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# Clarity and Communication: Preservice Teachers' Experiences in Online PLCs Provide Hope for the Future of Education

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***Abstract:*** *University methods instructors applied their background in online learning and teaching experience from K-12 classrooms to implement a new platform for elementary preservice teachers. Traditionally higher education online courses use threaded discussions for students to collaborate on course readings and projects. This pilot study investigates a new experience for preservice teachers called Professional Learning Communities (PLCs) in an online, asynchronous university methods course. Exposing preservice teachers to PLCs provides opportunities for them to learn about the PLC experience in public education settings prior to entering their residency or student-teaching semester. This qualitative study analyzed student surveys (n=26) posing open-ended items focusing on their experience participating in a PLC during their final semester in three methods courses. The findings suggest that communication and collaboration play vital roles in building a sense of community. Additionally, understanding the purpose of PLCs while balancing multiple areas of time influences preservice teachers' sense of communication, collaboration, and community. Researchers suggest preservice teachers need ample time to experience collaboration in a real-life PLC experience to feel supported in a community. Future research should investigate students' experiences before and after participating in a PLC experience.*

***Keywords:*** asynchronous, professional learning communities, preservice elementary teachers, online learning

## INTRODUCTION

Online or distance learning can be categorized into synchronous and asynchronous. Synchronous learning occurs in real time with a scheduled meeting time between the instructor and the students. In contrast, asynchronous learning does not have a scheduled meeting time with the instructor. College of Education courses reinforce independent and group assignments yet lack authentic experiences such as Professional Learning Communities (PLCs) in teacher preparation to prepare preservice teachers to fulfill their professional roles. The purpose of this qualitative pilot study aims to understand preservice teachers' experiences regarding the use of PLCs in the university's methods courses by addressing the following research question: How do PLC groups affect the overall experience of a cohort of preservice teachers enrolled in asynchronous, online methods courses in an elementary teacher preparation program?

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## LITERATURE REVIEW

### *ONLINE LEARNING IN HIGHER EDUCATION COURSES*

Online learning has become an increasingly common component of higher education, offering students flexibility while also requiring them to navigate multiple dimensions of digital learning. These dimensions include asynchronous and synchronous participation, self-directed learning, online collaboration, the use of learning technologies, and access to online learning environments (Koh et al., 2024). Flexibility can be particularly valuable for students balancing coursework with employment, family responsibilities, and other commitments (Lee et al., 2019). However, flexibility alone does not ensure an effective online learning experience. Institutions and instructors also play important roles in establishing learning environments that support instructional collaboration and social interaction among students (Castro et al., 2021).

Meaningful interaction and engagement present particular challenges in asynchronous learning environments. Shi (2023) found that participation in asynchronous threaded discussions decreased over the course of a semester, with participants identifying time as one factor contributing to declining participation. Research also demonstrates the importance of interaction and feedback in students' online learning experiences. Eleponio et al. (2024) found that College of Education students identified feedback from instructors and classmates and opportunities to interact through online tools as benefits of online learning, while also identifying time demands and procedural difficulties as challenges. More broadly, effective online instruction emphasizes regular feedback, peer to peer collaboration, and strong student instructor interaction (Castro et al., 2021; Eleponio et al., 2024). For preservice teachers, these considerations are particularly relevant because opportunities for meaningful interaction and collaboration should be intentionally supported within asynchronous learning environments.

### *PLCS IN SCHOOLS*

Professional Learning Communities (PLCs) have long served as a collaborative framework within K to 12 schools, enabling educators to engage in structured dialogue focused on improving student learning. DuFour et al. (2016) define a PLC as "an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve" (p.10). Key elements of effective PLCs include shared goals, reflective dialogue, collective responsibility, and a focus on student outcomes (Hord & Tobia, 2012; Hoaglund et al., 2014). These principles support a professional culture in which educators work collectively to improve teaching and student learning.

In practice, PLCs involve ongoing opportunities for educators to collaboratively examine student learning, reflect on instructional practices, and determine responsive approaches to instruction (DuFour et al., 2016; Hord, 1997). Effective PLCs emphasize shared purpose, collective inquiry, collaboration, and responsibility for student learning rather than simply meeting together as a group. Through this process, educators engage in professional reflection while developing a collaborative culture centered on continuous improvement. Although PLCs are most associated with K to 12 schools, their emphasis on collaboration, reflection, and shared responsibility has also led to our interest in the use of PLCs and related collaborative structures within teacher preparation programs.

### *PLCS IN TEACHER PREPARATION*

Although PLCs are most commonly associated with K to 12 schools, collaborative structures grounded in similar principles have also been incorporated into teacher preparation programs. These structures may be described using different terms, including cooperative learning groups, peer inquiry groups, and video mediated PLCs, but share an emphasis on collaborative inquiry, professional reflection, and instructional growth. Research examining PLCs within preservice teacher preparation remains comparatively limited, but existing studies suggest benefits for developing the collaborative and reflective practices expected of future educators. Hoaglund et al. (2014), for example, implemented a structured PLC model within a preservice teacher program and found that it supported collaboration, reflective dialogue, and preparation for professional practice. Bond (2013) found that PLC participation provided preservice teachers with pedagogical and emotional support, although participants experienced challenges with time management and providing peer feedback. Kuehl (2018) found that preservice teachers participating in PLCs focused on writing instruction reported greater confidence and clarity in lesson planning and differentiation.

A smaller body of research has explored collaborative professional learning within online teacher preparation. Courtney and King (2009) found that structured asynchronous online dialogue within an undergraduate literacy methods course supported collaborative learning and growth in preservice teachers' understanding of literacy instruction. Their use of small discussion groups, rotating peer roles, and structured prompts provided opportunities for reflection, peer learning, and application of course content. Packard (2019) examined video mediated PLCs within an online early childhood teacher preparation course and found that structured participation supported preservice teachers' instructional decision making and engagement in reflective practice. Alwafi et al. (2020) similarly examined preservice teachers' participation in an online professional learning community and found increased collaboration and knowledge construction, while participants also described greater social interaction, connection with peers, and a stronger sense of community. Together, these studies demonstrate the potential for intentionally structured professional collaboration to extend into online teacher preparation environments.

Despite these promising findings, less is known about how preservice teachers experience sustained PLC participation when PLCs are embedded within fully asynchronous methods coursework. Existing research provides evidence for PLCs in preservice teacher preparation and for professional learning communities within online environments, but the intersection of these areas remains less developed. The current study addresses this gap by examining preservice teachers' experiences participating in PLCs embedded across asynchronous elementary education methods courses. In addition to supporting collaboration and professional learning within the online course environment, these experiences provide opportunities for preservice teachers to practice the collaborative processes they will be expected to engage in as members of PLCs throughout their teaching careers.

## METHOD

Our qualitative study adopts a theoretical framework, an exploratory case study that fosters a constructivist paradigm to understand the real-life application of preservice teachers participating in the complexity of PLCs in online-asynchronous university courses (Creswell & Creswell, 2018; Stake, 2004; Yin, 2014). Yin (2014) suggested three case study qualifications, which we incorporated into our study: the research question includes “how, “the context is unusual, and the

researcher had no control over the participants. The purpose of this case study is also intrinsic, meaning that *we*, as instructors and researchers of this project, are genuinely interested in understanding how preservice methods students perceive participating in a PLC during the semester (Stake, 2004). Furthermore, *we* have built PLCs as part of the online methods community, and the online methods instructors have structured "the way the course is implemented at this particular university" (Tomaszewski et al., 2020, p. 5). Emerging knowledge from the relationships between the researcher and participants creates meaning that reveals the multiple realities of human behavior and experiences (Guba & Lincoln, 2005). Since we participated in this study as both instructors and researchers, reflexivity was used to discern our biases so that they did not influence the data (Seidman, 2006). We hope that this study will benefit us and the higher-education community, provided that the participants offer honest and reflective responses (Merriam, 2009).

