

Montclair State University Montclair State University Digital Commons

Theses, Dissertations and Culminating Projects

1-2018

Collaborative Teacher-Driven Professional Development : The Documented Journey of a Practitioner Action Research Teacher Study Group

Brenna D. Bohny
Montclair State University

Follow this and additional works at: <https://digitalcommons.montclair.edu/etd>

 Part of the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Bohny, Brenna D., "Collaborative Teacher-Driven Professional Development : The Documented Journey of a Practitioner Action Research Teacher Study Group" (2018). *Theses, Dissertations and Culminating Projects*. 167.
<https://digitalcommons.montclair.edu/etd/167>

This Dissertation is brought to you for free and open access by Montclair State University Digital Commons. It has been accepted for inclusion in Theses, Dissertations and Culminating Projects by an authorized administrator of Montclair State University Digital Commons. For more information, please contact digitalcommons@montclair.edu.

COLLABORATIVE TEACHER-DRIVEN PROFESSIONAL DEVELOPMENT:
THE DOCUMENTED JOURNEY OF A PRACTITIONER ACTION RESEARCH
TEACHER STUDY GROUP

A DISSERTATION

Submitted to the Faculty of
Montclair State University in partial fulfillment
of the requirements
for the degree of Doctor of Philosophy

by

BRENNA D. BOHNY

Montclair State University

Upper Montclair, NJ

2017

Dissertation Chairs: Dr. Suzanne McCotter and Dr. Kathryn Herr

Copyright © 2017 by *Brenna D. Bohny*. All rights reserved.

MONTCLAIR STATE UNIVERSITY

THE GRADUATE SCHOOL

DISSERTATION APPROVAL

We hereby approve the Dissertation

COLLABORATIVE TEACHER-DRIVEN PROFESSIONAL DEVELOPMENT:
THE DOCUMENTED JOURNEY OF A PRACTITIONER ACTION RESEARCH TEACHER
STUDY GROUP

of

Brenna D. Bohny

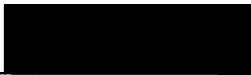
Candidate for the Degree:

Doctor of Philosophy

Dissertation Committee:

Teacher Education and
Teacher Development

Certified by:



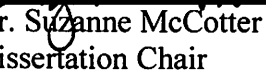
Dr. Joan C. Ficke
Dean of The Graduate School

Date

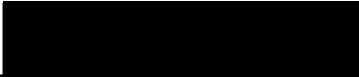
12/13/17



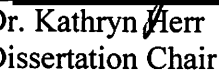
Dr. Suzanne McCotter
Dissertation Chair



Dr. Kathryn Herr
Dissertation Chair



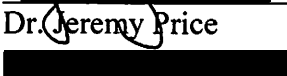
Dr. Kathryn Herr
Dissertation Chair



Dr. Kathryn Herr
Dissertation Chair



Dr. Jeremy Price



Dr. Jeremy Price



Dr. Monica Taylor

ABSTRACT

COLLABORATIVE TEACHER-DRIVEN PROFESSIONAL DEVELOPMENT: THE DOCUMENTED JOURNEY OF A PRACTITIONER ACTION RESEARCH TEACHER STUDY GROUP

by Brenna D. Bohny

Laws such as the *No Child Left Behind Act of 2001* (NCLB) and the *Every Student Succeeds Act* have shaped the landscape of education in many ways, including how professional development is structured. As a result, professional development has become increasingly limited to *training* teachers to carry out top-down mandated reforms based on subject-knowledge rather than concentrating on teacher *learning* efforts focused on the growth of adults as learners (Cochran-Smith & Lytle, 2006, 2009; Hirsch, 2006; Mertler, 2010). Organic, teacher-driven professional development, such as action research, provide teachers with opportunities to disrupt the often paternalistic power structures that currently exist. The purpose of this practitioner action research study was to examine professional learning within a teacher-driven study group. The study group consisted of seven secondary level English and social studies teachers, including myself, where we self-selected topics to examine that we believed were important. I was guided by the following research question: What does professional development look like when we, as teachers, gather to examine elements of classroom practice that are meaningful to us? I utilized James Paul Gee's (2004, 2007, 2015) affinity space concept as a useful lens to make meaning of these organic, collaborative learning experiences. I found that despite conducting professional development without administrative oversight, the group

initially found it difficult to avoid replicating traditional professional development structures. However, once the group was able to break the unspoken rules that govern traditional professional development, concepts such as expertise, space, and funding could be challenged. Additionally, I found that not only did the study group adjust to meet our changing needs but we also grew professionally as our work created ripple effects as we shared what we learned with others.

ACKNOWLEDGEMENTS

First, I offer my deepest gratitude and sincerest thanks to my dissertation chairs, Dr. Suzanne McCotter and Dr. Kathryn Herr. Suzanne, I will be forever grateful for our numerous phone conversations, your gentle guidance, and how you somehow always knew what to say and do to keep me on track. Kathryn, thank you for helping me realize that what I wanted to study was in front of me the entire time, for encouraging me to start documenting the study group in your action research elective course, and for taking on the role of co-chair with Suzanne.

I also want to thank the other members of my dissertation committee for their contributions to make this work possible. Dr. Jeremy Price provided valuable insight from the very earliest stages of this work and Dr. Monica Taylor's later contributions helped to provide perspective that had been previously missing. I cannot thank you both enough.

Every professor that I have encountered in my coursework in the TETD program has informed my journey in some way, probably in ways that they do not even realize. For that, I would like to thank Dr. Ana Maria Villegas, Dr. Helenrose Fives, Dr. Michele Knobel, Dr. Fernando Naiditch, Dr. Alina Reznitskaya, Dr. Doug Larkin, Dr. Ada Beth Cutler, Dr. Jennifer Robinson, and Dr. Chris Torres. I would like to especially thank Ana Maria for pushing me in my early coursework and for getting me started on this academic journey. Additionally, Marcia Adirim and Stacy Pinto deserve a special thanks for their assistance in getting this dissertation across the finish line. I am also grateful to Dr. Alan Amtzis, my RTC master's degree advisor, for introducing me to the world of

action research. I have truly taken the saying on the pin "ask a teacher how to make schools better" to heart.

I also need to thank the various "critical friends" who have helped to push my thinking and see my data in ways that I had not previously considered. I have been lucky to work with several critical friends groups both in a formal capacity during coursework and in less formal, self-directed ways. Anyone who has served in these groups has helped me in some way, shape, or form, even if they are not aware of the contribution that they made. I do need to give a special acknowledgement to Todd Bates for being a particularly consistent and challenging critical friend, whose vast knowledge of academic literature and assistance in helping me reflect on my data in different ways was more helpful than he could ever know. I also want to acknowledge the other members of Cohort 3, as well as our honorary Cohort 3 members, as we all learned so much from each other during our coursework together. A special thanks goes out to the ladies of "Vegas" as our AERA and publication experience made me truly realize that I could do this and that I belong in this program.

I am eternally grateful to the six original members of the teacher study group discussed in this dissertation. I cannot acknowledge you by name, but you know who you are. I am so lucky to work with each and every one of you. You are amazing teachers who are always looking for innovative ways to reach your students and continuously hone your craft. Working with you inspires me and pushes me to be a better teacher. I am so proud to be your colleague.

Throughout the course of my doctoral journey, I have found that the lines between the personal and professional have blurred. The worlds of teaching, research, and family often blend together, sometimes in unexpected ways. Probably the most unexpected, and most appreciated, came in the form of my mother, Barbara Marshall. I want to thank you from the bottom of my heart for completing the CITI Program so I could get IRB approval for you to join my research team as my transcriptionist. The time we spent together transcribing hours upon hours of interviews and study group meetings will be one that I will look back on fondly. I valued your insights into my research and talking through some of the concepts with you as someone who is outside the field of education was most helpful. For this, I will be eternally grateful. I want to thank my brother Colin Rooney, who inspires me in ways that he probably does not know. I am also grateful for the love and support of Linda, Mark, and Steve Bohny, as well as Carol, Dave, and Aurora Volpe.

Finally, but most importantly, I express my unending gratitude to my husband, Dave Bohny. His quiet strength and support helped me to persevere, even when I thought I could not. He kept me fed and kept me sane during some of the most chaotic parts of this journey. He is my forever critical friend and the Player 1 to my Player 2.

DEDICATION

This dissertation is dedicated to my supportive family: my husband Dave, my mother Barbara, my brother Colin, and all of the Bohnys and Volpes.

It is also dedicated to all of the teachers out there who find ways to make a difference every day. Our collective tacit knowledge can never be completely codified, but this dissertation is an attempt to at least partially document the behind the scenes work that we put in daily to improve our own learning and become better teachers.

TABLE OF CONTENTS

LIST OF FIGURES	xvi
CHAPTER ONE: INTRODUCTION.....	1
Teacher Research and Knowledge Production	7
CHAPTER TWO: CONCEPTUAL FRAMEWORK AND LITERATURE	
REVIEW	13
Affinity Spaces.....	13
Teacher-Driven Professional Development: What We Can Learn From the Literature.....	18
How Adults Learn.....	18
How Teachers Learn	19
Teacher Learning in Community	21
Teacher Learning in Collaborative Teacher-Driven Groups	23
Common endeavor or common focus is primary.....	25
Newbies and masters and everyone else share common space.....	29
Content organization is transformed by interactional organization.....	34
CHAPTER THREE: METHODOLOGY	40
Methodological Approach	40
Context and Participants	43
Data Sources	45

Data Analysis	46
Ethics.....	47
Positionality and Trustworthiness.....	48
Outcome validity.....	49
Process validity	50
Democratic validity.....	50
Catalytic validity.....	51
Dialogic validity.....	51
Methods Used to Establish Trustworthiness.....	51
Triangulation.....	52
Member checking and critical friends.....	52
Researcher's journal	54
Limitations and Significance	55
CHAPTER FOUR: FINDINGS	58
"Taken for Grant-ed": Meaningful Professional Development Does Not Have to Replicate Traditional Structures	62
" I Felt Like I Was Just Showing People How to Do Things . . . I Wanted It to Be More of a Dialogue": Meaningful Professional Development Does Not Have to Be Led by a Single Expert.....	65
Recognizing the individual expertise each person brought to the group	66
Expertise can be collectively generated	70

Expertise does not have to be a dichotomy, it can be a spectrum	73
" . . . It's Like We All Had an Epiphany.": Meaningful Professional Development Does Not Have to be Held in Traditional Learning Spaces	76
Learning together online as well as in person.....	78
Learning together does not have to happen just in a school space.....	81
Informal and non-formal learning in a professional development affinity space	85
"I Don't Know That the Money Was Ever the Impetus Behind It.": Meaningful Professional Development Does Not Have to Cost Much, Though Money Can be Helpful for Achieving Goals.....	91
Grant provided us with an opportunity to collaborate with each other but an obligation to spend it.....	91
Applying for a grant provided us with a common focus but one altered as necessary to fit our needs.....	93
Final Thoughts	98
Developing Professionally as Opposed to Going to Professional Development	99
"I'm Still Trying to Carve Out What Exactly My Role Is": Professional Changes as We Develop Professionally	102

Interactions with the study group shaped my academic learning	103
Jessica's professional change both redefines her role in the group and how the group could meet her new needs	107
" . . . It Is a Technology That I Was Able to [Use] Then, I Found Something That Was Similar and I Felt Comfortable With It, When I Wouldn't Have Had I Not Been Comfortable Using Zaption": What Changed in Our Classroom Practice	110
The process of learning how to use educational technology was more important than learning how to use a specific program.....	111
Reevaluating what counts as literacy skills	113
Meaningful teacher learning happened in the affinity space we created	117
"I Have Had a Really Varied Background [and] Professional Experience, so I Like Sharing That With Other People, and They Can Take From It What They Will": Ripple Effects of Our Study Group As We Share What We Learned With Others	120
Sharing what we learned with colleagues through traditional structures	121
Sharing what we learned with colleagues in less formal settings	124
Final Thoughts	127

