes from the data are outlined in the sections that follow.

Sharing Professional Practice

Twenty-four quotes from participants pertained to classroom strategies shared during the CoP meetings. All 10 participants discussed enjoying hearing classroom strategies from their peers, highlighted particular strategies that they liked the most, or shared it was meaningful to hear about a strategy from a teacher who had already incorporated it into their classroom. Goose described the community of new teachers as informative. When I asked him why he chose that word, Goose said, "As just a really young teacher, I'm still trying to brainstorm a lot of things, so they gave me a lot of really good ideas that I want to use moving into next year."

The most popular strategy was one about grouping student desks, shared by Juliana, which she learned about from *Building Thinking Classrooms* (Liljedahl, 2021). This strategy calls for teachers to group students into groups of three. Chloe implemented this strategy in her classroom after learning about it from Juliana during a meeting. Chloe said during her post-interview that moving from groups of four to groups of three "made a difference" and that "it just changed the vibes a little bit." Hendrix also incorporated the grouping strategy into his classroom, but instead moved from groups of four to groups of two, noting that it "worked better" and was "less distracting."

Audrey, Chloe, and Hendrix enjoyed hearing novel classroom strategies from teachers who had already tried out the strategies in their own classrooms. Chloe said she felt "a little inspired to try something new because it worked for somebody else," and Hendrix said that "hearing other…strategies and how they worked with other teachers

helps me make decisions on what strategies to implement in my classroom." Audrey used

the word "empowered" to describe how she felt about hearing strategies from other

teachers about managing student cell phone use in the classroom:

> The cell phone conversation was a highlight because it was on my mind too. I know it's on a bunch of people's minds right now. That was definitely a highlight because I feel a little more empowered to change it next year and to move to being stricter. Seeing that it worked for other people well gave me some more confidence to be like "OK, I can do this. It's work, but you can do it."

New Connections

Over 160 quotes from participants' individual post-interviews and reflection

documents were coded, of which 39 quotes spoke to participants' desire to form new

connections with their colleagues and their excitement that connections did indeed form.

One of the questions in teachers' reflection documents asked what their expectations

were for each CoP meeting and what they wanted to get out of their time spent with

members of the CoP. Anne, Celia, and Goose wrote that they wanted to get to know other

teachers who they work with as a result of participating in this project. Celia wrote about

this on two different occasions in her reflection. At the end of the January meeting, Celia

wrote,

> One desire is to build a better relationship with my colleagues and feel more comfortable talking with them when I do need help in the classroom, and understand their strengths as teachers so I can come to them when I need help. I think the meetings have helped me feel comfortable approaching my colleagues with questions. I think there is still room for me to improve these relationships with time!

When asked what they perceived to be beneficial from their time spent with

members of the CoP, Audrey, Chloe, Martha, and Rodrigo talked about getting to know

colleagues as a benefit. Rodrigo mentioned this in his reflection after three separate

meetings. After the December meeting, Rodrigo wrote, "I really enjoyed the ice breaker activity. I got to know my colleagues better and have more people to connect with at work. It helps me make work feel like a community and not a job."

During the post-interviews, all 10 participants talked about feeling more connected to the staff. Hendrix said that getting to know people was a highlight from his experience with the community of new teachers. When I asked him why he felt that this was a highlight, Hendrix stated, "Just building a network is really just something that's very important if you want to be successful in life or your career, in anything I think. The more people you know I feel it's better."

Several teachers discussed that the CoP gave them space to get to know colleagues who they wouldn't have crossed paths with otherwise. Rodrigo talked about getting to know more people as a result of physically being in the building for a whole school year, but he also described how the connections he formed with members of the CoP impacted his experience at the school:

> I felt like this was really helpful because I got to know more people that I would never have gotten to meet outside of…because otherwise it's just my PLC…it's just my department. And now I get to know people who are in different departments. It makes the experience, the town feel a lot smaller. It makes it feel like a home.

Audrey expressed a similar experience to Rodrigo. Audrey used the word "community" to describe the group of new teachers. When I asked her why she chose that word, Audrey said,

> I feel like I met the people in this little group and then there have been a couple people that I have gotten to know a little bit better and I wouldn't have if I hadn't had seen them first here and felt like more confident to reach out to them or ask them a question or talk to them about things.

When I asked Anne how connected she felt to the staff after participating in the study, she said,

> Absolutely stronger connection because I have familiar faces that I have enough information to go ask them for help or to collaborate with them or offer help if needed, whereas I wouldn't have met that diverse group of teachers. You and I wouldn't have had any collaboration. I meet people in my department, but I don't get to know other people around the building.