## Data Collection Procedures

A higher education university in the Western United States recruited 26 preservice teacher participants who volunteered from their methods courses using purposeful sampling (Maxwell, 2013). During the semester methods instructors attended student PLC meetings and maintained weekly communication through PLC agendas. At the end of the semester, a six-item survey was administered that included six open-ended questions (see Appendix). The study was approved by the Institutional Review Board (IRB) and three researchers acquired necessary CITI qualifications to analyze the results.

## Description of PLC Structure

Table 1 includes the details of the study's timeline before, during, and after the semester. Since these courses are asynchronous- online, an important aspect of this study is that all the meetings are held on Zoom. Instructors also included an explanation of the purpose of PLCs in the syllabi for students to reference during the semester (Figure 1).

**Table 1**

*PLC Structure and Timeline Before, During and After the Study*

| Timeline | Step-by-Step Process of forming and maintaining PLC groups |
|---|---|
| **Before** | **Three-Instructors Met to Complete:**<br>**1. Organize PLC Structure, Recorded PLC Video, Preview Students (4 weeks prior)**<br>Instructors took time to map out big assignments for each course during the semester. This helped spread out the workload for preservice teachers. Important decisions were made that aligned all courses/syllabi with the same late work policies, grading scale, passing requirements for the course and practicum, weekly due dates, AI, Practicum Assignments and Big Assignments.<br><br>We also updated documents: the preservice teacher student letter, google initial survey, informational meeting, course descriptions and course instructors.<br><br>Pre-recorded a short 20-minute segment modeling a PLC meeting, creating norms, and describing the four PLC roles.<br><br>Additionally, students' concerns and practicum placements were reviewed and discussed with any follow up emails. |
| | **2. Google Form**<br>A google form was written to inquire about preservice teachers' student teaching grade, degree pursuing, Praxis (taken- yes/no), PLC experience and availability of days/times for weekly meetings. An email was sent 3 weeks prior to the beginning of the semester. The purpose was to schedule the informational PLC Meeting that accommodated most preservice teachers' schedules. |
| | **3. Mentor Teacher and Preservice Teacher Initial Email**<br>A letter written to every Mentor Teacher introducing the instructors, a description of each course and expectations of the practicum. All of this information was included on the Preservice Teacher initial email in addition to an invitation to our Informational PLC Meeting. All emails were sent out 2 weeks prior to the semester starting. The meeting availability information gathered from the google form allowed us to select a day and time that worked best for preservice teachers. |
| | **4. Organize PLC Teams**<br>After the Google Form had been sent back, prior to the Informational PLC Meeting, Instructors met to sort preservice teachers by grade levels ensuring each PLC team had an equal representation of K-3 and 4-6. The consideration of availability of the weekly days/times also assisted in forming the PLC teams. |

| | |
|---|---|
| **During** | **Informational PLC Meeting (Week 1 of Semester)**<br>The first meeting was a Live Zoom Meeting for 90-minutes that was also recorded. The first hour was a slideshow presentation and the last 30-minutes were PLC Meeting Breakout Rooms.<br><br>The Informational Meeting Agenda:<br>1. Introduction, general course schedule and practicum schedule<br>2. Purpose of Asynchronous Learning<br>3. Common Syllabus Policies<br>4. PLCs Purpose & Expectations<br>5. Q& A<br>6. PLC Teams shared and Email was sent<br>30-minute Breakout Rooms<br>• A scheduled email provided access to a shared Google folder for each PLC team.<br>• On the first Agenda notes preservice teachers were required to decide Norms and a weekly meeting time. If all group members did not attend, they selected another 30-minute timeslot to complete the two requirements for the week's PLC points.<br>• An email reply with the Norms and weekly meeting time along with the Zoom meeting link was sent to all three instructors.<br>• |
| | **Weekly PLC Meetings (Literacy, Math and Humanities)**<br>The purpose of each week was for groups to discuss weekly reading discussions, write lesson plans and collaborate on group projects.<br><br>To effectively run a PLC meeting four roles were assigned:<br>1. Facilitator: leads meeting, and records math video<br><br>2. Timekeeper: Uses a timer to keep the group on track and records summary for Literacy Methods.<br><br>3. Recorder: types notes during the meeting and records summary for Humanities Methods.<br><br>4. Planner: Creates agendas prior to meetings for Math, Literacy, and Humanities Methods. |

| | |
|---|---|
| | **PLC Meeting Instructor Visit (Week 2)**<br>Three instructors split the PLC groups to attend each group's first meeting. Instructors observed the meeting to ensure the agenda was being shared with everyone, roles were defined and they understood the expectations. The instructors attended meetings to observe and provide support. Attending these meetings could be voluntary or if the instructors had concerns from PLC Meeting Notes or course work. They continued to attend meetings until expectations could be met and the group could manage independently. |
| **After** | **PLC Survey and Volunteer Interviews- After Final Grades Posted (2 weeks after semester ended)**<br>The last week of PLCs a survey was sent out asking for feedback on various areas of the PLC structure in university methods courses. In the survey, a final question asked for volunteers to participate in an interview after final grades were posted. |

**Figure 1**

*PLC Syllabi Statement*

**Professional Learning Communities (PLCs):**
A professional learning community (PLC) enables teachers, administrators, and support personnel to collaborate and learn together while improving instruction and student achievement. Teachers are typically organized in grade-level and or content-specific groups that discuss standards, curricula, teaching strategies and develop and implement common assessments. The whole concept of PLCs was developed near Chicago Illinois by Rick Dufour, who was a high school principal in the 1990s. Since then the idea of PLCs has spread across the country. Read about PLCs by clicking on the following PDF link...
What is a PLC - DuFour 2004.pdf
This semester you will be placed in PLC teams in all of your methods courses. Your team will decide on a time to meet once per week, for one hour. This opportunity provides a *real life classroom* experience to engage in a collaboration and support system to write lesson plans, create assessment rubrics, discuss content ideas, and complete course assignments together. PLCs will also replace a traditional 'Threaded Discussion'- because readings will be discussed during weekly PLC meetings. Each week you will earn points towards your grade for attending and engaging in PLC activities. More information will be provided in the course module. **Please refer to the modular titled 'PLC' for more information about PLCs.**

## Data Collection

The triangulation of data collection included three types of data: a six-item survey, class observations from PLC meetings, and documentation (e.g., weekly agenda notes and comments from assignments) (Tomaszewski et al., 2020).

## Data Analysis

Two coding cycles were implemented. The first involved open coding to condense large amounts of information from the surveys to develop themes, and the second employed axial coding to categorize themes into subthemes (Saldaña, 2021; Miles et al., 2013). Three CITI qualified researchers met multiple times to code survey data. During the first coding cycle, the researchers reviewed the data and identified one word that connected, which produced three main themes: community, communication, and collaboration, and referred to from this point as the 3Cs. Next, the researchers reviewed student data within the 3Cs and bolded key words for each theme. Researchers agreed that if phrases included words from multiple themes, they would be double-

coded. Many responses included the word "Time" and placed it in another main theme, "Time." The researchers openly coded through items 1, 2, , and 4 until interrater reliability was achieved. Item 6 was coded separately to discuss the range of student views as positive, negative, or neutral responses; a consensus was reached in the first cycle. The second coding cycle reviewed the main theme's responses and evaluated the bolded words to combine the responses into subthemes.

### VALIDITY AND RELIABILITY

The validity and reliability of this study were addressed through the research question, triangulation, and peer-evaluation. Validity occurs when designing case study research questions by incorporating and framing the questions with the word *how* (Yin, 2014). Additionally, during the data collection phase, "multiple sources of evidence…[and] constructing a "chain of evidence" (Yin, 2014, p. 47) or triangulation is used to construct validity (Tomaszewski et al., 2020). Triangulation also addresses the reliability of this study, as does the audit trail of how the study was conducted (Anfara et al., 2002). Moreover, peer-review of the study occurred during and after instructors' meetings to confirm the study's results (Merriam, 2009).