CHAPTER FIVE: CONCLUSIONS AND IMPLICATIONS	128
Discussion of Findings.....	129
Fludity of Expertise and Space	130
Journey away from the sage on the stage.....	131
Expert and learner can be one and the same	132
Learning outside of traditional spaces	133
Professional Development Should Meet Teachers' Actual, and Not Perceived, Needs.....	135
Meeting teachers where they currently are	136
Teachers have multiple learning goals that change over time	137
Striking the balance with enduring tensions	139
Reimagining Professional Development As Affinity Spaces	142
Valuing different forms of expertise.....	142
A common endeavor is important but needs to be flexible	143
Consider the role space plays.....	144
Spillover as a consequence of affinity space participation	145
Recommendations and Implications	147
Recommendations and Implications for Professional Development	147
Recommendations and Implications for Teacher Education Research....	148
Final Reflection.....	150
REFERENCES	152
APPENDIX A: TOPICS OF FOCUS FOR THE STUDY GROUP	165

APPENDIX B: GRANT APPROVAL NOTIFICATION	166
APPENDIX C: SAMPLE INTERVIEW QUESTIONS.....	169
APPENDIX D: SAMPLE CODES.....	170
APPENDIX E: SAMPLE MEMO	173
APPENDIX F: IRB APPROVAL.....	175
APPENDIX G: DESCRIPTIONS OF TECHNOLOGIES EXAMINED BY THE GROUP	176

LIST OF FIGURES

Figure 4.1 The ripple effect of our work101

Collaborative Teacher-Driven Professional Development:

The Documented Journey of a Practitioner Action Research Teacher Study Group

CHAPTER ONE: INTRODUCTION

My master's thesis advisor gave me a pin that says "ask a teacher how to make schools better." This pin resonates with me because teachers are typically not asked how to improve schools. Changes come in the form of mandates at the federal level, the state level, and the district level. Even school level changes more often than not come from administrators rather than classroom teachers. But teachers are a wealth of knowledge about many different areas of education. We are experts on our students, and we are knowledgeable in our content areas. We also know what types of professional development make us better teachers and what kinds of professional development do not. Professional development should start with the teachers and ripple out from there to affect local and federal policies. However, the reverse is more common at the present time. Factors that drive professional development start outside of the classroom and trickle down to the teachers.

One of the biggest changes to the landscape of professional development in recent years was the passage of the *No Child Left Behind Act of 2001* (No Child Left Behind [NCLB], 2002). Although NCLB has drawn attention to student achievement (Dee & Jacob, 2011; Lauen & Gaddis, 2012; Nichols, Glass, & Berliner, 2012; Smith, 2005) and teacher quality (Berliner, 2005; Karelitz et al., 2011; Peske & Haycock, 2006; Smith & Gorard, 2007), one area that remains under-examined is teacher professional development. In fact, NCLB narrowed what activities could be considered professional

development. Under NCLB, activities that could be considered professional development were ones that improved or increased teachers' subject knowledge or their understanding of research-based effective instructional strategies, and activities that were aligned directly with state content standards or student achievement standards and assessments. In December 2015, the *Every Student Succeeds Act* (ESSA) replaced NCLB. Although both laws specify that professional development should be more than one day or standalone workshops, ESSA provides more flexibility and local control over what counts as professional development compared to NCLB. For example, the ESSA includes "opportunities for effective teachers to lead evidence-based (to the extent the State determines that such evidence is reasonably available) professional development for the peers of such effective teachers" (Every Student Succeeds Act, 2015-2016). Additionally, it is left to the states to determine what counts as this "evidence" (Snyder, 2016; Sparks, 2016). Though like NCLB, data from assessments can still be used to inform instructional practices. Despite placing a greater emphasis on professional development and seemingly inviting teachers to play a larger part in the process, it remains to be seen if ESSA will truly change the face of professional development.

Although ESSA allows for local control over what counts as evidence, it is still reliant on this notion of schools providing proof of student instruction and teacher professional development via some form of data. Even if ESSA is less dependent on standardized assessments as evidence, it will take time for practice to catch up with policy. This is illustrated by the fact that for federal reporting purposes under ESSA, states still utilize the same standardized assessments used to report adequate yearly

progress under NCLB (Phillips, 2016). Critics of evidence-based professional development argue that these requirements have limited the focus of professional development to teacher *training* to carry out top-down mandated reforms based on subject-knowledge rather than teacher *learning* efforts which focus on the growth of adults as learners (Cochran-Smith & Lytle, 2006, 2009; Hirsch, 2006; Mertler, 2010). Teacher training is heavily focused on content knowledge and measurable data; teacher learning, in contrast, focuses on the development of professional knowledge and the changes in teacher beliefs and practices (Cochran-Smith & Fries, 2005). Professional development and teacher learning need to be integrally linked in order for meaningful changes in beliefs and practice to take place (Borko, 2004; Putnam & Borko, 2000). Furthermore, professional development and teacher learning are parts of a complex, interdependent system that work together with variables such as context and relationships with other practitioners at their subject or grade level (Opfer & Pedder, 2011). Therefore, teacher learning needs to be the focus of professional development.

With more and more school district resources being steered towards professional development initiatives meant to increase test scores (e.g. Jarrett, Evans, Dai, Williams, & Rogers, 2010; Klingner, Ahwee, van Garderen, & Hernandez, 2004), teachers are often left to seek out meaningful professional learning activities on their own. Additionally, teachers need more opportunities to work collaboratively and share what they know with colleagues (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Zepeda, 2012). The National Staff Development Council reported in an analysis of datasets from

its 2007-08 Standards Assessment Inventory and the National Center for Education Statistics' 2003-04 Schools and Staffing Survey (SASS) that:

only 40 percent of teachers frequently observed each other, only 55 percent had time set aside to discuss what they learned from professional development experiences, and only 57 percent had frequent opportunities to give each other feedback. We saw a similar pattern in the SASS dataset, in which teachers reported little cooperative effort and coordination among teachers in their schools.

(Darling-Hammond et al., 2009, p. 25)

In other words, teachers are not getting the time needed to truly learn with and from each other, actions that are necessary for meaningful adult learning (Drago-Severson, 2009).

Professional development should include holistic, authentic experiences grounded in inquiry, connected to the continued professional learning of the teacher, and be considerate of the specific context in which that practitioner works (Cochran-Smith & Lytle, 1993, 2009; Darling-Hammond & McLaughlin, 2011; Webster-Wright, 2009). Professional development should be about teacher learning; however, professional development is not always done in ways that allow teachers to truly learn and grow. *One shot* or *hit-and-run* workshops are commonly available to teachers at the district level (Darling-Hammond, 1997; Darling-Hammond et al., 2009; Stanley, 2011). However, professional development is more “likely to produce enhanced knowledge and skills” when it is sustained over time, integrated into teachers’ practice, and done collectively with “teachers from the same school, subject, or grade. . .which in turn are related to

improvements in teacher knowledge and skill and changes in classroom practice” (Garet, Porter, Desimone, Birman, & Yoon, 2001, pp. 935-936).

Teachers should be afforded opportunities to conduct this professional learning in collaboration with their colleagues (Darling-Hammond & McLaughlin, 2011; Drago-Severson, 2009; Garet et al., 2001; Zepeda, 2012). *Collaboration* in this context refers to relationships between teachers where they can, among other things, discuss classroom practices, feel comfortable offering each other feedback, and observe each other teaching (Barth, 2006; Drago-Severson, 2009). Warren-Little (1990) further explains that “collegiality *as* collaboration or as joint work anticipates truly collective action—teachers’ decisions to pursue a single course of action in concert, or alternatively, to decide on a set of basic priorities that in turn guide the independent choices of individual teachers” (p. 519). In other words, the concept of collaboration can range from constant interaction in pursuing a single goal to working independently but using interactions with colleagues to inform one’s own practice.

Practitioner inquiry through research designs like action research and teacher research provide teachers with opportunities to engage in meaningful professional learning in collaboration with colleagues, helping teachers to develop collegial relationships through the process of shared inquiry work. Anderson, Herr, and Nihlen (2007) articulate that in inquiry work like action research, “ideally, collaboration is done with others who have a stake in the problem under study; however, it may also be done with a group of other practitioners who are also engaged in research. These other practitioners may or may not work at the same site” (p. 8). This furthers the point made

by Warren-Little (1999) that collaboration can mean teachers working on the same task or independently on related activities with common goals or shared principles.

Furthermore, this type of professional learning fits well with the concept of teacher-driven efforts. To illustrate, Bredeson (2003) explains that in collaborative action research via teacher study groups “the topics and concerns are generally teacher generated so there is commitment on the part of teachers. Also, because study group learning is *in situ*, transfer of learning problems is mitigated” (pp. 148-149). In other words, the work is situated in the specific contexts in which teachers work and rely on teachers to investigate topics of interest to them. In keeping with the spirit of practitioner inquiry where teachers generate their own research questions or topics of interest (Anderson et al., 2007; Zepeda, 1999, 2012), I am taking *teacher-driven* to mean any professional development efforts that either have teachers as the impetus behind starting the effort (even if administrators later help in making those efforts part of a larger school culture), or efforts where teachers are in control of what is happening (even if administrators are the ones who started the effort before turning control over to the teachers). It is necessary to include the role of administrators in teacher-driven efforts because often administrators are the ones putting teachers in leadership roles where collaboration with others is possible (Drago-Severson, 2009), and because administrators play a large role in both creating professional development opportunities and shaping the culture of a school where inquiry and collaboration are viewed as valid parts of practice (Drago-Severson, 2009; Zepeda, 1999, 2012). However, teachers should play the primary role in the work that is being done.

Teacher Research and Knowledge Production

Cochran-Smith and Lytle (2009) identify five major genres under the umbrella of practitioner inquiry: action research/participatory action research, teacher research, self study, the scholarship of teaching, and using practice as a site for research. All of these inquiry methods share the characteristics of collaboration and blurring the lines between research and practice. For the purposes of this dissertation, the term *teacher research* will primarily be used due to the focus on the work done by teachers in the K-12 setting, though this work may be labeled as action research by other researchers. Check and Schutt (2011) clarify the distinction in that “all action research conducted by practitioners can properly be termed *teacher research [sic]*, but not all teacher research can properly be labeled *action research [sic]*” (p. 264).

Teacher research is one way of studying and documenting this collaborative process of learning. The process is, in itself, a form of professional development.

Cochran-Smith and Lytle (2009) define *teacher research* as:

the inquiries of K-12 teachers and prospective teachers, often in collaboration with university-based colleagues and other educators. Teacher researchers work in inquiry communities to examine their own assumptions, develop local knowledge by posing questions and gathering data, and—in many versions of teacher research—work for social justice by using inquiry to ensure educational opportunity, access, and equity for all students. (p. 40)

In other words, teacher research involves K-12 practitioners consciously examining their own practice or assumptions. This work can focus on a school-wide issue, a department

issue, or something related to the teacher's own work at the individual level. Teacher research can start at the preservice level as part of university coursework, or it can occur at any stage of in-service teaching. The teacher purposely crafts a question he or she would like to examine. Data are collected and analyzed as part of this examination. The data can take many forms, including but not limited to recordings of classroom lessons, surveys from students, products of student work, the teacher's practitioner journal or record, and interviews with students and colleagues. This work is often done alongside university researchers or with other K-12 colleagues either within the same district or across districts. The process of participating in teacher research is, in itself, a form of professional development, aligning with several points in Drago-Severson's (2009) four pillar practices for growth which support adult learning in schools: teaming, providing adults with leadership roles, collegial inquiry, and mentoring.

Furthermore, it can be argued that teacher research promotes equity for teachers in terms of knowledge production. Teacher research challenges the notion that knowledge production in education can only occur at the university level (e.g. Anderson et al., 2007; Cochran-Smith & Lytle, 1993, 2009; Herr & Anderson, 2014; Rust, 2009; Zeichner & Noffke, 2001). This, in turn, allows teachers to be viewed as experts, with their own schools becoming sites for generating knowledge (Christianakis, 2010; Cochran-Smith & Lytle, 1993, 2009). Teacher researchers may borrow methods from traditional academic research, but being situated as insiders in the school community gives them a unique perspective that outside researchers would have a difficult time accessing (Anderson et al., 2007). A particularly strong example of this can be found in Herr's work (Anderson

et al., 2007; Herr, 1999) with students of color who were interviewed about institutionalized racism at their school. Herr was a counselor and teacher at the school; therefore, she had pre-existing, trusting relationships with the students she interviewed and worked with in focus groups. Because these students already trusted Herr, it can reasonably be assumed that they were more likely to provide her with open and honest answers about institutionalized racism in their school than they might give an outsider.