Celia, Juliana, Martha, and Rodrigo mentioned more positive hallway interactions with members of the CoP as a highlight from their participation in the study. Martha expressed in her reflection document an enjoyment in knowing who her colleagues were when passing them in the hallway, and Juliana said during her post-interview that she felt that the energy of the "hello" in the hallway was a little bit higher when running into fellow CoP members. During her post-interview, Celia talked about running into a CoP member and having a conversation beyond just "hello," stating, "I probably wouldn't have gotten that far in the past."

Although quotes from all 10 participants were coded with a "new connections" theme, some teachers' reasons for an increase in connectedness to the staff at their school included other factors outside of the CoP. When asked how connected she felt to the staff at the school, Millie talked about how her participation in other teacher groups had an impact on her connections with colleagues:

> There's someone who is in this group [the CoP] that I also am in a teacher club with. I haven't gotten to know her specifically super well but I'm just a lot more comfortable and I know that I could go to that person and just have a lot more familiarity than another teacher that I only met a couple of times.

Goose implied during his post-interview that him being at the school for a full year, on top of his participation in the study, increased how connected he felt to the staff:

"I feel like I just know more people. I think people are starting to recognize…I'm here for the long run so people are trying to know who I am…I feel like I know the staff way better now."

Cross-Subject Relatability

Audrey, Celia, and Chloe noted in their reflection documents that they enjoyed hearing perspectives from teachers outside of their content areas and grade levels. Celia wrote, "I enjoy sharing and hearing ideas as a new teacher because this allows me to think outside of my own classroom and think about changing habits that I feel stuck in." The varied representation of teachers from different subjects and grade levels was of particular importance to Rodrigo, who talked about this aspect on four different occasions during his post-interview. He talked about the benefits of having a homogenous group of teachers, such as planning curriculum. On the other hand, Rodrigo described why he enjoyed being a part of a well rounded group of new teachers: "I love that we have a diverse group of people who teach different things. Many times I get ideas from them that I never would have thought of on my own."

Twenty-one quotes from participants' post-interviews and reflection documents were coded with "shared experience". This code was created for quotes from Anne, Audrey, Chloe, Goose, Martha, and Millie. The word "struggles" came up eight times in their quotes. During several of the CoP meetings, teachers were vulnerable in sharing with CoP members problems or struggles they were facing in their classrooms. Teachers expressed feeling validated in their struggles because when one member would share a problem they were facing, other members would share that they were dealing with the same issues in their classrooms. It seemed like the shared experiences and shared

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struggles among CoP members helped to diminish feelings of isolation among participants.

During her post-interview, Anne said she felt like there was an "equality level" to the CoP because "we are all teachers". Audrey stated in her post-interview that "it was encouraging that there were other people having the same struggle," particularly students using cell phones during class time, which she noted in her reflection document. The code "shared experience" was most frequent for Chloe and came up in both her reflection document and post-interview. Chloe said that it was helpful and validating to hear that she was not alone in her struggles as a teacher. During her post-interview, Chloe stated,

> It's just nice to be able to share experiences with people who have similar classroom experiences, who maybe have similar frustrations with learning. It's just nice to come together with people who get it and be able to share because when you're with kids all day you don't really get the time to…it's nice to talk to other adults that are experiencing similar things.

Goose echoed Chloe's sentiments in his reflection document, writing that "This meeting allowed me to realize that I am not alone in the struggles that I have been having here at the end of the semester. The feedback has been good to hear about handling the stresses of being a new teacher." Martha commented in her reflection document, "I like sharing similar issues, proposing solutions and just comfortable round table discussions." During the post-interview, Martha viewed the group being composed of new teachers as a "good thing" because "it kind of puts us all on the same playing field" and that "we are all doing kind of the same job and see the same issues". Millie felt validated knowing that she was not the only one struggling with issues such as students using cell phones during class, that it was not an indicator that she was just a bad teacher. "It just makes me feel like I'm not doing something wrong," she said during her post-interview. In her reflection

document, Millie wrote, "They have helped me to feel validated in my struggles. I'm not the only one with some of these challenges. Sometimes I feel like that because I am still a newer teacher."

Valuing Autonomy

Teachers appreciated having the freedom to choose what topics would be discussed at each CoP meeting. They shared that a lot of meetings or workshops that they attend are pre-planned and that having choice in setting the agendas made it so that their discussions felt timely–that they were talking about topics that were most pressing to them at the moment.

Audrey, Chloe, Juliana, Martha, Millie, and Rodrigo expressed that they enjoyed being able to choose discussion items and what topics would be a part of the agenda for each meeting. Juliana said in her post-interview, "I liked that we got to pick what we talked about." Chloe's response during her post-interview expands on Juliana's:

> It's kind of nice to have the time to talk about the stuff that's on our minds in that moment. As teachers, we get a lot of pre-planned [professional development] but it's nice to have a time to just chat about what feels important right now and what we need help with right now. I liked the vibe of it and how relaxed it was. I don't know if I want to change that.