### REFLEXIVITY

As methods instructors, our goal is to provide our students with the highest quality experience to prepare them for their residency and future classrooms. Implementing a new framework, such as PLCs can be difficult. At first, students may not understand the purpose, yet with our combined years of expertise in the public school system, we are realistic that our bias regarding PLCs has the potential to impede our perspectives of students' responses. The manner which we respond to students, the assignment workload, and our own personal struggles in managing PLC teams can influence student perspectives. Likewise, the knowledge students gained over the semester could introduce bias into the data analysis. To combat potential bias, we removed names from the responses in the data spreadsheet and analyzed the responses in the aggregate.

## RESULTS

Student surveys, observations, and documentation culminated in 167 responses into four themes: 3Cs and Time (Figure 2). Collaboration occurred most frequently (70), followed by time (42), communication (35), and community reported least frequent (14). Table 2 shares the main themes and subthemes that are further explained in this section.

**Table 2**

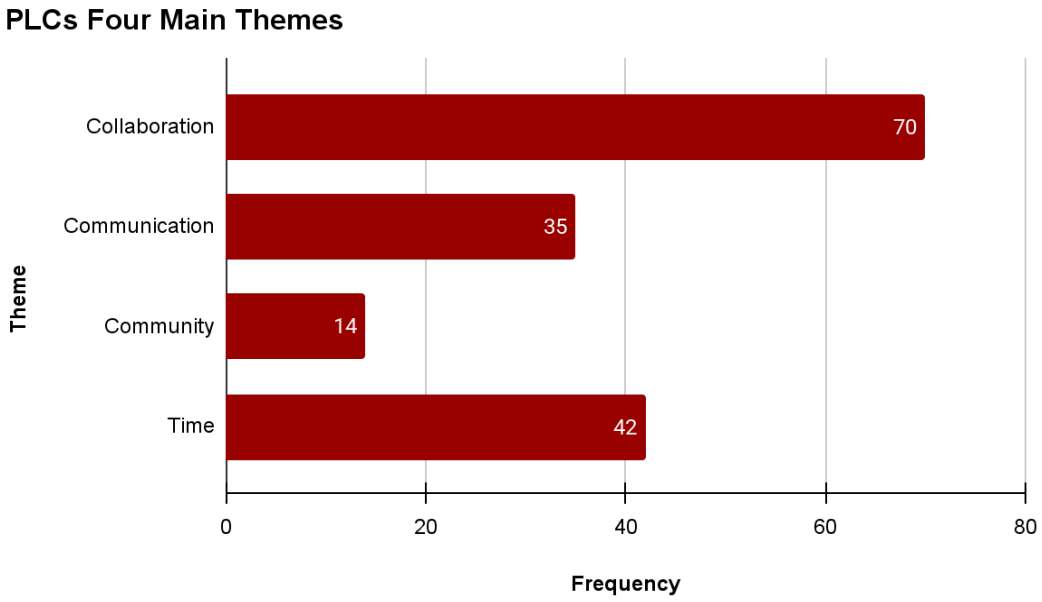
*Main Themes, Subthemes, Frequencies and Example Quotations to support themes*

| Main Themes | Subtheme | Frequency | Example Quote |
|---|---|---|---|
| Collaboration | | 70 | |
| | Shared Work | 32 | "Overall, I enjoyed working with my peers, bouncing ideas off of one another, and being able to engage in content together." |
| | Gaining Knowledge | 32 | |
| | Shared Goal | 6 | |
| Communication | | 35 | |
| | Conversation with Peers | 14 | "The first few meetings were tough because no one knew what to do and we weren't familiar with what was expected of us. We couldn't figure out the timing for these meetings and either rushed the meetings or took too long trying to figure things out." |
| | Keep in Contact with Peers | 5 | |
| | Leadership Organization | 4 | |
| | Lack of Communication | 5 | |
| | Changes in Viewpoints | 7 | |
| Community | | 14 | "It was great to have small groups of people to lean on throughout the semester. I have gained lifelong friendships." |
| | Relationships | 11 | |
| | Shared Roles-Sharing Work | 3 | |
| Time | | 42 | "Learning to balance your schedule and work out times to meet has been a positive that has helped us understand what others may be going through or understand that last minute things can delay meeting times." |
| | Time Management | 12 | |
| | Time Consuming | 14 | |
| | Schedule | 17 | |

Students' overall comments ranged from positive to negative in nature. Questions 1 and 2 prompted students' responses to share three positive and negative experiences (Appendix A). Positive experiences included, *"I had a great experience and recommend these groups to upcoming students. I appreciate the PLC group I was assigned to."* While other students shared general negative comments, *"Overall, my PLC experience this semester was negative" or "I did not enjoy the PLC experience, I felt that it was unfair to have to rely on other people for a large part of my grade and have my grade be affected because of it."* Subthemes explain students' reasoning.

**Figure 2**

*Frequency of Four Main Themes*




Subthemes could be double coded with another theme. For example, a student who mentioned, *"Getting to **talk to people** and not being limited by **communicating through writing**"* would be coded for the main theme Communication because they noted talking to peers and writing as a form of communication. However, because they also stated in the same response, *"I actually got to know them and **build connections with them**,"* this student response was double coded under Collaboration. The following double codes occurred:

1. Collaboration was double coded with Communication
2. Communication double coded with Collaboration
3. Community had no double codes
4. Time double coded with Communication and Collaboration twice

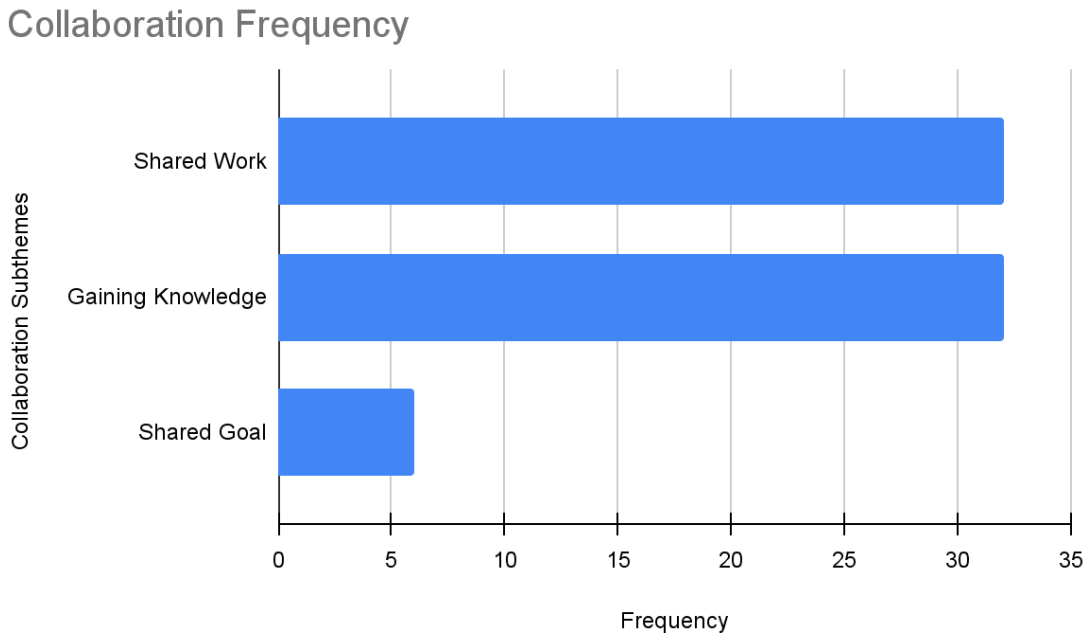
Subthemes attempt to explain students' experiences of participating in PLCs in an asynchronous online methods course first through the main theme: 3Cs and Time

### THEME 1: COLLABORATION

Collaboration was coded when students met in the PLC with the goal of jointly producing a product, such as an assignment, presentation, or group project, that had a component of social constructionism, such as socially constructing knowledge. Figure 3 displays the frequencies of the collaboration subthemes.