Moreover, action research and other forms of teacher research “can be a way for teachers to push back on outside-in reforms and expand the limited autonomy they still have” (Anderson et al., 2007, p. 55). Specifically, when teachers examine what is happening in their own classrooms, it usually stems from something connected to the larger world of education. For instance, a teacher research group may want to examine the effect of the new Next Generation Science Standards on student learning. These new science standards are an outside reform pushed onto teachers, but by conducting their own research on the effect these standards have on their own students, teachers can demonstrate some autonomy by not blindly accepting the reforms as the be-all-and-end-all. The results of this research can then be used to drive local instruction or can be presented in a broader context outside of their district. This means that by conducting teacher research, practitioners can blur the lines between what counts as local knowledge and what counts as global knowledge (Cochran-Smith & Lytle, 2009). This is also a way for teacher-driven professional development to align with ESSA’s emphasis on professional development that focuses on educators helping students meet state academic standards, but does so on the teachers’ own terms with how that work is done.

Additionally, schools are hierarchical organizations, where teachers typically do not have power over their own learning. That power typically rests with the school or district administration or even state or federal officials via mandates. Anderson et al. (2007) "see action research not merely as individual practitioners trying to improve their practice but as part of a larger social movement that challenges dominant research and development approaches that emphasize an outside-in, top-down approach to educational change" (p. 7). They further explain how this empowerment is possible because practitioners are becoming the creators of knowledge rather than just consumers. From a social justice perspective, organic, teacher-driven professional development like action research affords teachers an opportunity to disrupt structures that are taken-for-granted and often paternalistic.

Therefore, there is a need to include in empirical literature the voice of K-12 classroom teachers and their experiences with teacher-driven professional development. My goal is to document professional learning within a self-designed teacher study group where the teachers focus on issues that are important to them. Because I am particularly interested in the possibilities of self-designed professional development, my dissertation study was guided by the following research question: *What does professional development look like when we, as teachers, gather to examine elements of classroom practice that are meaningful to us?*

In this climate, studies of teachers voluntarily pursuing their own meaningful professional development are timely and important. As a middle school social studies teacher, I have experience with professional development being done to me and needing

to keep a record of my professional development experiences in order to “justify” my learning. However, I have also found that my most meaningful learning experiences are those that occur more organically with my colleagues. In their study of effective professional development practices, Garet et al. (2001) noted several advantages for teachers participating in professional development with colleagues from the same school, department, or grade level. These advantages included, but were not limited to: shared experiences, shared curricular materials, and a shared focus on students’ needs and learning goals. Additionally, Zeichner’s (2003) review of studies focusing on teacher research discussed how ownership of the research and control over the process was essential for a positive professional development experience. With that in mind, I aimed to examine professional development as it occurs organically for members of a teacher study group where those teachers retain control over the process of learning.

To aid in making meaning of these organic communal learning experiences, I examined this work through the lens of James Paul Gee’s (2004, 2007, 2015) affinity space concept. In the next chapter I will discuss how teacher-driven professional development can be further explained by Gee’s affinity space concept. While Gee’s work is not directly related to professional development, it is about how people learn. Since professional development should be, at its core, about teacher learning, Gee’s work provides an interesting lens to view this process. This will be followed by a discussion of the literature on how adults learn, how teachers learn, how teachers learn in community, and how teachers learn in communities they initiated. Chapter three will outline the methodology for this planned study as well as the rationale driving my decision to design

a qualitative study drawing on elements from action research and teacher research. I will also describe my position as both participant *in* the group and researcher *of* the group as well as the steps I took to establish the trustworthiness of my work. In chapter four I will present the findings of this study, specifically focusing on how our study group did not have to replicate traditional professional development structures and how our work together could better be defined as developing professionally as opposed to merely going to professional development. I will draw connections back to Gee's work in terms of how our study group is an example of an affinity space in the physical world, and areas where Gee's affinity space concept could be expanded. Finally, in chapter five I will outline the implications my research has for the field of teacher education as well as potential areas for further research.

CHAPTER TWO: CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

Affinity Spaces

Although typically used to discuss learning in digitally-mediated spaces, the concept of *affinity spaces*, also called *passionate affinity spaces*, provide the conceptual lens for this study. This concept has grown directly out of James Paul Gee's work (e.g. Duncan, 2012; Duncan & Hayes, 2012; Durga, 2012; Gee, 2004, 2007, 2012, 2015; Gee & Hayes, 2011; King, 2012), which draws on discourse analysis and socio-cultural theories of learning derived from New Literacy Studies in combination with situated cognition, body cognition, and distributed cognition (Gee, 2014; Rogers, 2004). Even though this is a relatively new set of ideas in terms of thinking about how people learn, it usefully explains successful learning within groups of people who share interest—albeit to varying degrees—in knowing more about the same thing.

Affinity space is not about how professional development is done, but it is a way of explaining how people learn. It offers an interesting way to look at professional development, particularly professional development that claims to be grassroots and teacher-driven. The concept of affinity spaces reminds us that professional learning does not have to be confined to top-down models and externally-led professional development, which have seemingly become the norm. Therefore, it is interesting to look at studies—especially those that claim to be successful studies of teacher-driven professional development—from an affinity space perspective.

Meaning and context form the foundation of Gee's work on affinity spaces. Gee (2004) defines an affinity space as

a place (physical, virtual, or a mixture of the two) wherein people interact with each other, often at a distance (that is, not necessarily face-to-face, though face to face [sic] interactions can also be involved), primarily through shared practices or a common endeavor (which entails shared practices), and only secondarily through shared culture, gender, ethnicity, or face-to-face relationships. (p. 98)

Affinity spaces, then, rely on a shared interest or goal rather than strong personal relationships with other people who share the space. The space itself can be a physical space, a virtual space, or a combination of both. Affinity spaces are useful ways of looking at how people learn because they represent a more authentic, “on demand” way of learning, driven by personal and collective interests (King, 2012).

There are eleven features that comprise an affinity space, but not as a prescribed checklist; rather, these represent features an affinity space may have (Gee, 2004, 2007, 2015). To clarify, Duncan and Hayes (2012) explain that these eleven hallmarks represent “a set of potential attributes that can be used to describe the features of a given affinity space and in particular, affinity spaces that seem to be most supportive of learning. That is, they serve as a set of *features* that can describe an affinity space but are not necessary for one” (p. 7). In other words, these are features that an affinity space can have, but it is not necessary for an affinity space to have all of these.

Presented here is a brief synopsis of the eleven features that an affinity space can have:

1. *Common endeavor, not race, class, gender, or disability, is primary:* Common endeavor refers to the common goal or interest of the group being central to the

work rather than relying on personal relationships or shared characteristics between participants.

2. *Newbies and masters and everyone else share common space*: This attribute refers to participants of all experience levels being welcome as knowledge contributors to the space. *Newbies* refers to someone who is a novice at the task or in the situation and *master* refers to someone more experienced or knowledgeable in that area.
3. *Some portals are strong generators*: “Participants can produce—not just consume—content. New content is judged by the standards of the space” (Gee, 2015, p. 197).
4. *Content organization is transformed by interactional organization*: This refers to how interactions among participants in the space can change the content that brought them together.
5. *Both intensive and extensive knowledge are encouraged*: Specialized (intensive) and extensive (broad) knowledge of the shared affinity is valued.
6. *Both individual and distributed knowledge are encouraged*: Individual and collective knowledge from other people and materials in the affinity space are honored.
7. *Dispersed knowledge is encouraged*: Knowledge that is not from the affinity space itself and comes from another space is valued.
8. *Tacit knowledge is encouraged and honored*: “The space honors tacit knowledge (such as knowledge attained through trial and error) and encourages explicit

knowledge (such as the codified knowledge found in tutorials and forums)” (Gee, 2015, p. 197).

9. *There are many different forms and routes to participation:* Participation levels can vary among those in the space and can vary for each individual over time.
10. *There are lots of different routes to status:* There are various ways participants in the space can gain status.
11. *Leadership is porous and leaders are resources:* Leadership can be vague or shift with the leader/follower dynamic being fluid. There is not a strict hierarchy as “leaders become learners, learners become leaders, producers become consumers, consumers become producers” (Gee, 2015, p. 197).

These attributes can be used to examine teacher-driven professional development efforts. For instance, Brass and Mecoli (2011) examined a failed instance of a wiki, a website where multiple people can collaborate to change the content, used as an informal learning space for teachers. This wiki was created by a teacher after completing a master’s course taught by Brass. The teacher invited his classmates and other seemingly like-minded teachers. Ideally, this wiki would have been a place for teachers of all experience levels—newbies and masters—to come together to discuss matters of practice and educational policy that were important to them. Although the authors note that the wiki creator tried to distribute knowledge and leadership by giving full editing rights to all participants, very few teachers updated the wiki, even after an email plea was sent out by the creator; the page went dormant not long after it was created. Brass and Mecoli discussed how restructuring the wiki group as an affinity space may have resulted in

greater success. For example, the teachers surveyed commented that one reason they did not utilize the wiki was because they did not have strong connections with the people on the wiki. Having a common goal or endeavor would have superseded the need for strong personal connections. However, the authors explained that the wiki covered a large span of educational interests, grade levels, and subject areas and that this did not give participants a truly common endeavor that they could connect on, which is vital for an affinity space. As noted before, the aforementioned attributes of an affinity space are fluid, including that of a common endeavor (Bommarito, 2014). The common endeavor, as well as the expertise levels of participants, can change and grow over the course of the space's existence.

Although there are eleven potential attributes of an affinity space, the three that are most relevant to this study are: (a) common endeavor is primary, (b) newbies and masters and everyone else share common space, and (c) content organization is transformed by interactional organization. Further discussion of why these three attributes are the most salient will be in the next section. As stated previously, Gee's affinity space concept is not about how professional development is done, but it is about how people learn. Therefore, an affinity space conceptual lens will be used to examine professional development groups as spaces for teacher learning.

Teacher-Driven Professional Development: What We Can Learn From the Literature

Since my study is focused on what happens when teachers in the same district are able to conduct their own professional development on topics that are of interest to them, it is necessary to first examine the current literature on teacher-driven professional development. This means examining studies that may not be fully teacher-led and are directed in some way by the schools, but are still influenced by teacher interest in some way. Before we can do that, it is imperative to first examine how adults learn, then how teachers learn, then how teachers learn in community.

How Adults Learn

Knowles (1980) popularized the European concept of andragogy, a theoretical model associated with self-directed adult learning, to the American educational community. Andragogy operates under several assumptions: 1) ability to direct own learning; 2) reservoir of life experiences to draw from to assist learning; 3) learning needs based on changing role in society; 4) problem-centered and wants to apply new knowledge immediately; and 5) internal, rather than external, factors motivate learning (Knowles, 1980; Merriam, 2001; Teaching Excellence in Adult Literacy Center, 2011). Though once thought of as a departure from pedagogy and its associations with childhood learning, andragogy can now be seen as operating on a continuum of sorts with pedagogy as sometimes children can be self-directed learners in certain situations and sometimes adults may be reliant on traditional transmission models (Merriam, 2001). Moreover, andragogy is not seen as going far enough in its depiction of adult learning.

Hase and Kenyon (2000, 2007) argued that andragogy is still teacher-centric and leaves the learner with very little opportunity to be involved in the curricula. They advocated for a shift to heutagogy which is “concerned with learner-centered learning that sees that learner as the major agent in their own learning, which occurs as a result of personal experiences” (Hase & Kenyon, 2007, p. 112). It should be noted, however, that Hase and Kenyon (2001) view heutagogy as an extension of andragogy rather than a complete departure from it. They also advocate for action research and action learning as methods compatible to heutagogy:

Action research allows experimentation with real world experience where learning is in the hands of the participants. This learning can then be tested in subsequent learning cycles. This is as close to real world learning as one can get in a controlled setting where there is a legitimate observer who is also a participant and learner all at the same time. (2007, p. 113)

How Teachers Learn

Cochran-Smith and Lytle (1999) discussed three conceptions of teacher learning: knowledge-for-practice, knowledge-in-practice, and knowledge-of-practice. Knowledge-for-practice is associated with formalized knowledge of content areas and teaching strategies that teachers use on a daily basis. Knowledge exists separate from the learner. Codified knowledge of teaching, the push towards professionalization of the field, certification exams, and the idea of teachers as knowledge users rather than generators dominate this view of teacher learning. Knowledge-in-practice is associated with the practical knowledge of teaching, and is dependent on teachers honing their craft through

their actions in the classroom. Under this conception of teacher learning, Cochran-Smith and Lytle further state that “to improve teaching, then, teachers need opportunities to enhance, make explicit, and articulate the tacit knowledge embedded in experience and in the wise action of very competent professionals” (pp. 262-263). Teachers are viewed as generators of knowledge within this conception of teaching, and this learning is typically done in collaboration with other teachers, often along with a facilitator to help question beliefs and assumptions. Knowledge separate from the learner does not exist.