Teachers valuing autonomy in creating agendas for each CoP meeting should not minimize the importance and meaningfulness of pre-planned agendas. As an example, staff meetings led by administrative or district-level teams tend to include topics such as building-level updates, new school policies enacted by state legislature, and more. Discussion items such as these are certainly important. The autonomous nature of the CoP facilitated discussions that allowed teachers to relate more to each other through

sharing similar experiences and struggles they were facing as new teachers at their

school.

Productive and Safe Atmosphere

When talking about their experience with the CoP, teachers frequently used four

words: problem-solving, supportive, positive, and safe. During her post-interview, Juliana

described the CoP as being solution-oriented, that when teachers sought out help,

everyone brainstormed ideas and proposed potential solutions. Juliana described the CoP

in this aspect as "functional," noting that "everyone was willing to jump in. Nobody was

like 'Well, I don't teach [that subject]; I can't help you.'" Anne mirrored Juliana's

perspective, stating, "In the smaller group, it seemed like we were problem solving or

addressing things in a positive way." Celia said that, as a result of her participation in the

CoP, she feels like she "would be more comfortable hashing out a problem or something

in my classroom."

In addition to assisting with problem solving, Anne viewed the CoP as a

supportive environment in which everyone's viewpoints were supported, whether or not

they were shared opinions among everyone in the CoP: "Every single time someone

would voice a complaint, there was a brainstorm of ideas, some collaboration, but still

everyone was supported for their opinion." Anne went on to express her wish that the

CoP continues because "it is supportive for teachers. I felt like everyone had some

ownership. People were engaged…This offers something to new teachers. This is

something very supportive." Millie said that the CoP "gives us a chance to just talk

through ideas and issues and support each other."

Participants described the atmosphere of the CoP as positive. Hendrix said the CoP of new teachers "didn't seem that they were trying to put anybody down. It's just a…an exchange of ideas in order for us to better ourselves," and Anne said that there was a "positive energy" in the group. Audrey shared a similar perspective about the CoP, stating that, "everyone was just really encouraging to each other and really kind and helpful with things."

During each of the post-interviews, I asked participants to use three words to describe the CoP. Teachers expressed that the space for the CoP was nonjudgemental, that they could open up and be vulnerable in asking for help or sharing frustrations without fear of being looked down upon or made to feel inferior because their classrooms were not perfect. Audrey used the word "safe" to describe the CoP. When I asked Audrey why she chose the word "safe" to describe the CoP, she said, "I felt like I could say things, like struggles, admit to struggles. It was a really helpful environment. I think I need that positivity a lot of the time." Juliana described the CoP as safe as well. "I feel like it's a safe space. We're all new to here, newish. It just immediately felt like no judgment. That's what I mean by the safety. It just easily felt like a safe space to share and vent."

Suggestions for Improvement

After asking each participant about their highlights of the CoP, I asked if they had any suggestions for improvement should another CoP of new teachers be formed. Martha and Celia suggested time limits for discussing topics and establishing norms for the CoP. Martha said that she felt like sometimes the CoP would veer off of the agenda and talk about things outside of our control and suggested that I set time limits for certain topics

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so that all agenda items could be covered. Celia suggested members of the CoP create norms for discussions so that there could be equity in voice–ensuring that everyone gets a chance to speak so that one or two people do not dominate the conversation.

Summary

I aimed to address the four research questions that asked about the CoP's impact on teachers' classroom routines, feelings of camaraderie, sense of belonging at their school, and professional identities by collecting data via pre- and post-intervention interviews, participant reflection documents, my researcher journal, and recordings of each CoP meeting. A brief summary of the findings is below. A more in-depth discussion of the findings can be found in Chapter 5.

Teachers in the CoP chose agenda items that were mostly centered around their classrooms, such as engagement strategies and managing student cell phone use. They shared what they were already doing in their classrooms while others listened, asked questions, and imagined how they could implement the routines in their own classrooms. Learning about strategies from teachers who were already implementing the methods in their classrooms gave CoP members confidence or motivation to put the learned strategies into practice with their students. If the strategies worked for a teacher's students, then teachers felt like they could replicate the same strategies in their classrooms with success.

The CoP seemed to have a positive impact on teachers' sense of belonging at their school through the sharing of experiences and struggles. The discussion items for each meeting were chosen by CoP members. Through this open platform of discussion and collaboration, teachers were able to get to know each other and relate to one another.