**Figure 3**

*Frequency of Collaboration Subthemes*




***SHARED WORK***

Shared Work (32 times) and perceptions such as, "*Having a group to discuss things and work on assignments together was great.*" Conversely, when students perceived that work was not shared, a lack of collaboration was cited, "*I found that not everybody was putting in the same amount of effort.*" Student perceptions that unequal shared work occurred more often than positive views. Within the collaboration theme, students mentioned preferring their PLC work to discussion threads, "*I also enjoyed being able to work on some assignments together and not having to do discussion boards*." We coded this as a positive aspect of collaboration, but noted the reference to threaded discussion assignments. Mention of traditional online threaded discussion was notable, yet occurred in less than three responses.

The weekly agendas documented facilitators leading the meetings, they liked "*hearing what [other students] had to say,"* and agenda documents collaboration between students getting the work completed together during PLC meetings, shared in Figure 4, students discuss applying an instructional technique in their classroom.

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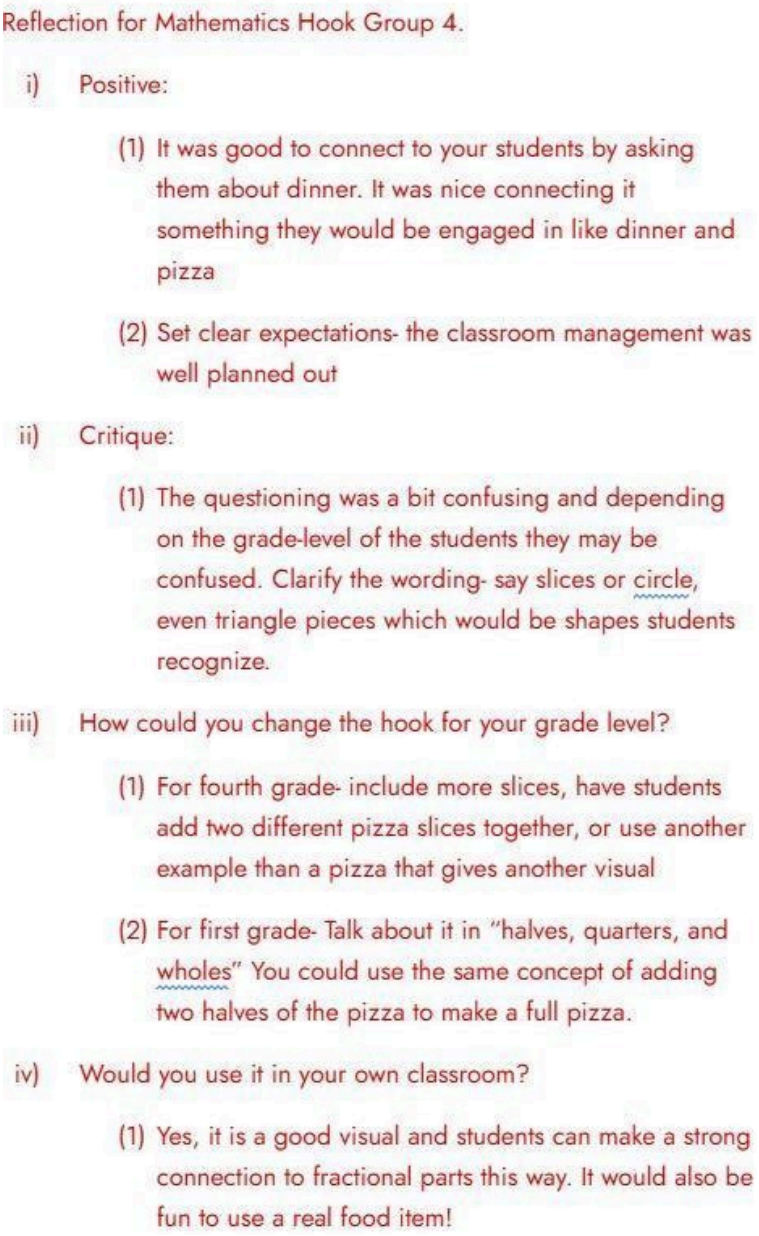
**Figure 4**

*Example of a PLC assignment- students were assigned another PLC group's lesson plan and worked together to evaluate and critique the lesson plan.*



Reflection for Mathematics Hook Group 4.

i) Positive:

(1) It was good to connect to your students by asking them about dinner. It was nice connecting it something they would be engaged in like dinner and pizza

(2) Set clear expectations- the classroom management was well planned out

ii) Critique:

(1) The questioning was a bit confusing and depending on the grade-level of the students they may be confused. Clarify the wording- say slices or circle, even triangle pieces which would be shapes students recognize.

iii) How could you change the hook for your grade level?

(1) For fourth grade- include more slices, have students add two different pizza slices together, or use another example than a pizza that gives another visual

(2) For first grade- Talk about it in "halves, quarters, and wholes" You could use the same concept of adding two halves of the pizza to make a full pizza.

iv) Would you use it in your own classroom?

(1) Yes, it is a good visual and students can make a strong connection to fractional parts this way. It would also be fun to use a real food item!

*Note.* Directly taken from the student agenda.

***GAINING KNOWLEDGE***

Gaining knowledge (32 times) was acquired from assignments and practicum experiences that altered students' mindset. Students "*[asked] their PLC member any questions [they] had or clarification issues"* that can be described in more detail as "*discussing course work"* and "*have impactful conversations that alerted the way I viewed the lessons and class work."* Course readings were noted as "*more worthwhile"* because weekly discussions allowed for "*shared perspectives."* During reading discussions, the recorder transcribed the chapter's summary that recognized the

importance of graphic organizers and instructional strategies associated with note taking (Figure 5).

**Figure 5**

*Example of a PLC reading discussion of the math textbook, Building Thinking Classrooms by Peter Liljedahl (2021)*

**1) BTC discussion Chapter 11: Summarize chapters, Aha, questions, keeper notebook**

**Summary:**

- Students not knowing what to do when they aren't tasked with taking notes
- Using graphic organizers for note taking by utilizing the five types
- I do you do for notes is just mimicking
- Students are naturally mindful about what they know they need to write
- I-write-you-write and fill-in-the-blank notes are not useful
- Students keeping up with notes does not mean they are thinking

**Aha:**

- Students learning how to take notes can help them on standardized tests
- Students are so focused on copying notes that they are not thinking

**Questions:**

- How can teachers help students prioritize thinking when writing notes?

**Keeper Notebook:**

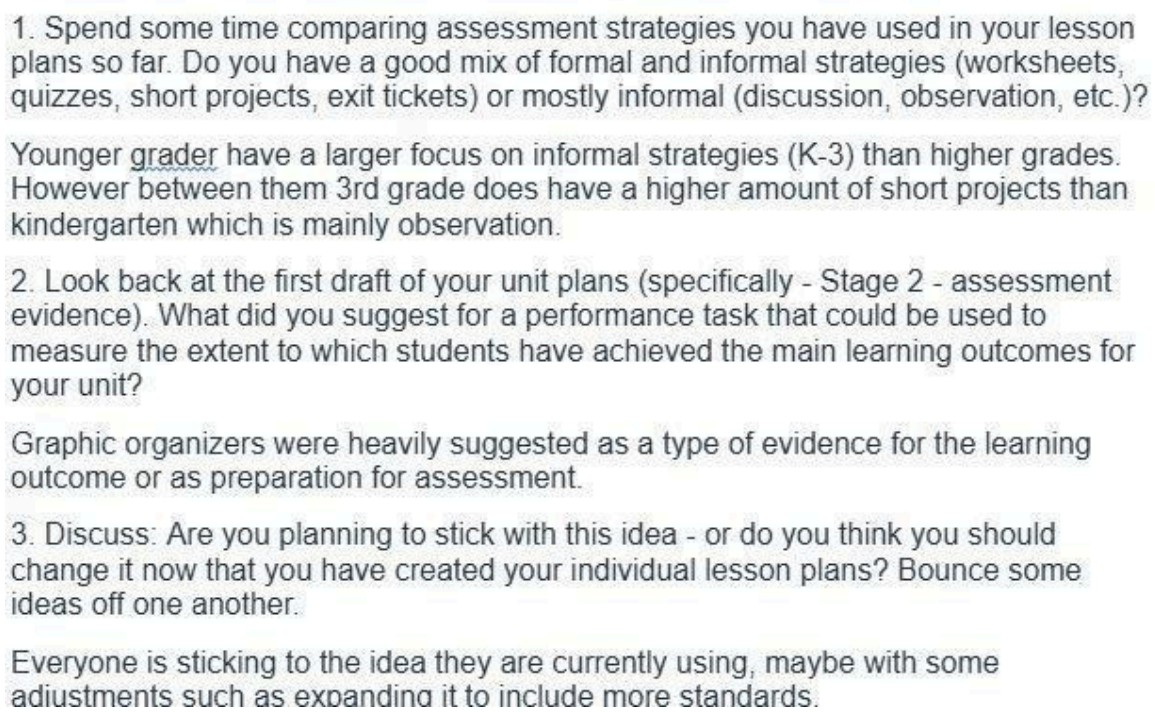
- Have students write notes to their future forgetful selves and review every so often
- Make a graphic organizer workbook as a resource tool for students
- Annotating work examples

*Note.* Directly from the student agenda.