Knowledge-of-practice, likewise, does not view knowledge as existing separately from the learner, though it does not make any distinctions between formal and practice knowledge of teaching. Cochran-Smith and Lytle warn that this conception of teacher learning is not a synthesis of the other two conceptions, but rather

it is based on fundamentally different ideas: that practice is more than practical, that inquiry is more than an artful rendering of teachers’ practical knowledge, and that understanding knowledge needs of teaching means transcending the idea that the formal-practical distinction captures the universe of knowledge types. (p. 274)

In other words, there is an emphasis on locally generated practical knowledge, as well as how that knowledge can be expanded to the larger field of teaching or formal knowledge. These two constructs do not exist in isolation of each other. Also, within this conception, teacher learning occurs in collaboration with others via “teacher networks, inquiry communities, and other school-based collectives in which teacher and others conjoin their efforts to construct knowledge” (p. 273). Action research, teacher research, and other inquiry communities are associated with this conception of teacher learning.

Teacher Learning in Community

Parallels can be drawn between adult learning concepts like andragogy and heutagogy and teacher learning concepts like knowledge-for-practice, knowledge-in-practice, and knowledge-of-practice. For instance, action research as a means of learning and creating knowledge is congruent with both heutagogy and knowledge-of-practice. Since action research is often done in collaboration with others, let us look at the concept of learning communities.

In recent years, the term learning communities has become a popular term to refer to a plethora of teacher learning groups, such as professional learning communities (PLCs), teaming, mentoring communities, lesson study, study groups, action/teacher research groups, and inquiry groups, among other names (e.g. Drago-Severson, 2009; DuFour, 2004; Hord, 1997; Little 2012). For example, Hord (1997) noted that study groups and action research are two suggestions for fostering professional learning communities in schools. For the purposes of this study, any of these types of groups will be considered under the broader umbrella of learning communities, rather than getting bogged down in labels and the idiosyncrasies of the different types of communities (Many, 2009). It should be noted that the term professional learning communities (PLCs) has a very specific connotation and set of criteria and should not be used to describe “every imaginable combination of individuals with an interest in education” (DuFour, 2004, p. 6), which is why the broader term learning communities is being used instead, unless the term PLCs is used in the context of the original work, as it was with Hord.

The definition of learning community in this study is informed by Haberman (2004), Hord (1997) and Little's (2012) work.

Haberman (2004) defines a group as “a learning community when members share a common vision that learning is the primary purpose for their association and the ultimate value to preserve in the workplace and that learning outcomes are the primary criteria for evaluating the success of their work” (p. 52). Haberman also lists the attributes of learning communities as modeling (teachers guiding their own learning using the same principles they use with their students), continual sharing of ideas, collaboration, egalitarianism, high productivity, community, and practical applications. Hord's (1997) aspects of what she terms as professional learning communities include: supportive and shared leadership, collective creativity, shared values and vision, supportive conditions, and shared personal practice. Little's (2012) characteristics of professional community include: shared values and purpose, collective focus on and responsibility for student learning, improving student learning through collaborative and coordinated efforts, practices supportive of teacher learning “summed up as ‘deprivatized practice and reflective dialogue,’” and collective control over decisions (p. 15). Major common themes across all three authors are having shared ideas/values/goals usually with a focus on student learning and the importance of working collaboratively with colleagues. The attributes of learning communities for teachers can be reflected through Gee's (2004; 2007) affinity space concept, as demonstrated in the next section through examination of literature specific to teacher-driven professional development communities.

Teacher Learning in Collaborative Teacher-Driven Groups

In this section, I discuss what the literature says about collaborative teacher-driven professional development for educators who are in the same school district. The aim is to better understand how the attributes of Gee's (2004; 2007) affinity spaces concept can be demonstrated in face-to-face teacher-driven professional development efforts. Affinity space attributes informed but did not drive my analysis. For reporting purposes, it was useful to group these categories beneath three attributes of Gee's concept. I was very open to ideas outside the concept of affinity space as delineated by Gee, but what I found was that my analysis usefully coalesced around three particular attributes from the affinity space concept:

- common endeavor is primary
- newbies and masters and everyone else share common space
- content organization is transformed by interactional organization.

These three features of Gee's (2004; 2007) affinity spaces are reflected in the concept of learning communities. For instance, the idea of having a common endeavor aligns with Hord's (1997) attribute of shared value and vision or Little's (2012) shared values and focus. Newbies and masters and everyone else share common space is echoed in the collaborative and collective attributes across Little, Hord, and Haberman's (2004) characteristics of learning communities. And content organization is transformed by interactional changes is reflected in the change in classroom practice and school culture, which is at the heart of the work learning communities do.

The studies examined in this section did not explicitly tap into the affinity space concept as part of their frameworks, nor did they generate affinity spaces in the way that Gee originally argued for as part of a digitally-mediated experience. Duncan and Hayes (2012) explain that “the forms of shared knowledge, distributed expertise, and peer mentoring exemplified in affinity spaces—as well as their tensions, conflicts, and complexities—may offer a starting point for efforts that go beyond games and game-based learning, to foster the kinds of knowledge spaces and systems that will become increasingly important in all aspects of our lives” (p. 19). This suggests that the affinity space concept could be examined outside of games, game-based learning, and other digitally-mediated experiences. Therefore, the affinity space concept can be useful in helping to unpack how teacher-driven forms of professional development can be examined as legitimate learning experiences. It is hoped that this study serves as a starting point for examining how attributes of affinity spaces can be found in face-to-face teacher-driven professional development opportunities, helping to pave the way to the creation of more organic, grassroots teacher-driven professional development efforts.

Analysis of the literature suggested three ways in which teacher-driven professional development opportunities can be viewed as sharing attributes of Gee’s (2004, 2007) affinity spaces concept. Each of these attributes will be discussed in their own sections along with a detailed example from previous work from the world of digital literacies in order to set the stage for how this particular attribute has been used before to examine learning. The first attribute discussed is the role *common endeavors* play in teacher-driven professional development. This is followed by discussion of the concepts

masters and *newbies* as viewed in the kinds of professional development reported to the surveyed studies. The final focus comprises an examination of how Gee's concept of *content organization is transformed by interactional organization* (2004, 2007) can be used to view the changes collaborative teacher-driven professional development make outside the group itself as found in the literature surveyed.

Common endeavor or common focus is primary. A common endeavor is a key component to teacher-driven professional development efforts focused on collaborative teacher research (Arnold, 2002; Bintz & Dillard, 2007; Cawthon, Dawson, Judd-Glossy, & Ihorn, 2012; Chandler-Olcott, 2002; Clarke, 2012; Dever & Lash, 2013; Gilles, Wilson, & Elias, 2010; Murata, 2002; Parsons, Metzger, Askew, & Carswell, 2011; Roberts, Crawford, & Hickmann, 2010; Rock & Wilson, 2005; Ryan, 2016). It is this common endeavor that seems to bind the group together, not individual identities or their characteristics (Gee, 2004, 2007, 2012, 2015). The people involved might never work together or interact with each other if it was not for the common cause or interest that unites them. Gee (2012) illustrates this point by noting that two people with a shared passion for cat breeding might engage together in an online forum on the subject, but their personal characteristics like differences in age, political views, and race might prevent them from ever having met in the real world. It was their specific common interest that brought them together. When examining teacher research as a form of professional development, the common endeavor outweighs individual teachers' characteristics like grade taught, content discipline, and even teaching experience; thus

bringing together teachers who might not otherwise have the opportunity to engage together in discussions of practice.

A common instructional goal or implementation of a new curriculum element is frequently the goal of practitioners conducting teacher research (Bintz & Dillard, 2007; Cawthon et al., 2012; Chandler-Olcott, 2002; Clarke, 2012; Dever & Lash, 2013; Murata, 2002; Parsons et al., 2011; Rock & Wilson, 2005; Ryan, 2016), which superseded other aspects of the teachers' individual identities to bring them together. This was evident in Murata's study of four interdisciplinary teams of teachers who received support from the school to restructure their individual courses so they could co-teach with a colleague. What united these teachers was their shared desire to create interdisciplinary classes by means of co-teaching, to collaborate with interdisciplinary colleagues, and to develop "a more comprehensive learning experience for their students" (p. 69).

Similarly, Chandler-Olcott (2002), Clarke (2012), Ryan (2016) and Parsons et al. (2011) exemplified how a group of teachers working together around a common endeavor can transcend grade, content, and other individual factors that might otherwise keep teachers from working together. The elementary teachers in Chandler-Olcott's study were in a teacher research group that came together via a grant that they applied for and received. The umbrella topic for each year was the common endeavor that brought these teachers together, along with the desire to conduct teacher research. Likewise, the teachers in Clarke's study were brought together with the goal of promoting the use of technology in the classroom, though they were encouraged to individualize their research to something meaningful to their own practice. The early elementary school teachers in

Ryan's (2016) study were provided the opportunity by their principal, in lieu of several traditionally structured faculty meetings, to create inquiry groups around various topics of self-interest.

The teachers in Parson et al.'s study (2011) were frustrated by a drop in literacy test scores at their Title 1 elementary school and worked with the administration and a local university to change their language arts curriculum. The administration focused professional development sessions around the teachers working on project-based literacy lessons, which aligned with the goal the teachers had. In these studies, the teachers were the impetus for the change at a school-wide level, although in Parson et al. the structure for professional development was ultimately set up by administration based on what the teachers identified as an issue, whereas in Chandler-Olcott (2002) the teachers had a much stronger, direct involvement to the work being done. Despite these differences in the level of teacher involvement in driving the professional development, it is clear that the common endeavor of improving instruction brought together teachers in these studies.

Murata (2002), Chandler-Olcott (2002), and Parsons et al. (2011) demonstrated how a common endeavor created by the teachers was then brought to administration for additional support. However, this is not the only way a common endeavor can bring teachers together. The studies examined here also suggest that the impetus for common endeavor can be provided by an outside organization (Cawthorn et al., 2012) or by district officials (Dever & Lash, 2013) that is then co-opted by the teachers for their own professional development purposes. Common interests that bring teachers together do not have to be confined to a specific classroom goal or practice, either, but can also include

some sort of in-common process. Roberts et al. (2010) provided a particularly salient example of an in-common process by studying the Master Teacher Program (MTP) which was a voluntary long-term professional development program focused on providing teachers with the opportunity to learn how to conduct teacher research. Other studies also demonstrated in-common processes like the desire to conduct action research (Gilles et al., 2010); to participate in a lesson study, where teachers collaboratively plan a lesson and critically observe each other teach it (Rock & Wilson, 2005); or be reflective practitioners (Bintz & Dillard, 2007). The common endeavor can also lie outside of the realm of K-12 students by focusing on teachers' roles as teacher educators with respect to student teachers in their schools (Arnold, 2002). In all cases, though, the teachers in these studies are brought together by some common driving force.

As stated earlier, the teachers in these studies were not part of affinity spaces in the way that Gee conceived the concept (2004, 2007), nor did the authors use affinity spaces as their framework for analysis. However, it is helpful to use Gee's (2004, 2007, 2012) attribute of "common endeavor as primary" over other personal factors to examine teacher-driven professional development. Allowing teachers a stronger say in their learning and development does not mean letting go of the concept of structure or advocating for setting up an "anything goes" situation. In fact, providing protocols and structure were things that the teachers in these studies wanted in order to be successful in their respective projects (Cawthon et al, 2012; Dever & Lash, 2013; Roberts et al, 2010; Ryan, 2016). It is important to note even within the traditional hierarchical power

structure of schools, action research and teacher research provided these educators with the opportunity to make their voices heard.