Because the CoP was composed of teachers who were in their first, second, or third year in the building, some individuals had already met each other through new teacher orientation. However, as the school year continues, it is likely that teachers who met each other during new teacher orientation rarely saw each other outside of faculty meetings. The CoP provided a space for teachers to get to know colleagues with whom they did not regularly interact with. The makeup and format of the CoP facilitated feelings of safety and productivity among members of the group. Teachers felt that they could openly ask for help from their peers without the fear of negative responses.

Whether or not participation in the CoP had an impact on teacher identity is inconclusive. While teachers did talk about the four facets of teacher identified in Chapter 2, they did not directly mention if or how their participation in the CoP had an impact on their teacher identities. Potential reasons for this are discussed in Chapter 5.

CHAPTER 5

This qualitative research project ran from October 2022 to May 2023. Teachers

who were in their first, second, or third year of teaching at the research site were eligible

to participate in the study, with ten teachers total electing to participate. Teachers from

mathematics, science, special education, and career and technical education backgrounds

were represented in the community of practice (CoP). I met with participants monthly for

an hour at a time, and participants were charged with collectively creating the agenda for

each meeting.

In the sections that follow, I discuss in what ways the data answers the four

research questions that ask about classroom routines (practice), camaraderie among

participants (community), sense of belonging at the school, and professional identities as

teachers. I go on to discuss limitations of the study and conclude with recommendations

for future research in this area, as well as recommendations for practitioners in education.

Summary of Findings

Teachers valued being able to get to know and learn alongside colleagues who

they did not interact with on a regular basis. In their pre-intervention interviews, teachers

stated that they mostly interacted with colleagues who were in their departments or

whose classrooms were in close proximity to their own, i.e. classroom neighbors or

teachers down the hall, as a consequence of the large size of the school. As a result of

these regular meetings with coworkers, teachers expressed a deeper level of connection

with the other teachers in the group.

The unique makeup of the group, in which the common thread among participants

was being in their first few years of teaching at the school, though not necessarily new to

the field of education, was a benefit as well. Teachers shared classroom strategies that transcended content areas and were not specific to one discipline. Some participants said that they appreciated hearing strategies from teachers who had already implemented the strategies in their own classrooms. This gave the listeners more confidence and motivation to test out the strategies in their classrooms. Participants also shared struggles they were facing in their classrooms, and group members offered support, solutions, and advice. Teachers expressed feeling validated in their struggles after hearing that other members of the CoP were facing similar challenges, such as student cell phone use in the classroom.

Participants created the agenda for each meeting, and most participants stated they liked this aspect of their CoP because they were able to select topics that felt most timely and pressing in the moment. When teachers described the CoP during their post-intervention interviews, the most commonly used words were *problem-solving*, *supportive*, *positive*, and *safe*. Teachers felt like they could be honest with needing help in particular areas and that other members of the CoP were eager to problem solve, being nonjudgemental in doing so.

Discussion

In this section, I address how the findings answer or do not answer the research questions. The four research questions that I aimed to address with this study are listed below:

RQ 1: In what ways does participation in a community of practice affect classroom routines?

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RQ 2: What role does a structured community of practice play in cultivating feelings of camaraderie among participants?

RQ 3: Does participation in a community of practice lead to a greater sense of belonging? If so, what elements of the CoP are perceived as most important to this development?

RQ 4: Does participation in a community of practice impact teacher identity? If so, what elements of the CoP are perceived as most important to this development?

Classroom Routines (Practice)

When challenging participants to create the agenda for each meeting, I asked them questions such as, "What is something exciting you want to share? What do you need help with?" Each time, the group landed on topics that had a theme of classroom strategies and routines. The focus of each meeting was centered on classroom strategies, particularly strategies about student engagement, assessment, end-of-year projects, reviewing for final exams, and managing student cell phone use in the classroom. Because the majority of teachers' work days are spent in their classrooms with students, participants' selection of classroom strategies as the topic of each meeting was not surprising.

During the post-interviews, all 10 participants noted the exchanging of ideas about classroom strategies as a highlight from their experience with the CoP. Teachers learned new strategies, the most popular of which was the student grouping strategy shared by Juliana, which she learned about from Liljedahl's (2021) book, *Building Thinking Classrooms*. Audrey, Chloe, and Hendrix implemented the strategy in their

classrooms and said it was successful, stating that students seemed to be more engaged and productive as a result.

Some participants reported having prior knowledge of a classroom strategy but learning unique ways to modify or improve the strategy. As an example, Martha shared a strategy about using student-created name tents in the classroom. While this is not necessarily a novel strategy, Martha presented ways to enhance the use of name tents.