Collaboration often was double coded with communication. Collaboration was coded when mentions of working together, engaging in content together, or when participants explicitly stated *collaboration*. The gain in knowledge occurred from the social aspect of "bouncing ideas off of one another" and "engag[ing] in content together." Social discourse discussed content knowledge and implied clarification of assignment parameters and expectations like in the humanities assignment (Figure 6).

**Figure 6**

*Example of a PLC working together to evaluate the instructional strategies and standards in their lesson plans.*

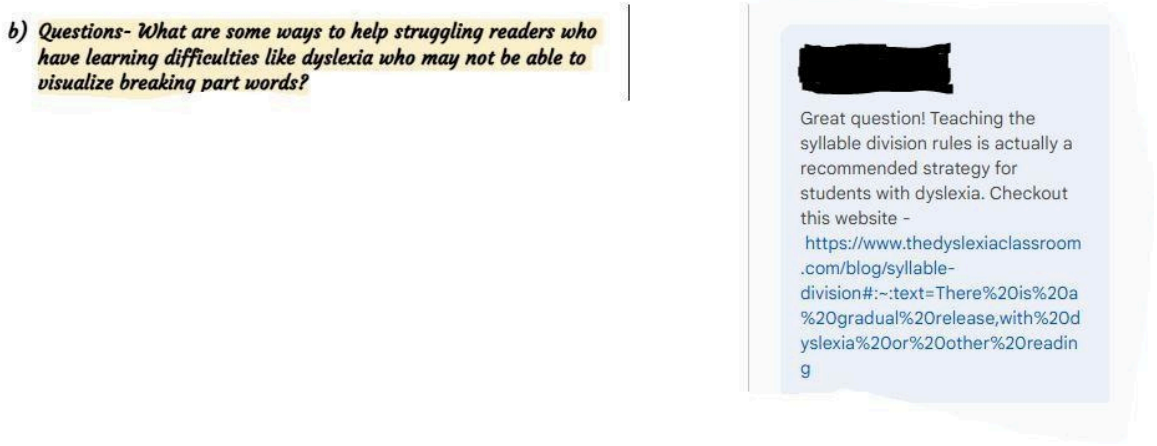



*Note.* Directly from the student agenda.

Agendas provided similar nuances, like PLC teams discussed topics and collectively gained knowledge by asking the instructor questions to clarify course content understandings (Figure 7).

**Figure 7**

*Example of a PLC posing a question in the weekly Agenda and the professor providing additional information to students' knowledge.*




*Note.* Directly from student agenda.

The practicum experience helped students gain knowledge about the PLC culture, "*I prepared myself for when my mentor teacher brought me into the 3rd grade PLC meetings.*" This student applied their authentic experience from the PLC methods to their practicum.

### *Shared Goal*

Although not mentioned often, a shared goal (6 times) was another perceived benefit of collaboration, such as "*I felt it was beneficial to collaborate with students who were also taking the same classes and working towards the same degree, especially since it was an online class*." This quote mentions shared goals in common career choices and collaboration in online classes. Students connected same grade-level teachers within their practicum as a shared goal, "*PLC's brought the ability to experience working with other teachers whether or not they are in the same grade level."* This belief recognizes that an authentic experience occurs within a collaborative PLC atmosphere as an in-service teacher.

### *Concluding Collaboration Remarks*

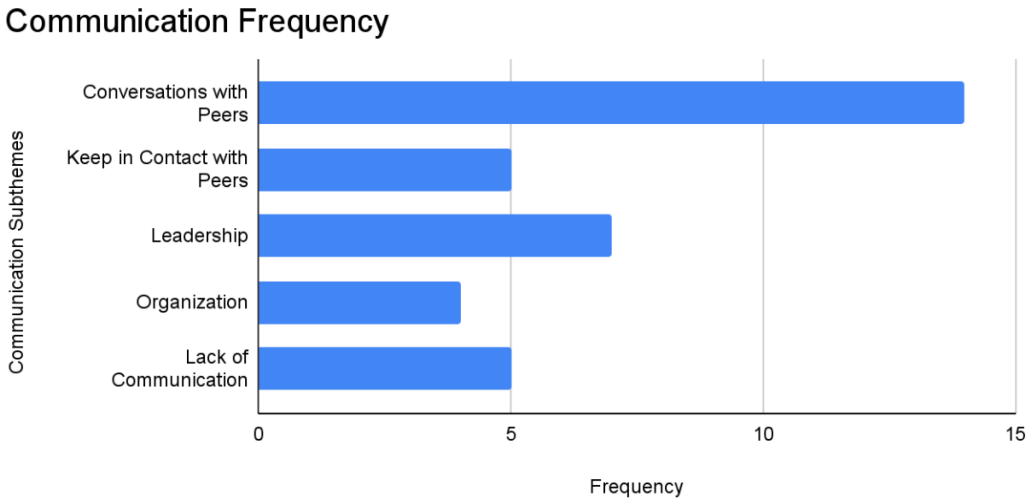
In the survey, (Q4, Appendix A) students were asked about their initial viewpoint and if it changed during the semester. Participants indicated they had difficulty at first finding a shared time to complete their assignments, yet after problem-solving their schedules this changed their attitude. However, after finding a shared time, not all group members contributed equally on the assignment. Overall, PLC teams collaborated positively from a shared workload on assignments and gained knowledge from one another during PLC meetings from discussions, yet perceptions of unequal group work remained. In group collaboration the workload can initially seem unfair, and possibly through mitigation from instructors the participants could have learned techniques to resolve their differences to find common ground.

### Theme 2: Communication

Communication (cited 35 times) included five subthemes with varied frequencies from four to fourteen occurrences (Figure 8).

**Figure 8**

*Frequency of Communication Subthemes*



### *Conversations with Peers*

Conversations with peers (14 times), students reported they communicated during PLC meetings with general statements such as, "*we had really good conversations and collaborations during the [PLC] meetings*." Communication with peers occurred inside and outside PLC meetings and incorporated tones of professionalism.

The conversations and collaborations can further be understood through discussions regarding coursework debriefing about assignments, "*gave me a chance to debrief and have conversations with peers about coursework."* Additionally, students expressed they used *"[PLCs were] nice to have a place to vent and ask questions without having to always turn to the instructor of the course"* and have *"good conversations about particular assignments."* Asking questions meant students communicated with one another, "*having a group to help and decipher what some of the assignments [meant],"* and furthermore students reported they gained clarification on how to complete the assignments, "*doing them the right way, or that we were all doing it incorrectly together."* Overall, students felt the conversations meant "*having people to check in with that supported me through consistent communication."* Consistent communication was not clarified, yet we can make more sense of students' experiences from reported comments that conversations students had not only occurred during PLC meetings, also occurred through text messages. One student comment, "*I was able to have a reliable group to whom I could text about all 3 of our method courses,"* thus indicating conversations with peers occurred inside and outside of PLC meetings. The last big idea within this subtheme was the topic of conversations with peers focused on a professional level. For instance, it was shared, "*Teamwork, the ability to communicate with peers at a professional level, and confidence from others that allows us to be guided in the content."* Additionally, students recognized they were "*learning skills for the future"* and reported "*If I had the choice between PLC meetings and discussion posts, I would absolutely choose the PLC experience,"* thus providing additional evidence students are embracing the PLC experience on a professional level.