Thus it seems a common endeavor around which to bring the teachers together is one way to aid practitioners in the establishment of effective teacher-driven professional development. Furthermore, the teachers in these studies were not being “trained” in something they had little interest in; rather, they were active participants in either generating their own common endeavor (e.g. Arnold, 2002; Chandler-Olcott, 2002; Murata, 2002; Ryan, 2016) or self-selecting aspects of the work within the provided common endeavor (e.g. Cawthon, et al., 2012; Dever & Lash, 2013; Gilles et al., 2010; Roberts et al., 2010). In each of these studies, teachers had some control over their learning. But without a common goal of some sort, these teachers would most likely have not had the chance to work together in such a direct fashion. However, it should be noted that a common endeavor is not always enough for teachers to do their work successfully if the structure or protocols group members felt they needed to function cohesively was lacking (e.g., Cawthorn et al., 2012; Dever & Lash, 2013).

Newbies and masters and everyone else share common space. Another attribute of an affinity space that is helpful in examining collaborative teacher research professional development efforts is the concept of newbies, masters, and everyone else sharing a common space. Gee (2004) explained that “the whole continuum of people from new to experienced, from unskilled to highly skilled, from minorly interested to addicted, and everything in between, is accommodated in the same space” (p. 85).

Simply put, people are brought together in an affinity space due to a common endeavor,

as discussed earlier. Since individual characteristics like age, race, or gender take a backseat to their common interest, it makes sense that experience with the area of interest would also be less important. Someone new to the topic of interest can have access to the group the same way as someone who has been a part of it for a long time. Durga (2012) provides an example of this in her examination of players of the video game *Civilization* who learned to program via an online affinity space *CivFanatics*. Her work focused on three players, each with different experiences at modding (modification of game content). Mike was self-described as a “mod-player,” someone who created mods in addition to his primary goal of playing the game; Andy saw his ability to mod as a way of improving his gameplay; and Will was a hobbyist programmer with little interest in playing the game itself. All three players were masters in one sense but a newbie in another. For instance, Mike was more of a master in gameplay and took part in multiplayer games, but did not put a lot of emphasis on his ability to mod; Durga was unable to find any user-created maps or mods created by him. In contrast, Will was perhaps a master at programming and modding, but more of a newbie in playing the game since he really did not focus on gameplay.

Similarly, the teachers may be newbies and masters in different ways during their various research projects. Years of teaching experience is typically what comes to mind when referring to teachers as novices or veterans. A number of the studies in this review explicitly noted working relationships between newer and more experienced teachers (Arnold, 2002; Gilles et al., 2010; Murata, 2002; Rock & Wilson, 2005). In Gilles et al.’s study, the action research group at Parkland Elementary School was mandatory for all

participants in the Teaching Fellows master's program (an induction program for all new teachers receiving a master's degree through the school's partnership with the University of Missouri-Columbia). These teachers were new to classroom teaching. The program was open on a voluntary basis to all other teachers at Parkland, with around 38% of the teachers participating per year, giving this action research group a good mix of new and veteran teachers. Similarly, the seven teachers in Rock and Wilson's lesson study groups were made up of a mix of new and veteran teachers, ranging from one to eleven years of teaching experience.

However, when examining teacher research through the lens of affinity spaces, the number of years teaching is only one factor that plays into the newbies/ masters discussion. The newbie/master dynamic can also refer to experience with the common endeavor. In the action research group in Gilles et al. (2010), half of the teachers in the group had taken the action research course before and half had not. This means that half of the group could be considered newbies at conducting action research and half could be considered masters. Similarly, Murata's (2002) study of interdisciplinary team teachers had teachers with varying years of teaching experience and varying degrees of experience with co-teaching.

Sometimes the relationship between newbies and masters might not be evident in the group members but in the common endeavor that brings them together. The author in Arnold's (2002) study formed a study group with five other cooperating teachers at her non-traditional high school to discuss their experiences working with student teachers. Although the student teachers were not directly a part of the study group, their role in the

lives of the cooperating teachers were the focus of the group's discussions, causing the teachers to reflect on their newbie/master relationships with these new teachers.

Although all the study group members were masters as veteran teachers, their focus was to discuss their experiences mentoring newbie student teachers.

The idea of newbies and masters does not need to refer to the relationships between classroom teachers in this work. University partnerships are not uncommon in teacher research relationships (Anderson et al., 2007; Cochran-Smith & Lytle, 1993, 2009). These outside researchers typically provide access to resources or provide assistance facilitating the project (Zeichner & Noffke, 2001). Even though the teachers are the ones conducting the research, university partnerships are sometimes cultivated at the district level or by individual teachers to aid in the teacher research process. Most of these studies involved local universities or university researchers being a part of this work in some form (Bintz & Dillard, 2007; Cawthon et al., 2012; Chandler-Olcott, 2002; Gilles et al., 2010; Parsons et al., 2011; Rock & Wilson, 2005).

Gee's (2004, 2007) work does not discuss what happens when there is not a mix of masters and newbies. Cawthorn et al. (2012) seemed to run into this problem since the university research assistant assigned to work with the teacher researchers was a second-year doctoral student with some experience in drama, teaching, and research, but not with mentoring teachers. The authors called the teachers and the research assistant "relative novices to the journey on which they were about to embark" (p. 221). In this instance, there were no true masters in how to conduct this work together. Perhaps this was

another factor that contributed to the lack of success for this particular teacher research initiative.

It is important to lay some groundwork rules or protocols for interactions when bringing novice and veteran teachers together. The teachers in Rock and Wilson's (2005) study thought that they would have benefited from some sort of peer coaching and mediation training prior to conducting their lesson studies. Both newer and veteran teachers expressed that some type of mediation training would have prevented hurt feelings during the critiquing process. Additionally, the newer teachers expressed that giving feedback to more experienced teachers and critiquing their lessons was an uncomfortable process. Had the teachers received training in this process prior to their study, this could have mitigated some of the discomfort felt by all parties.

Again, the affinity space concept attribute of "newbies and masters and everyone else sharing a common space" can provide a useful lens in examining teacher interactions with each other in teacher-driven professional development settings. In the studies analyzed here, several specified relationships between veteran and novice teachers (Arnold, 2002; Gilles et al., 2010; Murata, 2002; Rock & Wilson, 2005). However, years of teaching experience are not the only way that the newbie/master relationship can be seen. This dynamic is witnessed with teachers new and experienced to whatever the common endeavor is, such as action research (Gilles et al., 2010) or experience with team teaching (Murata, 2002). Moreover, the newbie and master relationship might be seen with outsiders working with the teachers, such as preservice student teachers (Arnold) or university partnerships (Bintz & Dillard, 2007; Cawthon et al., 2012; Chandler-Olcott,

2002; Gilles et al.; Parsons et al., 2011; Rock & Wilson, 2005). Interactions between masters and newbies on all levels provide opportunities for teachers to engage in meaningful professional learning opportunities with colleagues and knowledgeable outsiders like university-researchers.

Content organization is transformed by interactional organization. When people interact within an affinity space, the nature of the space and the content will change over time. Gee (2004) used the example of the game *Age of Mythology (AoM)* when illustrating this particular attribute. He explained that when players interact in an affinity space like the site *AoM Heaven*, the game may be changed by the company through updates and patches based on what is discussed by players. Duncan (2012) provides another example of how the Flash-based game site Kongregate allows players to provide feedback via comments, forums, and at the time of the article the Kongregate Labs contest. Through these different spaces, players could provide feedback to the game developers, which in turn resulted in developers making changes to the games or using that information when developing future games.

While not exactly what Gee (2004, 2007) envisioned, the affinity space attribute of "content organization being transformed by interactional organization" can be a useful lens in examining teacher-driven professional development efforts. The transformation caused by teachers conducting teacher research collaboratively will look different than discussions in an online forum resulting in changes in a video game. While Gee's (2004, 2007) affinity space concept takes into consideration dispersed knowledge coming into the affinity space, he fails to discuss the impact of knowledge leaving the space. Since

the idea of knowledge dispersing out of the space seems to best fit, albeit not perfectly, with the idea of content and interactional organization, it is discussed here rather than examining it as the separate affinity space attribute of “dispersed knowledge is encouraged.” That particular attribute seems to only address bringing knowledge via other texts and resources into the space rather than discussing how the knowledge changes spaces beyond the original intent (Gee, 2004, 2007). However, this spillover effect as it could relate to affinity spaces is something that could benefit from further research.

When talking about her work conducting an action research group with students of color in her middle school, Herr (1999) suggested that “teacher research often has a ‘spillover’ effect; I think that there is something about merely *asking* certain questions within the context of a school that sends a ripple through it and begins to interrupt the way everyday practices are viewed” (p. 10). To clarify, even if the purpose of the teacher research group is to examine one’s own practice, there could be farther reaching effects that spill over into other areas of school life. Several studies in this review illustrate two ways that schools transformed due to the interactions of teacher-driven professional development groups creating some sort of spillover effect (Bintz & Dillard, 2007; Chandler-Olcott, 2002; Clarke, 2012; Gilles et al., 2010; Murata, 2002; Roberts et al., 2010; Ryan, 2016). The first way was through changes in classroom practices. The second way was through changes in school culture.

Both Bintz and Dillard (2007) and Murata (2002) discuss the spillover effect their teacher research had on their students. In Bintz and Dillard, a 4th grade teacher and the

school literacy specialist worked together to examine their work developing a new literacy and social studies curriculum via student research projects. Over the course of the three years of the study, the two practitioners began to let go of the district-mandated curriculum and began to drive instruction based on their reflection from the previous year. By the third year, the students not only negotiated the research topics but also the mode of presentation by shifting the format from a traditional paper to a museum-style presentation. Much as the teachers were giving themselves greater control over the curriculum, so too were the students gaining greater control over their learning experience. Furthermore, the changes that the teachers made to the curriculum and to their teaching came from their reflections, further illustrating how these teacher-driven professional development efforts result in meaningful teacher learning.

The high school team teachers in Murata's (2002) study caused a different type of spillover effect. Their work blended different content areas together, so that even the students no longer considered each class as separate subjects, but rather part of one learning experience. Furthermore, the teachers noted that their relationships with each other could cause a spillover effect into the lives of their students. Because they could see two teachers engaged in respectful disagreements over potentially charged issues like politics, the students learned how to have those same types of dialogues with their peers. Although Murata (2002) discussed change in classroom climate as a spillover effect of their work, this change can also be seen at the school or district level (Chandler-Olcott, 2002; Clarke, 2012; Gilles et al., 2010; Roberts et al., 2010; Ryan, 2016). For instance, as the school principal, Ryan (2016) created the climate for teachers to set up inquiry

groups in lieu of several traditionally structured faculty meetings. At the end of the first year, the teachers were also able to share what they learned in their smaller inquiry groups with the rest of the faculty. Although Ryan left the school during the middle of the second year of the study, he reported that the school continued the "Design Your Own Learning" sessions even after his departure.

In summation, the studies examined in this review suggest ways in which the interactions of these teacher-driven professional development efforts have had a spillover effect into areas beyond the scope of the teacher group. In these studies, this spillover effect influenced the teachers' work with students and classroom practices (Bintz & Dillard, 2007; Murata, 2002) as well as creating changes at the school or district level (Chandler-Olcott, 2002; Clarke, 2012; Gilles et al., 2010; Roberts et al., 2010; Ryan, 2016). Although this is not a perfect fit with Gee's (2004, 2007) affinity space attribute of "content organization is transformed by interactional organization," it is the attribute that can best express the changes in other areas of school life as a result of teacher-driven professional development efforts.

There is potential for the concept of affinity spaces to be used to help highlight informal professional development opportunities, and to provide a new way to look at professional development differently. Collaborative teacher-driven professional development opportunities, such as practitioner inquiry through teacher research, are especially fertile ground for this type of examination. Although the studies examined here were all collaborative teacher-driven efforts, none of these studies used affinity spaces as a framework for their study. It would be interesting to see if studies conducted

with this framework in mind would emphasize the same attributes discussed above. That is why my study used affinity spaces as a framework for examining a group of teachers conducting their own learning experiences in a group environment. I wanted to see if these same attributes were evident when examining the work my colleagues and I conduct with each other.