Three participants shared that they enjoyed hearing about classroom strategies from teachers who had already tested them out in their classrooms. They talked about how meaningful it is to hear how a strategy works or does not work from someone who has tried it themselves, rather than searching for strategies online. During the May meeting, Millie shared a method she was using to manage student cell phone use in her classroom. After hearing the discussion, Audrey said she felt empowered to start implementing a cell phone strategy in her classroom the following year: "Seeing that it worked for other people well gave me some more confidence to be like, 'OK, I can do this.' It's work, but you can do it."

Darling-Hammond et al. (2009) found that "professional development is most effective when it addresses the concrete, everyday challenges involved in teaching and learning specific academic subject matter" (p. 10). Although "specific academic subject matter" was not discussed at the meetings, due to the CoP being composed of teachers from different content areas, teachers created each agenda so that their needs were met in a timely manner. In regards to setting each agenda prior to the meetings, Chloe said, "It's kind of nice to have the time to talk about the stuff that's on our minds in that moment." As a result of the choice in creating the agendas, Rodrigo felt like "your voice mattered".

Participants setting agendas for upcoming meetings is a marker of a formative teacher community, as described in chapter one (Vangrieken et al., 2017). This is supported by recommendations from Wenger-Trayner, et al. (2023) to allow CoP members to structure agendas in a way that best meets their needs.

Feelings of Camaraderie (Community)

The frequency of meetings, i.e. once each month, was important in cultivating feelings of camaraderie and community among participants. During her post-interview, Anne said:

> By meeting once a month, we were building those relationships that we're going to be supportive versus having some sort of outside professional development where you're not going to see that group of people again. And I think that's important for new teachers to have.

During the first meeting in November, I was leading the discussion. This was the first time that the participants were together and asked to talk about items on the agenda. Although teachers worked in the same building, most did not know each other well as a result of their limited interactions on a daily basis. Over time and as more meetings occurred, participants began to take the lead on discussions, opening up about strategies that worked in their classrooms that they were excited to share with the group, problems they were facing in their classrooms, or simply brainstorming ways that a strategy could be modified to work in their classroom contexts.

The regular meetings allowed for participants to be vulnerable in asking for help or sharing their classroom struggles, which ultimately led to a sense of trust among the group. These observations are supported by Hord and Sommers (2008), who explained that trust among a group can emerge as the members of the group continue to spend time

around each other. As described in chapter two, Wenger et al. (2002) stated that trust is an essential component in the development and sustainability of a CoP.

It is important to highlight that trust emerged organically among CoP members. After a couple of meetings, teachers were courageous in sharing their frustrations in the classroom or items they needed help with. The word "validate" came up four times in participants' reflection documents and three times during the post-interviews. Teachers expressed valuing the knowledge that they were not alone in their struggles and that members of the CoP shared similar frustrations. In her reflection document, Millie wrote,

> They [fellow CoP members] have helped me to feel validated in my struggles, I'm not the only one with some of these challenges. Sometimes I feel like that because I am still a newer teacher. It really helps to hear what other people are dealing with and to have space to talk it out and share ideas.

Celia said that the honest nature of the groups' discussions made her feel more comfortable with the CoP members outside of the monthly meetings. These findings are supported by the work of Wenger-Trayner et al. (2023), who stated that trust emerges among members of a CoP when they are open with their successes and failures.

The heterogeneity of the group assisted in facilitating a sense of community among participants. The commonality among participants was that they were in their first, second, or third year of teaching at the school. What made the group diverse was the range of years of teaching experience (1-26 years) and the number of content areas that were represented (career and technical education, mathematics, science, and special education). As noted in chapter two, a heterogeneous working group of teachers enables benefits for both less experienced and more experienced teachers (Eshchar-Netz & Vedder-Weiss, 2021).

Wenger (1998) found that CoPs lend themselves to being heterogeneous, that although there are commonalities among all members, there is also an inherent level of diversity. Intentional participation in a CoP allows for meaningful learning for all members to take place, regardless of their years of experience in their field. Rodrigo used the word "well rounded" three times during his post-interview when talking about his experience with the CoP, and, as mentioned in Chapter 4, liked the heterogeneous makeup of the CoP because it allowed him to gain unique ideas that he would not have otherwise.

Teaching is an ever-evolving field. A new school year brings a new set of students who present unique gifts and challenges compared to previous groups of students. As such, a spirit of continuous learning is crucial to teaching. Novice and veteran teachers have a different set of skills and knowledge, and as such, the learning that occurs between teachers with different levels of experience is valuable. Even teachers with over 20 years of experience can benefit from collaborating with their less experienced colleagues.