### *Keep in Contact with Peers*

This theme occurred five times and highlighted ways the PLC teams used communication and not double coded (see Figure 8). Some responses were general highlighting that staying in contact with other students was abnormal, "*I was able to keep in contact with [a group of classmates] throughout the semester…these courses were all online with minimal interaction with other students normally."* Other students identified how they stayed in contact with their peers through text messages, "*I was able to make larger connections with other people in my class. I communicated and texted these people outside of class/PLC"* and although this is not an uncommon way we communicate this same student continues to explain, "*This is something that I have never really felt comfortable doing in any other class."* This student shared texting other classmates from their PLC group was not a regular occurrence in other courses. Moreover, students also communicated "*if I was running late to the meeting…I always communicated this to my PLC members,"* illustrating "*lots of communication throughout the week via text"* was how PLC groups kept in contact with one another. Additionally, other students stated they utilized text messages to stay organized with course assignments and weekly meetings. For instance, "*I also sent a text Monday [morning] with a basic breakdown of what each of us needed to do prior to the meeting.*" Students overall shared, "*there was a lot of communication that I had to stay on top of each week for my PLC."* Overall, students kept in contact with their peers on a regular basis through text messages regarding meetings, updates and, communicating weekly plans.

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### *Leadership*

This subtheme, Leadership (7 times) indicated as a facilitator role during the PLC meetings (Figure 8). The facilitator *"[led] the meeting following the agenda"* and *"ran the meetings"*-to communicate announcements, updates on assignments, and open up communication to accomplish tasks. Moreover, roles of leadership meant *[keeping] everyone on track, [taking] care of most of the administrative side of things, such as recording on the zoom, maintaining the zoom, submitting group assignments to Canvas, sharing my screen with the agenda or any assignments in progress, and keeping track of the role rotation schedule."* Many leadership qualities encouraged communication before and after meetings through agendas and zoom recordings, while during the meeting collaboration working on assignments and managing assignments took place.

### *Organization*

The least common theme, Organization (4 times) and double coded once indicated how PLCs communicate by planning with an agenda (Figure 8). Students shared "*I was the planner for the beginning of the semester"* with additional details, "*the planner- so I would make the agenda and I made sure we talked about everything we needed to."* Communicating through an agenda was something one student noted as they "*enjoyed making the agenda"* and found the role ensured "often played a role in making sure *everyone knew what to expect* [to be as] *effective as possible.* Lastly, students also *"created the zoom meeting and submitted our recordings."* The zoom meetings created a regular virtual space for the meeting to occur; this student scheduled the weekly PLC's group virtual meeting. Then, after the completed meetings, students submitted a 5-minute video summary of PLC meetings to the instructors. Students shared roles to organize the various communication pathways during the meeting through the agenda.

### *Lack of Communication*

Misunderstandings or lack of communication (5 times) with student viewpoints regarding the professors to the lack of communication during PLC meetings. Students shared the clarity to orchestrate a PLC meeting, "*There was a lot of confusion throughout the semester, first, how to go about the PLCs"* and other feelings, *"if there was some sense of communication between methods professors, because it felt like we were often doing way more in some classes than others."* Additionally, communication breaking down within the meetings, *"a lot of the meetings felt meaningless and unguided and a waste of time."*

Students experienced unclear expectations and an unbalanced workload from professors and during the PLC meetings that caused frustration during meetings, especially at the beginning. Moreover, students felt *"a lack of freedom and ability to complete assignments and projects because of disagreements in the group."* Although this point only occurred once, it displays a sense of frustration of communication within the PLC group when completing assignments. Student perspectives highlighted the miscommunications from professors and frustration in conversations during the PLC meetings. Mitigating the communication viewpoints by instructors observing the beginning or end of PLC meetings on a regular basis. Instructors discussed attending PLC meetings and sometimes created opportunities for students to speak freely in the moment versus on video recordings.

### *Changes in Viewpoints*

Item four (Q4) encouraged students to share changes in their points of view of PLCs (7 times). The responses showed an initial negative attitude towards the time necessarily allotted to PLC with attitude changed by the perceived positive aspects, such as communication with peers, be it talking about assignments or impactful conversations in general. For example,

*At first, I was really against it, I don't like being in groups and I just wanted to do everything myself. After a couple weeks, it wasn't too bad. I liked being able to talk about an assignment that we had questions on. It was also cool to hear everyone's practicum experience and compare ours.*

Other student responses share similar characteristics as the example above with initial indications of *"nervous"* or *"frustrated"* for various reasons, yet the opinions shifted to hold *"value," "engaging," "meaningful," and "[enjoyment]"* when actively participating in PLCs. These responses were coded under communication to highlight students' points of view around talking and discussing or "*[messaging] my groupmates to check with them first."*

### *Concluding Communication Remarks*

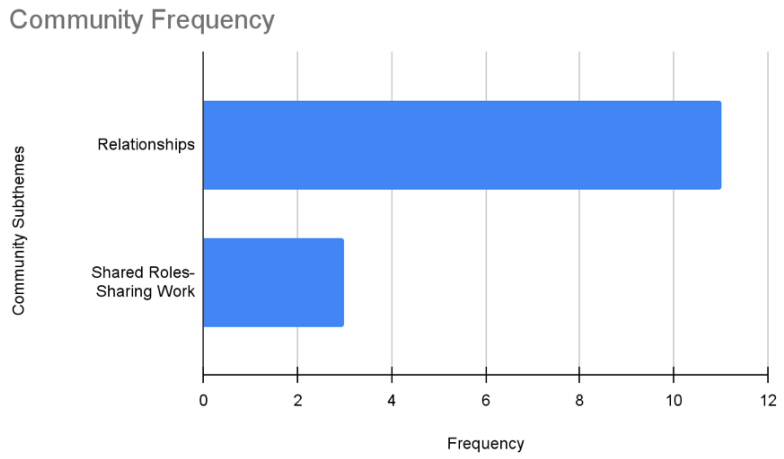
Communication occurred both prior to meetings, during meetings and outside of PLC meetings and students embraced tones of professionalism. Communication pathways utilizing phone texting allowed PLC members to Keep in Touch with Peers, while agendas played an imperative role in organizing communication during meetings. Leadership roles focused PLC meetings to stay on track and effectively run meetings. Nevertheless, communication does not always guarantee understanding from professors or peers.

## Theme 3: Community

Community was the least recorded response from students (14 times) and included two subthemes (Figure 9). Each of the subtheme frequencies varied from three to eleven occurrences. Relationships occurred 11 times while Shared Roles-Sharing Work was coded 3 times. The following section explains the results of each subtheme from students' viewpoints.

**Figure 9**

*Frequency of Community Subthemes*



### *RELATIONSHIPS*

Relationships occurred 11 times (Figure 9). Students shared they *"enjoyed the opportunity to be able to build a community with peers"* and building relationships, making friends and having others to lean on increased the "*sense of community."* Relationships were built from "*having a group to turn to when you may be stuck or need some ideas"* and evolved as students realized "*I was not the only person having difficulty with a certain assignment."* As students began to lean on one another, relationships between PLC members began to form. These friendships or relationships created a sense of community and relationships meant students "*grew close to their peers that were willing to work together."* Students mentioned leaning on their PLC members during their student teaching semester because of the PLC group, thus building friendships and lifelong relationships as a community.

### *SHARED ROLES-SHARING WORK*

The least common subtheme, Shared Roles-Sharing Work occurred 3 times (Figure 9). This theme was small, yet worth mentioning as students began forming a community by sharing their roles like facilitator, recorder, planner and timer every three to four weeks "*helping me gain an understanding of each role and how to complete each task successfully."* Students could look to one another for support, ask specifics about the qualifications of each role, and as stated, "*taking turns in different roles."* Students began to understand that a community shares and supports one another in duties and tasks.