Additionally, none of these studies included online professional development efforts, though Ryan's (2016) study did have teachers set up groups initially using a shared Google Doc during a faculty meeting, professional learning did not happen in that online space. Since the affinity space concept was designed to look at learning in an online space, it would be interesting to see if these attributes would be demonstrated by teachers in the same district learning together in a partially or completely digitally-mediated space. This is especially timely as online communications in both real-time and asynchronously become common place mediums for learning. The teacher research study group I am in participates in digital communication, primarily through the use of a shared Google Doc initially, and later through Google Classroom. Therefore, it would be beneficial to examine the role this online space plays in teacher learning.

Finally, teacher research provides classroom teachers with an opportunity to become knowledge generators and focus on issues specific to their classroom practices. What teachers learn about their own practice via collaboration with colleagues can, in turn, have a spillover effect into the larger community of the school, the district, or even the field of education. This provides educators with an opportunity to push back against top-down mandates and reforms, such as No Child Left Behind and the Every Student

Succeeds Act. I was interested in seeing what this spillover effect looked like with the teacher research study group I am in. Does our work together have a broader reach beyond just the teachers participating in the group?

CHAPTER THREE: METHODOLOGY

The purpose of this study is to examine teachers' professional learning in a self-designed study group. For practitioners like me, the findings from this study may contribute to the knowledge base of teacher-driven professional development and serve as a data source for other teachers interested in generating their own professional development opportunities. Furthermore, this will contribute to the knowledge base of teacher development to demonstrate how meaningful professional development for in-service educators can be led by the teachers rather than administrators or outside experts.

In this section, I describe the implementation of this study, as well as my thought process behind those decisions. This was a practitioner research study that used qualitative data gathering methods such as recording group meetings and conducting participant interviews. I also discuss my position as a both participant and researcher in the study group community as well as the steps I took to ensure the trustworthiness of my work in this role. Finally, I discuss the limitations and significance of this study.

Methodological Approach

The question that guided my study was: What does professional development look like when we, as teachers, gather to examine elements of classroom practice that are meaningful to us? Given my research question and my situation as a teacher whose interests stemmed from experiences within my district, action research is an appropriate methodology. Although the definition of action research varies across sources, Herr and Anderson (2015) noted that

most agree on the following: action research is inquiry that is done *by* or *with* insiders to an organization or community, but never *to* or *on* them...Action research is oriented to some action or cycle of actions that organizational or community members have taken, are taking, or wish to take to address a particularly problematic situation. The idea is that that changes occur either within the setting and/or within the researchers themselves. (pp. 3-4)

I was already part of a pre-existing teacher study group in my district where we examined various aspects of our practice that were important to us and shared ideas together as a group to help each other grow professionally. Prior to our work in this group, participants of the group primarily received professional development via district in-service workshops, typically with someone talking at us. As a group, we selected topics of interest related to our practice that we wanted to explore together (see Appendix A for the topics our group examined and additional notes about the parameters of the study). As a local teacher I was an insider of this community, and we were looking to address a “particularly problematic situation” as we saw it (Herr & Anderson, 2015). Because I was an insider, I was an active participant in the group, and my participation in the group informed my own classroom practices.

I studied this process with my colleagues since “action research is best done in collaboration with others who have a stake in the problem under investigation” (Herr & Anderson, 2015, p. 4). Additionally, in their argument that community research should be recognized as much as individually conducted research Cochran-Smith and Lytle (1993) stated that “through inquiry, groups of teachers conjoin their understandings to

create local knowledge in and for their own communities” (p. 52). Through informal conversations with colleagues, I know I am not the only one who is tired of prescribed professional development and is looking for new ways to learn, so this research certainly has the potential to create local knowledge for our own community.

Furthermore, action research via teacher research as the research approach fits since the focus of this work is more internal than institutional. The changes would be within the participants themselves. I was interested in hearing what my fellow teachers had to say about the experiences of discussing their practice with colleagues and what we thought of creating their own professional development opportunities together as a group. Being part of a teacher study group with others makes sense for the context of this research since I wanted to know about teachers’ experiences learning to create self-driven professional development opportunities. According to Saavedra (1996)

socially constructed contexts, such as the teachers study group, facilitate opportunities for teachers to examine their own situations and nature of their positions in school and social systems. As teachers explore their lived experiences, emancipatory knowledge increases awareness of the contradictions within everyday understandings, and in doing so directs attention to the possibilities for social and personal transformation. (p. 272)

Teacher voice in formal, district-sanctioned professional development has been silenced, so analyzing an action research study group to examine what happens when teachers take back their own professional learning was appropriate for the context of this research. By taking control over their own learning, teachers are in their own way fighting back

against the paternalistic system that implies teachers do not know what is "good" for them. Moreover, Anderson et al. (2007) highlight the social justice aspect of this work by stating

as school practitioners become more active in sharing their work and action research become a broad-based movement, it has the potential to reject the dualistic hierarchies of university and school, knowledge and action, theory and practice. It has the potential to become a truly grassroots, democratic movement of knowledge production and educational and social change. (p. 32)

This means that breaking down the hierarchical connotations between schools and universities and what counts as knowledge can help pave the way for real social change in the field of education.

Action research via teacher research was the best fit for my particular research question, particularly through a teacher study group. I was interested in the personal changes within us as teachers and our work in a localized context. As a member of this community, I wanted to conduct this research collaboratively with other teachers. I know that my individual experience with teacher-driven professional development was not the only story available so I want to make the experiences of my colleagues in the study group known as well.

Context and Participants

The study focused on a teacher research project conducted in my school district, located in a suburban northern New Jersey town. Participants include the seven members of a pre-existing study group, which consists of six of my colleagues (Dean, Rachel, Ann,

Cassandra, Sophia, Jessica) and me. Three participants in the study group, including myself, are solely social studies certified. One participant was certified general education K-12 and highly qualified to teach social studies. Three participants are language arts certified and each has an additional certification in at least one of the following areas: social studies, English as a Second Language, elementary education, or school library media specialist. All three secondary schools in our district are represented as there is at least one person in the group currently working at each of the two middle schools and the high school. Several participants have had past experience at more than one of these schools in the district. For instance, a participant could have previously taught at the high school but now teaches at one of the middle schools in the same district. We are a group of six female teachers and one male teacher, with teaching experience ranging from eight to twenty-four years at the start of the study. All participants are white, which is reflective of the composition of the majority of our departments. The group meetings were scheduled based on our availability and were typically held once or twice a month for about forty minutes to two hours. We also conducted meetings online by posting asynchronously to a Google Doc for the first two years, then switched to Google Classroom during the third year.

This group originally formed during the 2014-15 school year with the purpose of studying technology integration in our social studies and English classes. We applied for and received a study group grant from a local university. All original group participants continued with the group into the 2015-16 school year (see Appendix B for the grant approval notification for the 2014-15 and 2015-16 school years). In the 2016-17 school

year two more teachers joined the group. We also received the study group grant from the same local university for these next two years as well. Institutional Review Board (IRB) approval to formally study the group was received in February 2015, but audio documentation of the group meetings did not start until April 2015. However, documents created by the group, such as the group meeting Google Doc, do exist as a written record before that and were also used in my analysis.

Data Sources

As a participant and researcher of the group, I recorded the group meetings for analysis of our collaborative learning. The group meetings took place as they usually do as my research did not alter the meeting structure. Meetings are conducted in fairly informal fashion, where the conversation is driven by group members' thoughts and questions. We typically meet once or twice a month, either in one of our classrooms or off-site at a local restaurant for anywhere between forty minutes to two hours. I transcribed and analyzed the data to see what could be learned about teachers creating their own professional development together. In addition to meeting transcripts, documents created by the group were also analyzed as ancillary data. These documents were generated by the group via Google Docs and Google Classroom, and include items such as online meeting notes where members of the group participated in virtual discussions as well as a collectively constructed table about experiences and lesson ideas using different educational technologies.

Furthermore, interviews with participants were conducted to supplement the data provided from the meeting recordings. Each participant was interviewed in either the

summer or fall of 2016 in a follow-up interview lasting approximately thirty minutes. I was also interviewed by one of the other participants in order to record my own experiences. My goal in conducting these interviews was to get an explicit perspective from participants about the ways in which this teacher-driven professional development works for them and why they continued to be a part of this group, even after the initial 2014-15 grant period ended. Therefore, these interviews were semistructured (Merriam, 2009), meaning that although some questions were predetermined, the conversation was guided by the overall topic of professional development to get a sense of each participant's history with both traditional and non-traditional forms of professional development (see Appendix C for sample semistructured interview questions).

Additionally, I kept a researcher's journal to ensure the consistency and dependability or reliability of this study (Merriam, 2009) as well as to serve as a record of my thoughts during this process of working with my colleagues (Anderson et al., 2007). Data analysis was ongoing throughout the study, and these documents served as valuable data sources as they provided additional insight into the research question (Merriam, 2009).

Data Analysis

The constant comparative method derived from grounded theory (Charmaz, 2010; Glaser & Strauss, 1967; Merriam, 2009) was used to examine similar themes and emerging patterns in the data. A basic open-coding process was used to analyze the data (Merriam, 2009; Saldaña, 2009). However, an initial round of data gathering and analysis was conducted with this same study group, and the codes generated in that initial

work suggested codes that would be helpful in more lengthy study (see Appendix D for sample codes from the initial round of data gathering). Gee's (2004, 2007, 2015) work on affinity spaces also provided the basis for some of my codes. While Gee's work informed my analysis, I remained open to other constructs. Data analysis was an ongoing process, and codes evolved and changed over the course of the study.

In order to help me make meaning of my data, I used memo writing. Saldaña (2009) provided eleven examples of different analytic memos, though he also noted that "all memos are analytic regardless of content" (p. 33). Furthermore, memos allowed me to make connections between my data and to help identify biases and assumptions about my work (Charmaz, 2010). It was helpful for me to create a memo from each of the meeting transcripts and use those to play with patterns or themes that emerged from the data. I also created memos around various overarching themes that emerged from the transcripts of meetings and interviews and used those to better refine the concepts that would eventually form my findings (see Appendix E for a sample memo I created after reading one meeting's transcript).

Ethics

As my study involved research on human subjects, I needed permission from the Institutional Review Board (IRB) to conduct my study. As previously mentioned, I had already received IRB approval for an initial round of data gather as part of an assignment for an action research course I took. As the data became part of my dissertation research I applied for and received extensions to continue this work, which included a number of updates and changes to that initial proposal in keeping with the evolving nature of my

work (see Appendix F for initial IRB approval notification). While the risks are seen as minimal since participation in this group was voluntary, there was always the possibility that participants would not find the study group as beneficial or as interesting as anticipated. Participants were volunteers and were free to leave the study at any time. To help ensure the confidentiality of group members, pseudonyms were used in the collection, analysis, and reporting of all data.

Positionality and Trustworthiness

It is very difficult for me to separate my researcher identity from my professional identity, and I did not want to make the mistake of being an insider positioning myself as an outsider (Herr & Anderson, 2015). I am a middle school social studies teacher in northern New Jersey. I am also a researcher interested in the professional development of teachers. This research interests stems from personal experience. If I were not a teacher in this current political climate, I probably would not be interested in this topic. This dual role of being a participant and a researcher will be brought up in more detail in the findings of chapter 4 and the discussion of chapter 5 as it played such a vital part in this study. Since I am personally and professionally tied into my research I took several measures to ensure the validity of my work and to account for possible biases. The steps I took included: triangulation of data, member-checking, enlisting the assistance of critical friends, and utilizing a researcher's journal to examine biases and subjectivity.

The research approach which best fits the type of work that I conducted is action research in the form of a teacher study group, which was discussed in greater detail earlier. Action research shares some tools to demonstrate trustworthiness with qualitative

research, such as member checking and triangulation. However, practitioner research has the added need for the participant researcher to balance his or her identities as both participant and researcher. This necessitates different criterion for establishing trustworthiness. Herr and Anderson (2015) and Anderson et al. (2007) outline five criteria for action research, aligned with the goals of action research, for establishing trustworthiness: outcome, process, democratic, catalytic, and dialogic. Herr and Anderson (2015) refer to these as validity criteria; whereas Anderson et al. (2007) note that either validity or trustworthiness can be used until there is a newer term that better meets the needs of action research. For the purposes of this section, I will refer to these as validity concerns in reflecting the more recent publication date of Herr and Anderson's (2015) work. First, I will provide an overview of each validity criterion. Then I will address the methods used to establish the trustworthiness of this study.