School leaders should recognize and capitalize on generational diversity at the workplace, a relatively new area for educational research. For example, at a public school, there could easily be teachers who are members of the Baby Boomer generation, Generation Z, and the generations in between. Each generation presents a unique set of perspectives, strengths, and "way of doing things." These differences can potentially lead to conflict, but if school leaders are intentional about learning about each member of their staff and the generation they are a part of and creating space for different generations of

teachers to learn from one another, then all teachers can benefit (Elmore, 2022; Werra, 2019).

Anne had more years of teaching experience compared to the other members of the group (mean and median years of experience was 7.2 and 3, respectively). During her post-interview, Anne said,

> I'm going to get soft being around these young teachers. To see their enthusiasm and their compassion and there's a big age difference with some of these teachers and to see their perspective and their enthusiasm is contagious, and it does soften you. You're like 'Oh, I could be like that.' To see the teachers be so invested in impacting the students' curriculum, that's motivating.

Anne's quote highlights the powerful learning that can take place among different generations of teachers. It is likely that Elmore (2022) would view Anne's perspective as a form of reverse mentoring, where more seasoned teachers take on mentee roles while less experienced teachers act as mentors. Again, veteran teachers can learn a lot from younger teachers and vice versa.

Sense of Belonging

The research study had a positive impact on participants' sense of belonging at the school. This was made possible by the new connections that were formed among participants as a result of their engagement with the CoP, sharing experiences, and participating in icebreaker activities at the beginning of each meeting.

Regular monthly meetings with the CoP made it so that participants got to know their colleagues better and that they could relate to each other, even though the conversations that took place were not about personal topics. Hearing from fellow CoP members about the struggles they were facing, such as monitoring student cell phone use, facilitated connections and ultimately a stronger sense of belonging at the school. When

teachers listened to their peers and were able to share that they were dealing with the same issues, a sense of togetherness was

Listening to their peers and sharing that they were dealing with the same issues (such as monitoring student cell phone use) created a sense of togetherness for teachers, that their struggles were not unique to their own classrooms. During her post-interview, Millie shared that the CoP helped her to open up with her colleagues and be more vulnerable during the monthly discussions: "This group is a big part of the reason that kind of encouraged me to put myself out there a little bit more." Being given space to talk through problems and propose solutions helped to minimize any feelings of isolation teachers may have felt due to limited time spent with other teachers and ultimately led to increased confidence in speaking to their peers.

I planned for icebreaker activities at the beginning of each meeting with the intent of teachers getting to know each other. All of the icebreakers that were used in this study are described in chapter 3. Juliana shared how impactful the icebreakers were for her during her experience with the CoP. At the beginning of the April meeting, I asked teachers to draw a picture of how they were feeling that day. We were in the last quarter of the school year, so naturally teachers were feeling exhausted. During the meeting, Chloe said, "We're tired. We can see summer right there."

These feelings are not specific to teachers at this school. As the end of the school year approaches, it is possible that all teachers, no matter their context, are beginning to feel fatigued. Many teachers expressed that in their drawings. During her post-interview, Juliana said, "[Icebreakers] tear a lot of walls down. You had us draw how we were feeling at this point in the school year. Laughing at ourselves kept it from becoming a

'Debbie Downer' environment and so I think that helped." Experts at Montclair State University say that icebreakers are a means of fostering relationships among students, so it is unsurprising that a similar effect was observed for new teachers (Montclair State University Office for Faculty Excellence, n.d.). The icebreakers that occurred at the beginning of each CoP meeting fostered connections among CoP members, which ultimately enhanced their sense of belonging at the school.

In the previous section about feelings of camaraderie, I highlighted the reverse mentoring that took place between more experienced and younger teachers. As noted in Chapter 1, mentoring experiences allow for veteran teachers to learn unique ways to teach their content (Bressman et al., 2018). In addition to benefiting teachers' practice, mentoring can positively impact teachers' sense of belonging at their schools. School leaders have said that creating systems that foster connections among staff and feelings of belonging (i.e. mentoring programs) are crucial to retaining teachers (Thomas-Reynolds, 2022). While this project did not intentionally employ a mentoring format, it is interesting to see that some teachers in the CoP viewed their experience as being one in which they were mentoring or were mentored. The mentorship that emerged from the CoP created relationships among teachers and ultimately enhanced their sense of belonging at their school.

Being recently hired to a school can sometimes feel alienating. Even with several years of teaching experience, there is still a learning curve in terms of navigating student and personnel policies, school culture, and more. The CoP allowed for participants to share their experiences and realize that they were not alone in the questions they had or the challenges they were facing in the classroom. Similar to Johnston's (2015) findings,

participants' engagement in the CoP helped to minimize any feelings of isolation that new teachers may experience.