### *CHANGES IN VIEWPOINTS*

Item four (Q4) shared changes in their points of view of PLCs, 6 occurrences were coded under community. An initial negative attitude was changed to a positive attitude with the catalyst being the theme of community. Participants indicated they had a "*strong group"* and *"grew to love"* meeting as a PLC as the purpose of PLCs were revealed throughout each meeting.

### *CONCLUDING COMMUNITY REMARKS*

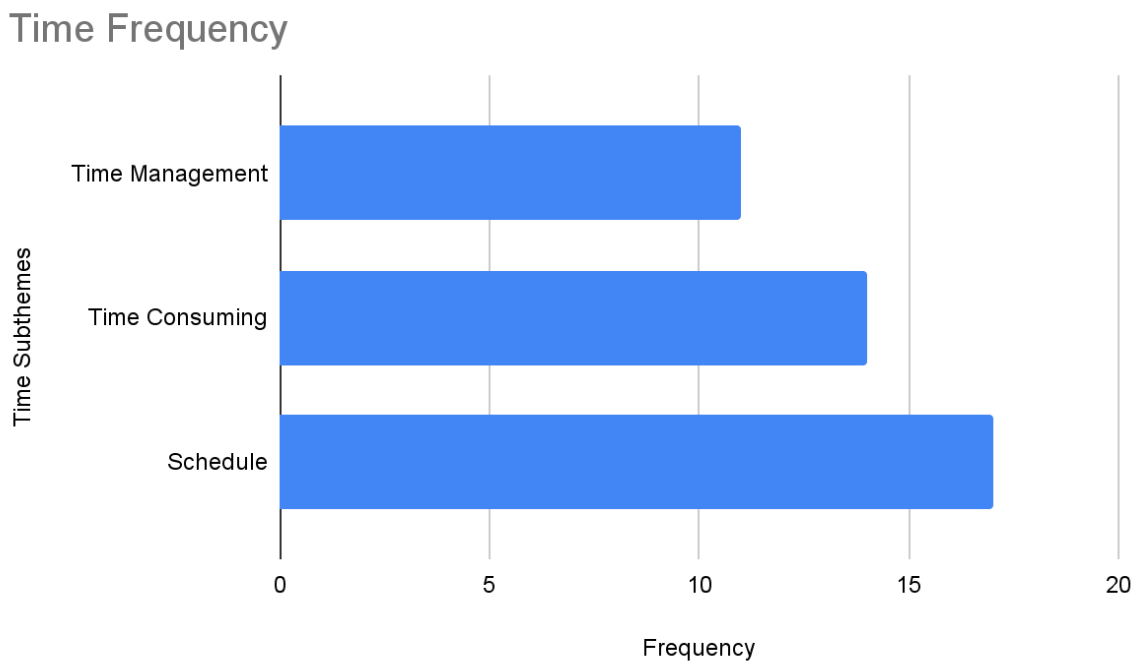
Community was coded into two sub-codes with the most common, Relationships, occurring eleven times and Shared Roles-Sharing Work occurring only three times. No themes were double coded as subthemes. Within the small PLC groups students built lasting friendships and by sharing the tasks and workload, students supported one another that in turn created a sense of community.

## THEME 4: TIME

Time was coded as the third most frequently recorded response from students (43 times), almost the same frequency as Communication (44 times). Time included three subthemes (Figure 10). Each subtheme's frequencies ranged from twelve to seventeen occurrences. Additionally, Time was double coded twice for Collaboration and Communication.

**Figure 10**

*Frequency of Time Subthemes*




***TIME MANAGEMENT***

Time Management (12 times) was double coded for Communication twice and Collaboration once (Figure 10). Time Management was coded with common phrases of "meeting time" including varying synonyms such as "coordinating" or time words such as "minute or day." Managing their time for PLCs was difficult because of "s*o many different things going on"* or *"figuring out the timing"* during meetings to coordinate meeting times with other PLC members. Students noted there was "*not enough meeting time*" yet others shared it was difficult to find common meeting times. During the meetings students shared at the beginning the purpose was not clear and "*no one knew what to do…we couldn't figure out the timing of these meetings,*" students tried to either rush through the meetings to get things done or struggled to figure out what to do. Others explained they initially thought the meetings were one hour total each week, not one hour for each method course as part of the instruction requirement. The timekeeper ensured their group was "*spending equal and equitable times on each subject."* However, when team members had to reschedule at the last minute, this felt frustrating.

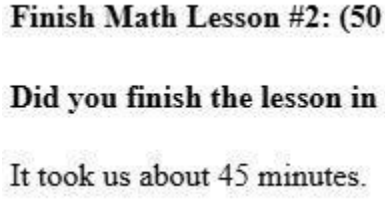
***TIME CONSUMING***

The second common subtheme, Time Consuming (14 times) students noted PLC meetings as negative because the length of time to complete a meeting "*overstretching our time*" and "*spending an overwhelming amount of time to complete group assignments and projects*." They struggled to complete assignments, and one student shared, "*they were in every role at least once …I would end up being one of the people trying to push onto the next topic fairly quickly.*" Instructors noted some groups enjoyed taking longer to discuss topics, while others in the group did not. During one of the final PLC meetings, the math instructor challenged PLC teams to write

a math lesson in 50 minutes. The instructor was excited to learn, as noted on the Agenda in Figure 11, groups met the challenge.

**Figure 11**

*Math lesson challenge documented on Agenda*




*Note.* Directly from student agenda.

***SCHEDULING***

The most common subtheme, Scheduling (17 times) and students reported difficulty in "*finding time to meet together*" with other PLC members due to personal scheduling conflicts. Additionally, students noted scheduling conflicts with the methods courses' weekly due dates. The week opened late on Sunday and due on Saturday nights making it "*inconvenient to meet because class work was not open until Sunday at 4pm"* The feelings were mutually negative in that "*after classroom hours…. we were tired and burnt out to fully participate in an effective way*" and students felt "*crammed for time.*" Nevertheless, other students shared a positive lesson that they learned how to balance schedules and understand what peers are going through. While there were a considerable number of negative perspectives regarding scheduling PLCs, this seems to be a natural consequence for any type of group or collaborative work in an asynchronous course. Students must learn to prioritize time and compromise with others in a collaborative setting.

***Changes in Viewpoints***

Item 4 (Q4) had five responses coded for time. Responses shared ranged from meshing schedules or assignments that took longer than anticipated, contributing to a change in attitude toward negative feelings regarding the PLC. One student speculated that it might have been "*more enjoyable"* if PLC was done in person rather than online. Considering the range of points of view regarding the time mirror real-life application to PLCs in schools. Mitigating these feelings could be achieved by bringing in a panel of past veteran mentor teachers for students to express these feelings (along with others). The panel's perspective may offer more than an alternative viewpoint, but solutions to future concerns when balancing the multifaceted parts of school in addition to their home life.

***Concluding Time Remarks***

Time constituted a main theme from students' perspectives with three subthemes. Students shared they struggled with the time management of coordinating meeting times, especially with late cancellations, thus challenges managing their time effectively. PLCs groups also felt meetings took too much time, yet when challenged to focus on time, groups found success. The biggest concern was scheduling between personal and course conflicts; students felt a negative presence of time.

### *OVERALL REMARKS*

Collaboration and communication aspects built a sense of community within the PLC groups through assignments and discussions that allowed teams to gain additional content knowledge. Collaboration included a shared purpose, whereas communication served as a means for keeping in contact with PLC members, leading meetings, and guiding organizational components of the meetings. The importance of sharing and building relationships developed a sense of community, yet reported the least. Nevertheless, time contributed to the management of planning PLC meetings as well as time management during meetings.