Outcome Validity

Outcome validity has to do with outcome of the action and ongoing reframing of the problem. Action research is not linear, there is not a finite beginning and end point. There is no end point when the problem is officially solved because new questions come up during process. The action researcher can only hope to capture a particular portion of the process, but it is by no means the whole process. In examining the study group, my goal was to lead to a deeper understanding of professional development by reframing teachers as professionals who can design their own learning rather than being passive subjects who have professional development done to them. Additionally, the study group has kept changing its focus as new questions or problems presented themselves.

Process Validity

Process validity calls upon the researcher to not only participate in a series of reflective cycles but also to ensure the quality of the evidence used as data. Much as the study group needed to change its focus as new questions or problems arose, as the documenting researcher I also needed to change my focus as needed. Findings that originally seemed important gave way to other findings as new questions presented themselves. I remained open to this throughout the writing of this dissertation. This required ongoing reflection on the process as well as on the data.

Democratic Validity

Democratic validity can refer to the "extent to which research is done in collaboration with all parties who have a stake in the problem under investigation" but also the local validity in "which the problems emerge from a particular context and in which solutions are appropriate to the context" (Herr & Anderson, 2015, p. 69). Throughout our conversations in the study group, we were concerned with how our actions as teachers would affect not only each other, but our colleagues and our students. We thought of solutions and materials to purchase with the grant money that made sense to our local setting. As a researcher, I am in a position to present the voices of these teachers to a larger audience. While we are happy to continue our work together on a local level, this is a story that should be documented and made known. We are doing what teachers do every day, yet this teacher voice is often not heard in policy discussions or when making large scale educational decisions.

Catalytic Validity

Herr and Anderson (2015) note that while catalytic validity "overlaps with process and democratic validity, it highlights the transformative potential of action research" and that "the most powerful action research studies are those in which the researchers recount a spiraling change in their own and their participants understanding" (p. 69). A researcher's journal and memo writing served as important sources for recording the transformative changes experienced by both me and the other participants in the study group.

Dialogic Validity

Dialogic validity is concerned with the validation of the study. In other words, do the methods and the study's findings "resonate with a community of practice" (Herr & Anderson, 2015, p. 70)? As discussed in the next section, I worked with both critical friends and various members of my committee to seek validation with the findings. These various sets of people pushed back on my thinking, and would send me back to the drawing board to dig deeper to get to the bigger story that could be told. I also wanted to make sure the findings resonated as accurate to the participants in the study in order to make sure my interpretation of our experiences together matched their understanding.

Methods Used to Establish Trustworthiness

Anderson et al. (2007) note that the aforementioned criteria for establishing validity or trustworthiness in action research "are intertwined and that a single strategy may help meet more than one of the criteria" and that they implore the researcher to "holistically ask whether the spirit of the criteria has been taken into consideration and

then indicate to the reader how they were addressed" (p. 147). With this in mind, I describe in this section the methods used to establish the trustworthiness of my study.

Triangulation. Triangulation, the act of cross-checking a variety of sources to see if the findings are consistent, is one of the most common tools for establishing the trustworthiness of a study (Anderson et al., 2007; Guba & Lincoln, 1982; Herr & Anderson, 2015; Merriam, 2009). This allowed me to be aware of my own personal biases. I welcomed my tacit understandings as a teacher and a participant in this study, but I also had to double check them against other data sources before committing to them as findings. For instance, if I made note in my journal that I thought something was an important finding, I also had to look for evidence of that same finding in one or more interview transcripts, meeting notes, or some other document created as part of the study group. My thought in the research journal is insufficient on its own.

Member checking and critical friends. Along those same lines, I conducted member checks with the teacher participants in this study group. Member checking, or as Maxwell (2010) calls it, respondent validation, "is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstandings of what you observed" (p. 283). Conducting member checks allows a researcher to ask participants for feedback on the emerging findings to make sure that the researcher is interpreting participants' experiences correctly (Merriam, 2009). For instance, after I transcribed and coded the data for the meetings, I sent my memo files to all of the study group participants to make

sure I did not misrepresent their words or experiences in any way. A few of the study group participants responded to my email and told me that they felt what I wrote accurately reflected their experience. I have also had frequent conversations with one particular participant, Rachel, to bounce ideas off of her. These informal conversations have helped to push my thinking and to work through a few road blocks in my analysis that I have had along the way. In this way, she also served in the capacity as a critical friend.

In addition to talking with this particular participant who served as an insider critical friend, it was important to me to enlist the help of independent critical friends who could help “problematize the taken-for-granted aspects” of my work (Herr & Anderson, 2015, p. 30). Because I am an insider to the community that I studied, it was vital that I found some way to ensure that I was not overlooking something that might seem irrelevant to me. This can be done through triangulation and member checking as discussed earlier, but that is often not enough in practitioner action research. Herr and Anderson (2015) note that “practitioners, because they *are* native to the setting, must work to see the taken-for-granted aspects of their practice from an outsider perspective” (p. 63). My critical friends consisted of several fellow doctoral students. One critical friend was from the same doctoral program I am in; therefore, he is knowledgeable of the expectations of the program, but he is not familiar with my particular research context. The other critical friends were from a different doctoral programs. They provided me with an outsider’s perspective on my research context and findings. These critical friends helped me to reaffirm my findings or pushed me in a new direction to re-examine what I

saw in the data. As these critical friends are also conducting action research dissertations, they are familiar with the expectations for trustworthiness in action research.

Additionally, the members of my dissertation committee, especially my co-chairs, have viewed drafts of my work and have provided "methodological guidance" and feedback to push my thinking (Herr & Anderson, 2015). I am fortunate that my committee members are well-versed in the expectations of action research, something that is not necessarily common on dissertation committees (Herr & Anderson, 2015).

Researcher's journal. There are also a number of steps I needed to take to address any personal bias towards my research. Merriam (2009) noted, "investigators need to explain their biases, dispositions, and assumptions regarding the research to be undertaken" (p. 219). As explained earlier, I am a teacher, and I am currently dissatisfied with how professional development is being conducted at an institutional level. I did not hide that when writing up my research. Similarly, I have had positive, though limited, experiences with teacher-driven professional development both in the study group in through other grassroots efforts like attending Edcamps (Swanson, 2014). By being upfront with this information, I hope to allow the reader to see where my values and expectations might influence the findings (Merriam, 2009). According to Herr and Anderson (2015), "biases and subjectivity are natural and acceptable in action research as long as they are critically examined rather than ignored" (p. 60). In order to critically examine my biases and subjectivity as well as the changes in my ways of thinking, I practiced reflexivity and keep a research journal in an attempt to "uncover one's own underlying epistemological assumptions, reasons for formulating the study in a particular

way, and implicit assumptions, biases, or prejudices about the context or problem” (Guba & Lincoln, 1982, p. 248). As both participant and researcher, my journal was both a source of data and a place to make meaning of the study group's work. Anderson et al. (2007) note that the reflexive journal is “also valuable in terms of catalytic validity, where researchers can trace their own reorienting and refocusing in light of the evolution of research” (p. 153). This was also a good place to pick apart my own biases and subjectivity as a researcher who is also an insider to the world being researched.

In summation, I am an insider to my research since I am a member of the community that I studied. Therefore, I am uniquely situated to study teacher-directed professional development since I have done so myself and continued to do so with a group of other teachers at a local level. However, because I am an insider to my context I must be careful to take certain measures to account for subjectivity and biases. Triangulation of data, conducting member checks, consulting critical friends, and practicing reflexivity through a research journal are all ways to help ensure the trustworthiness of my work.

Limitations and Significance

As with any study, there are certain limitations that need to be recognized although those do not take away from the significance of the work. As noted earlier, a few of the participants responded to my member check email and told me that they felt my analysis was an accurate representation of the group's experiences. It is possible that other group participants who did not respond to my email could have additional insights into the experience that I did not take into consideration. Additionally, I was only able to

conduct one follow-up interview with each participant after the 2015-16 school year to serve as supplemental data for the meeting recordings and transcripts. It is possible that a second series of interviews informed by later data analysis could have lead to different questions and, therefore, different themes.

Furthermore, the spiral-like nature of action research means that there is no set beginning or end point. Our work together as a study group started before I formally researched the group as part of this study, and continued after the data collection for this study ended. I recorded all of the meetings from the 2015-16 school year, but only one meeting from the 2014-15 school year once IRB approval had been received. Group generated documents and my researcher's journal provide information from those earlier meetings, though they cannot capture the full experience the way the audio recordings can. Additionally, our work together continued into the 2016-17 school year with two new people joining the study group. Those meetings were outside the scope of my study and therefore not recorded. However, our experiences in those meetings continued to inform my analysis of the previous year's data.

Finally, while this study is not generalizable, it can contribute to the larger knowledge base of how teachers learn and develop professionally. This is written from the perspective of a classroom teacher about the work of professional learning done collaboratively with other classroom teachers. This is a voice that is often missing from the professional development discussion as professional development is typically viewed as something done to teachers rather than teachers taking on an active role in their own

learning. It is imperative that this voice gets included in the ongoing discussion of professional development.

CHAPTER FOUR: FINDINGS

It is a scenario that plays out in schools every day. Classroom teachers have to teach the same concepts or standards to their students as their colleagues who teach the same course. Imagine that two different teachers are tasked with teaching their students about archaeology:

- One teacher assigns students a reading about the process of archaeology and how artifacts are used by historians to reconstruct a civilization, especially when written records either are not there or cannot be translated. The article describes how historians can answer questions like "what did the physical environment where this civilization was located look like" and "what evidence suggests that this culture engaged in certain religious practices" by analyzing the artifacts. After reading the article, the teacher engages students in a discussion where they explain how a historian can tell what a civilization was like based on the evidence at hand. Students must be able to back their claims by citing evidence from the article.
- The other teacher provides students with a number of sample artifacts from a potential civilization. Students are told that no written records have been found yet for this culture, that these artifacts are the only clues that exist to tell us about this civilization. In pairs, students are tasked with answering questions about the physical environment that this civilization was located in and explaining how they can tell if this culture possibly engaged in religious practices. Students must be able to back their claims by citing evidence from the artifacts.

Let us assume that the teachers in the above scenarios teach in the same grade level at the same school. They administer the same post-assessment to their students and both sets of students are able to demonstrate their knowledge well. Was there a "right" way to teach this lesson?

Depending on your personal philosophy about teaching, you might find yourself siding with one teacher or the other. For instance, someone who puts a lot of stock into utilizing texts as a means for gathering information and discussions as a means for synthesizing knowledge, you might see yourself a bit more in the first teacher. If you are someone who leans more towards inquiry learning and having students work together to construct knowledge, then you might see yourself reflected in the second teacher's lesson. But, going back to the original question, was there a "right" way to teach this lesson?

So too we must ask this about professional development. Is there a "right" way to do professional development? When asked to reflect on their experiences with professional development, most teachers will probably describe sitting in a large space in the school like the cafeteria or the auditorium while listening to a speaker convey some information. It is possible that some teachers may describe experiences where they worked in breakout groups discussing topics provided by their principals or supervisors. Are either of these experiences the "right" way of doing professional development? More importantly, are these the only ways of doing professional development? When professional development opportunities are structured, are teachers viewed as vessels to be filled by outside experts or are these opportunities structured so that teachers can

collectively explore and create expertise on topics relevant to their own teaching practice, with teachers viewed as professionals capable of directing their own learning?

In this chapter, I focus on the question that guided my research: What does professional development look when we, as teachers, gather to examine elements of classroom practice that are meaningful to us? Yet in examining this question, other questions emerged: How hard is it for teachers to avoid replicating traditional professional development structures when given freedom? What made this work together a professional development *opportunity* versus an *obligation*? Is going to professional development different than being a developing professional? These are not questions that can be answered with a simple yes or no. Nor can I speak beyond the experience that this particular teacher study group had. But in documenting a piece of our journey together, I am adding to the field of education from the perspective of a teacher. For this particular group of educators, this particular experience was worthwhile. This particular experience showed us that it was hard to avoid replicating traditional professional development structures, though we were eventually able to do so. What we experienced was more than just attending a professional development but turned into, as of this writing, a three year journey of professionals developing. We learned to navigate the tensions between obligations and opportunities and learn in the space created between these two opposing concepts.