It is important to note that some teachers expressed a stronger sense of belonging as a result of simply being at the school longer, in conjunction with their participation in the CoP. When asked how connected he felt to the staff at the school, Rodrigo shared,

> Definitely more connected just 'cause I've had more time to, obviously, like this group has helped, and then throughout the year you just get to know people a lot better. That's why I felt like this was really helpful because I got to know more people that I would never have gotten to meet.

It is possible that a sense of belonging for new teachers increases just by being in the building for one full year, two years, etc., and it seems that the CoP helped to enhance feelings of belonging for some participants.

Teacher Identity

Whether or not the CoP had an impact on participants' teacher identities is inconclusive. In chapter two, I identified four facets of teacher identity: self-image, self-efficacy, job motivation, and task perception. During the post-interviews, I asked participants how they would describe themselves as teachers, their perceived effectiveness as teachers, why they chose to become teachers, and what they view their roles are as teachers. My reasoning behind asking these questions was to uncover whether or not the CoP impacted their teacher identities. I did not frame the questions to read, for example, "How did the CoP impact your self-efficacy as a teacher?" I made this decision because I did not want the participants to feel that they had to say that their experience in the CoP did have an impact. When envisioning the impacts of this study, I imagined that by talking through classroom strategies and topics that were most relevant, participants

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would share that, for example, a strategy that they learned from the group and implemented in their classroom made them feel more confident as a teacher (self-efficacy). Instead, teachers talked generally about the construct of teacher identity, but did not speak directly to whether or not the CoP impacted their teacher identities. This is why I did not code any data from these interview questions.

Two thoughts come to mind as to why the data are inconclusive in terms of if the CoP impacted teacher identity for participants:

1: Identity is a multilayered concept that may take more than six hours of meeting time to impact

2: Teachers already had a strong professional identity going into the study.

Most of the literature surrounding teacher identity that I discussed in chapter two focused on pre-service and novice teachers. Barrett et al. (2002) categorize novice teachers as those who are in their first or second year of teaching, while Kim and Roth (2011) used five years or less as a means of classifying novice teachers. Following both definitions, six novice teachers participated in this study. It is possible that for the novice teachers, participating in six hours of a research study was not enough time for their teacher identities to be impacted. Wenger (1998) explained identity as having five aspects: "negotiated experience, community membership, learning trajectory, nexus of multimembership, and a relation between the local and the global," (p. 149). Given the time constraints of the study, it is possible that the research timeline was not long enough to affect teacher identity. For the more seasoned teachers who participated in this research project (with 9-26 years of teaching experience), it is possible that their teacher identities have already developed over time.

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Limitations

I chose a qualitative methodology for this research because I was interested in learning about participants' experiences with the CoP. I assumed I would be able to gather richer data that spoke more to the research questions by implementing this design. In the previous section, I discussed that the research project's impact on teacher identity was inconclusive. This could have been a result of my questioning during the post-interviews. It is possible that the study did have an impact on identity, but the questions I asked participants did not uncover the impacts. For example, when asking participants about self-efficacy, instead of asking participants how they would describe their effectiveness as a teacher, I could have asked them what it means to be effective as a teacher, what an effective lesson and an ineffective lesson looks like, or what strategies teachers use which enhance their perceptions of self-efficacy.

Although I viewed a qualitative methodology as appropriate for this study, I could have employed a mixed methods approach in which I ask teachers to respond to statements on a Likert scale with the statements asking questions about belonging and identity. The results of the survey could have been used as a springboard for the post-interviews and potentially could have uncovered results that my interviews did not.

This research study had a positive impact on participants' classroom routines, feelings of camaraderie, and sense of belonging. It is important to note that the 10 teachers who participated in the study volunteered to do so. Should schools choose to implement a CoP approach to supporting new teachers, they should be cautious about making participation mandatory for all new teachers. My recruitment strategies included advertising the study via email and face-to-face to approximately 30 new teachers.

Because only 10 teachers consented to participate, schools should be careful in making participation in a program such as this mandatory. It is possible that if all new teachers are required to meet after school once a month, the benefits that were observed in this study may not be replicated.

Recommendations for Researchers and Practitioners

New teachers who participated in this study expressed their enjoyment in getting to know colleagues and exchanging classroom strategy ideas, and as a result, their sense of belonging was positively impacted. Below are my recommendations for future research in the area of supporting new, recently hired teachers and for school leaders who want to support new teachers.

As mentioned previously, the timeline for this study was six months, and impacts on teacher identity were inconclusive. It is suggested that researchers implement a longitudinal study that takes place over the course of two or three years and ask participants to do more than engage in a discussion for one hour each month. As an example, researchers should ask participants to participate in classroom observations of their CoP peers in order to see the classroom strategies being put into action that were merely talked about at the meeting.