## DISCUSSION

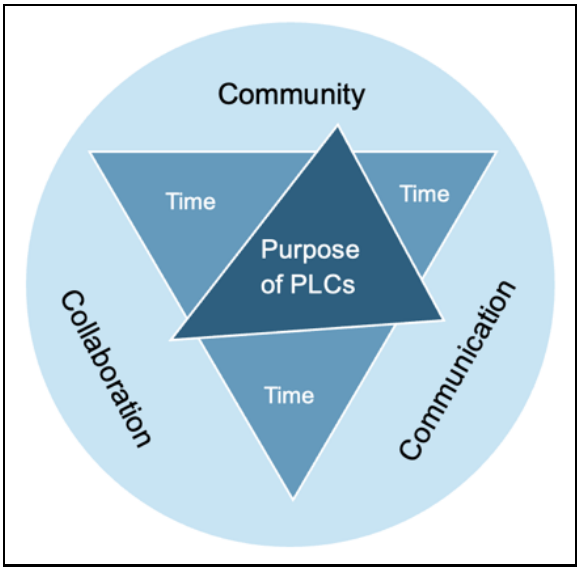
Analyzing survey responses revealed four primary themes: 3Cs and Time with surface level engagement and connections of belonging within PLCs (Hord & Tobia, 2012). Thus highlighting the importance of understanding the purpose of a PLCs and recognizing how time influences the experience (Kupczynski et al., 2013). Illustrated in Figure 14, a clear sense of purpose and effective use of time creates a balance within the 3Cs, fostering genuine engagement and buy-in (Courtney & King, 2009). Creating a positive authentic PLC experience early on could likely influence students' perceptions of PLCs within the teaching profession.

### PURPOSE OF COLLABORATION

Student responses overwhelmingly pointed to collaboration as the most defining feature of their PLC experience describing dividing responsibilities, contributing to shared assignments, and coordinating efforts when completing weekly tasks (e.g., reading assignments, time keeping). Collaboration was transactional, focused on ensuring the work got done (Bond, 2013). A smaller group of students recognized their PLC as more than a course requirement, constructing a bridge to future classroom practices through peer dialogue, reflection, and joint problem-solving (Hoaglund et al., 2014; Packard, 2019). Meaningful collaboration depended upon broader goals that influence the structure and time of the PLC (DuFour et al., 2016). Students understanding the design of PLCs built professional habits and shared pedagogical understanding, collaboration was perceived as more meaningful. One student wrote, "*We worked together to figure out how we might actually use this in our own classrooms, not just for the grade*." Another noted, "*I liked having a group to talk about how this would play out with real kids. It made me feel more confident.*" A deeper level of collaboration fostered community as an essential component of PLCs. Collaboration also appeared vulnerable to time-related challenges. Several students reported that group members contributed unequally, coordinating meetings felt inefficient, or PLCs meetings lacked structure. These comments point to the need for balance. Without sufficient time, meaningful collaboration cannot take place and without a shared purpose and structure, excess time can lead to frustration. Figure 12 illustrates an overemphasis on collaboration or poor time management creates an unbalanced PLC structure that reduces its overall effectiveness.

**Figure 12**

*Collaboration and the essence of Time*



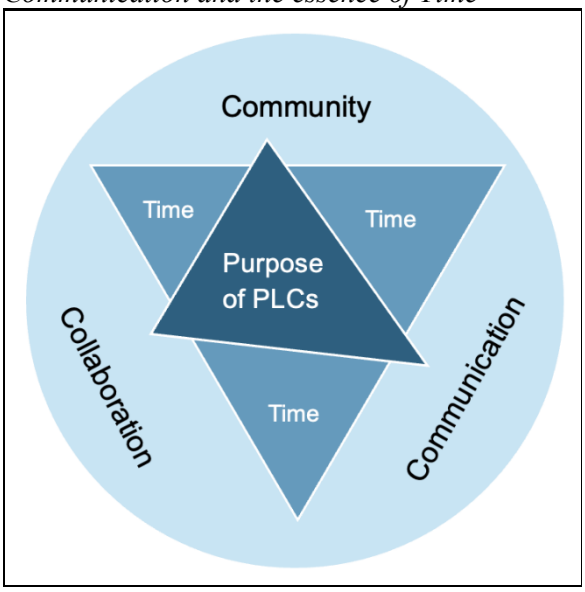

**Purpose of Communication**

Students applied various forms of effective communication practices before, during, and after PLC meetings. The amount of time students spend communicating as represented in Figure 13 describes the inner-workings that fosters a professional culture of peer accountability (Bond, 2013; DuFour et al., 2016). Prior to PLC meetings, students used text messaging as a form of communication to confirm the dates and times of meetings and completed tasks. During PLC meetings, agendas served as effective organizational tools for leaders to guide meetings and facilitate peer conversations (Hoaglund et al., 2014). Communication evolved for some PLC teams and PLC meetings focused less on task completion and more on educating students with the importance of authentic PLCs utilizing various communication pathways (e.g., texting) outside and during meetings (DuFour et al., 2016; Hord, 2012). The agenda facilitated peer conversations during meetings and accommodated diverse student personalities and social interactions (Alwafi et al., 2020).

Koh et al. 's (2024) study differentiates online learning into six supports, while our study combines two constructs: asynchronous and synchronous learning. An asynchronous course that incorporated a synchronous component into a methods course surprised students (Kupczynski et al., 2013). Nonetheless, students recognized PLC meetings supported authentic communication structures (e.g., text messaging for planning, the agenda for running meetings), while peer conversations improved students' pedagogical content knowledge in various academic areas (Veloo et al., 2015).

**Figure 13**

*Communication and the essence of Time*

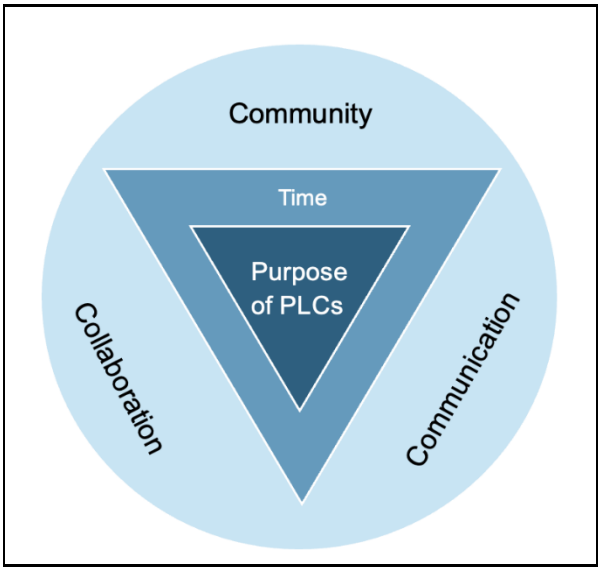



Once PLC teams effectively manage their time to foster collaboration and communication, they begin to understand the multifaceted objectives of their PLCs. Applying aspects of collaboration, such as shared work and common goals, alongside communication, including peer -to-peer, structural, and professional interactions, creates a cycle that PLC teams engage in effective forms of communication and collaboration. Ultimately, teams find the balance between collaboration, communication, and time management, cultivating a community of learners, defining the true purpose of their PLC team, and building a Professional Learning *Community* (DuFour et al., 2016).

An educational community is a direct reflection of the relationships and emotional support built in the PLC, which Bond (2013) deemed important. Intuitively, this is logical; established communication structures allow students to strategically collaborate on course assignments, thereby forming relationships with their peers, thus creating balance (Figure 14).

**Figure 14**

*All in Balance*




## LIMITATIONS AND FUTURE RESEARCH

A few structural limitations of this study include: a pilot study and a small sample size (*n=26)*. Another limitation was that students lacked background knowledge of the purpose and value of PLCs and, as a result, may not have fully understood the significance of the collaborative experience. Therefore, when implementing the PLC structure in your online course consider these takeaways:

- Prior:
  - Prepare the PLC structure
  - Provide ample communication to preservice teachers regarding this structure.
- During:
  - Informational meeting to prioritize expectations.
  - Regular attendance unannounced at PLC meetings.
  - A Live Panel Discussion that includes past mentors.

Future research instructors and programs should articulate the purpose and expectations of PLC work that can collect pre and post Likert scale surveys Furthermore, asking guided reflection questions on weekly agendas can provide the meaning of community from the students' perspective.

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