If practitioners should implement this intervention system at their schools for new teachers, they should utilize teacher-leaders to facilitate the program. During her post-interview, Anne said that she liked that the group was made up of teachers and that I was a teacher. She felt like this created an "even playing field" for the group. A CoP could also present a unique way to provide mentoring services for novice teachers. A pair of veteran teachers could be partnered with novice teachers to provide support, a space for

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listening and problem solving when challenges arrive. More recommendations for practitioners are outlined below:

- District-level leaders: Oversee the implementation of a community of practice for new teachers at each building in the district. Creating a CoP at each building would make it so that the size of each CoP is a feasible number of teachers. In addition, limiting participation in a CoP to teachers in a specific building would give teachers opportunities to collaborate on challenges and struggles new teachers are facing that are building-specific.

- Building principals: Utilize one or two teacher-leaders to facilitate a CoP composed of new teachers.

- Teacher-leaders facilitating each CoP: Meet monthly or quarterly to discuss the activities, logistics, etc. of each CoP in order to share what is working well and what can be improved.

Conclusion

Regardless of years of teaching experience, being a new teacher in a school presents challenges – learning the procedures and culture of the building, which individual to ask for help about particular topics, wrestling with feeling like the struggles one faces are happening only to them or that they are alone in their challenges. A CoP for new teachers presents individualized support to teachers who are a part of the community. Allowing teachers to create the agenda items so that they can discuss the most pressing issues in that moment, monthly meetings or check-ins, and fostering a space of honesty, safety, trust, and vulnerability are important facets of new teacher CoPs that should not be ignored. Through meaningful and intentional time and space carved

out specifically for new teachers, schools can have a positive impact on new teachers'

practice, feelings of camaraderie among their new colleagues, and sense of belonging in

their new school.

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APPENDIX A

PARTICIPANT REFLECTION QUESTIONS

1. Was anything beneficial from this meeting? If so, what and explain.
2. Would you change anything about future meetings? If so, what and explain.
3. Is there anything that you learned today that you could take back to your classroom and start implementing? If so what and explain
4. What are your expectations for these meetings? What do you want to get out of them? How and to what extent have the meetings been meeting your expectations so far?

APPENDIX B

SAMPLE PRE-INTERVENTION INTERVIEW QUESTIONS

1. What are three words you would use to describe your experience so far at the school? Elaborate on these.
2. How connected do you feel to the staff at the school?
3. How welcoming have you found the school to be?
4. How would you describe yourself as a teacher?
5. How would you describe your effectiveness as a teacher?
6. Why did you choose to be a teacher?
7. How would you describe your role as a teacher?

APPENDIX C

SAMPLE POST-INTERVENTION INTERVIEW QUESTIONS

1. What are three words you would use to describe this group to a new teacher (hired next year)?
2. What 3-5 highlights from your experience with the CoP?
3. Is there anything you would change about the CoP if this were to be implemented with next year's new teachers?
4. What are three words you would use to describe your experience at the school this year?
5. How connected do you feel to the staff at the school?
6. How welcoming have you found the school to be?
7. How would you describe yourself as a teacher?
8. How would you describe your effectiveness as a teacher?
9. Why did you choose to be a teacher?
10. How would you describe your role as a teacher?

APPENDIX D

IRB APPROVAL

EXEMPTION GRANTED

Ruth Wylie
Division of Educational Leadership and Innovation - Tempe
480/727-5175
Ruth.Wylie@asu.edu

Dear Ruth Wylie:

On 9/29/2022 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Community of practice with new teachers: Belonging and identity
Investigator:	Ruth Wylie
IRB ID:	STUDY00016548
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Email Correspondence - Research Site.pdf, Category: Other; • IRB Supporting Documents.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Tarbutton Dissertation IRB Protocol (2).docx, Category: IRB Protocol; • Verbal recruitment script, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(ii) Tests, surveys, interviews, or observation (low risk) on 9/26/2022.

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

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

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

Sincerely,

IRB Administrator

cc: Taylor Tarbutton
         Taylor Tarbutton

EXEMPTION GRANTED

Ruth Wylie
Division of Educational Leadership and Innovation - Tempe
480/727-5175
Ruth.Wylie@asu.edu

Dear Ruth Wylie:

On 9/30/2022 the ASU IRB reviewed the following protocol:

Type of Review:	Modification / Update
Title:	Community of practice with new teachers: Belonging and identity
Investigator:	Ruth Wylie
IRB ID:	STUDY00016548
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Approval letter from research site, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(ii) Tests, surveys, interviews, or observation (low risk) on 9/30/2022.

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

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

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Sincerely,

IRB Administrator

cc: Taylor Tarbutton