This chapter is divided in two major sections, in which I discuss the themes I constructed through analysis of the data. In the first major section I discuss how our study group engaged in meaningful professional development that did not necessarily

have to replicate traditional structures. I start with showing how we slowly shifted away from the traditional professional development structures of having a sole expert in the group leading teachers in a traditional school-based setting. I discuss how the idea of expertise can be individually recognized by each person in the group, how this expertise can be collectively generated, and push against the idea that expertise is an “all-or-nothing” dichotomy. Then, I examine how professional learning can happen outside traditional spaces by exploring how our study group learned together online and outside of school at a local restaurant. I also examine how these informal and non-formal learning spaces are congruent to the idea of an affinity space. I end that section with an examination of the role grant funding played in our group as both an opportunity to legitimize our work to the outside world and providing us with a common focus, but also as an obligation as we struggled to meaningfully spend it and still meet our needs.

In the second major section I explore how we, as a study group, developed as professionals during our work together rather than just merely attending professional development together. I start by looking at the professional changes made by certain participants in the group and how those changes redefined the role of the study group in our lives. I then look at how our classroom practice changed due to our work together, particularly in the areas of learning how to evaluate educational technology, reevaluating what counts as literacy in the classroom, and ending with a discussion of how meaningful teacher learning occurred in this affinity space that we created. I end this section by examining the ripple effects of our study group and how what we learned from our work

together did not stay contained within the parameters of the group. We shared what we learned with colleagues in our district and the larger community of educators.

"Taken for Grant-ed ": Meaningful Professional Development Does Not Have to Replicate Traditional Structures

Just as the two teachers in the example earlier utilized two different ways to effectively teach the same concepts about archaeology to their students, so too can teachers find different ways of enhancing their own professional learning. Imagine that two different teachers want to find out more about an educational technology program that they are each interested in utilizing with their students:

- One teacher finds out that a local university is having a workshop showing teachers how to use that program. She attends the workshop, listens to a speaker demonstrate how to use the program, is then given time to try the program herself with guidance from the instructor, and leaves the workshop with a certificate of professional development in hand. This teacher feels that she can successfully implement this program with her students in upcoming lessons.
- The other teacher gathers several of his colleagues together. They have all expressed interest in learning to use this program. They meet after school at the teacher's house and experiment with the program. They learn to use the different features and discuss ways that they can use this program in their lessons. Two of the teachers even plan a lesson together that they will implement next week in their classes. None of the teachers leave this session with a certificate of professional development, but all of the teachers left feeling excited to try this

program and feel they have a better understanding of how it works.

In both scenarios, the teachers involved felt prepared to implement a new-to-them piece of educational technology into their classes. The type of technology is irrelevant. It does not even need to be technology. Picture the same scenarios with a reading strategy or some other concept that is new to a particular educator. Does it matter that this teacher learned how to use it in a formal workshop or in a less formal setting with colleagues? In the first scenario, this teacher attended a traditional form of professional development and found that session to meet her needs, but that is not always the case. There are times where traditional forms of professional development do not meet the needs of the teachers in attendance, and sometimes even leave those teachers feeling like they did not learn anything at all. The teachers attend the session because they are obligated to do so, but they do not find it to be a meaningful learning opportunity. If teachers find alternative ways of expanding their professional knowledge outside of district provided opportunities or structured courses/ workshops at universities, like the teachers in the second scenario, then why do recognized professional development opportunities still take on more traditional features? If the setting does not matter so long as learning took place, then why is professional development often only recognized as such if it "looks" a certain way? As teachers, we have an obligation to ourselves to find meaningful professional development opportunities in order to learn and grow in our practice. This should be what drives professional development, not just collecting certificates of attendance to assure district administrators that we have met an annual requirement of district-sanctioned learning.

But even when teachers get together in a less formal setting to create their own professional development opportunities, there are still struggles with structure. When my colleagues and I got together to form our study group, we initially struggled with recognizing that our self-directed professional development did not have to "look" a certain way. When puzzling through this with some critical friends, one person made the comment that our study group work was "taken for granted" because we had received a \$500 grant meant to help us work together in a teacher-driven study group, but because we were taking for granted that professional development needed to look a certain way that we inadvertently were replicating traditional structures. However, as time progressed, our interactions within the study group shifted to look less like traditional professional development structures. In this section, I examine how we, as a group, eventually started to break the rules of traditionally structured professional development. First, I describe how knowledge in the group generated our collective expertise, not solely from one lone expert. However, it did take time for us to reach that point. Then, I explain how the setting of our learning migrated from traditional classroom spaces to less traditional settings. Finally, I discuss how the grant money that we received was a driving force in helping us achieve our goals, but did not dictate what our work looked like. This is especially important when considering that professional development does not have to cost a lot of money to be meaningful.

"I Felt Like I Was Just Showing People How to Do Things . . . I Wanted It to Be More of a Dialogue": Meaningful Professional Development Does Not Have to Be Led by a Single Expert

Typically as a society, we look to the most knowledgeable person, the most experienced person, or the person with the highest status to be the expert. Traditionally, the professional development experiences that teachers come to expect involve an expert leading the group in some way. It is often overlooked that teachers contain a wealth of knowledge from their experiences that can, and should, be tapped into. Knowledge can be constructed by teachers working together; knowledge does not have to be transmitted by a so-called expert to the novices in the room.

As teachers, our status is often judged by how long we have been teaching. The longer you have been teaching, the more of a master you are considered to be due to your experience. In our study group we could all be considered masters, or at least not really newbies, in the field. No one in the group has fewer than eight years of teaching experience. Although our study group was about teaching, it was also about learning how to both work together as teacher researchers and how to learn about the different topics we were exploring. In that regard, we all had opportunities to take on the role of master or newbie, sometimes at the same time. However, our work together did not start off that way. Whether we were consciously aware of it or not, we started off replicating traditional professional development structures by having an expert in the room lead essentially a show-and-tell session of educational technology that the group was interested in.

Recognizing the individual expertise each person brought to the group. For a variety of reasons, including but not limited to my role as my school's webmaster and someone who often leads technology in-service sessions for the new teacher induction program, I assumed the role as group technology expert. I showed the rest of the group a piece of educational technology that seemed to meet the goals of what the other participants were looking for and demonstrated it for the group. We would then have a discussion and take turns exploring the applications of that piece of technology. For me, this was very frustrating because I was hoping that our group would be less like traditional professional development while still providing us with meaningful learning opportunities, which came up in the follow-up interview Rachel conducted on me:

Brenna: I felt like I was just showing people how to do things, and I didn't want it to turn into that. I wanted it to be more of a dialogue, and I feel like it did it eventually become that after the first couple of meetings, especially the meeting where you started to show us BitStrips. Do you remember that one?

Rachel: Yes, I do.

Brenna: After that one it was like, ok, it doesn't just have to be Brenna showing things. It can be other people, and then I feel like we became more, had more of a dialogue, and when we moved off campus so to speak and went to the restaurants, and it became much more conversational.

This excerpt succinctly summarizes the evolution of our study group, from one person being recognized as an expert, to a second person taking on the role of expert and once that became "OK" to do, then it opened the doors for all participants in the study group to

share their own knowledge and expertise. This then allowed us to make other changes to our study group that made it look less like traditional professional development structures.

But how did we get to that point? Although I spent the earlier meetings as the expert on technology, Rachel asked if she could show the group how she recently tried BitStrips for Schools with her students (see Appendix G for descriptions of the various technologies our study group examined that are referenced in this chapter). I was thrilled to turn over the meeting to someone else so I could truly become a learner and full participant in the group, rather than the de facto expert and learner. Many of us had seen BitStrips online in social media, though none of us had previously considered its application in the classroom. Rachel shared with us samples of the editorial cartoons created by her eighth grade pre-honors students for the book *Flowers for Algernon* where they took on issues like the treatment of the mentally disabled and ethics in science. Rachel helped members of the study group set up a BitStrips for Schools account and added us as "students" to her class. She walked us through the process of how to create characters and scenes, showed us how to monitor usernames and passwords for student accounts, and fielded questions from the other participants in the study group.

Several times, Rachel mentioned that she had only started using this program two days earlier with her students, but was excited to share with us what she had learned from the experience. She also noted that although a few of the students were a bit "goofy" with the program at first by spending time creating silly looking avatar characters, the motivation from students was high overall to use this program to complete the artistic

portion of their editorial cartoon project. Later in the meeting, we discussed as a group how we could use this program in other classes. For example, the idea came up that it could be used in social studies to create a timeline of events by having students make several different BitStrip panels and then cut them out and paste them together to create the timeline.

Although Rachel, as the person with experience using BitStrips, took on the role of expert at this meeting, our suggestions for the application of this program were not dismissed. We had seen how this could be used in an English class, so conversation shifted to how it could be used in social studies. Since the current unit of study was about the ancient Greek civilization, that turned out to be the focus of our examples. Dean and I discussed the possibility of taking an article we had used in class about education in Sparta and how students could use BitStrips to make a timeline of a typical Spartan soldier's life. I then suggested that we could use it to create a visual comparison between Athens and Sparta. Rachel then suggested how we could use the program with a reading about the Trojan War and have each student create a panel to form a collective story map. During this conversation, Sophia had been clicking on different background options and found one of the pyramids, suggesting that we could find a way to use this in the Egypt unit.

Even though the rest of us had not tried this program with our students, our thoughts on how it could be used were equally as valuable. Rachel was the only person in the room who had experience trying BitStrips for Schools with her students, so she was deemed the expert on that topic. However, she also admitted that she had only learned to

use it a few days earlier. By admitting her lack of experience despite being the expert on BitStrips in the room, she set the stage for the rest of the group to comfortably discuss ways of using it with our students. Though we still replicated traditional professional development by having an expert in the room leading the meeting, we were starting to chip away at the traditional construct of having an expert leading novices to a point of educational enlightenment. We were starting to see that we each had expertise and knowledge that was important and should be shared with the rest of the group.

It is important to note that we allowed ourselves permission to be vulnerable. Usually someone who learned how to do something a few days earlier would not be considered an "expert" at that task. Compared to the rest of the group, Rachel had some experience using BitStrips with her students, so she became the de facto expert on the topic. Additionally, Dean, Sophia, and I collectively generated ideas that we could bring back to our social studies classes. These factors allowed us to push back on what it meant to be an expert in our group and allowed us to see the role of experience and expertise in a new light.

Eventually, other participants in the study group started to take on the role of expert on certain topics of interest. Sophia did this when she led group discussions on the use of Achieve 3000. Sophia and Dean had both been on the district committee the previous summer to learn to use the program and find articles that could be used in the English and social studies classes. As a group, we also wanted to talk about ways to make it "our own," not just use it because we were told we had to. By reworking how we used Achieve 3000 for our own purposes, we were taking back the role of expert. We

might be told that we had to use it, but we could use it in ways that we felt made the most sense for our classes. As someone with knowledge about Achieve 3000, Sophia became the master on that topic and shared with us articles that matched topics in our curriculum. In addition to being part of the summer committee, she had also been given student access to the program earlier than most of the group, so she had a chance to learn how to use it in application. She shared that expertise with us at several meetings and fielded many questions from participants on how to use the program. She also encouraged us to add any articles that we found that worked well with our students to the Google Doc that she created during the summer committee work with Dean. Similarly, Jessica's experience using the library databases was a great help when we were working on learning more about Lexile levels. Not only did her past expertise as an English teacher help those of us who were not English teachers learn how to meaningfully use Lexile levels, but her experience using the district library databases helped us find a new avenue for using Lexile levels with non-fiction articles for research projects. In both of these instances, Sophia and Jessica were experts at something other members in the group were not, and they used that role to help the rest of us learn about that particular concept.

Expertise can be collectively generated. Traditional professional development structures usually have an expert to guide the group. As previously discussed, our study group meetings inadvertently started off with a group participant taking on the role of expert and leading a meeting centered around one specific topic. But what happens when there is no expert on a given topic? Can meaningful professional learning still take place? In our study group, there were instances where we did not have an expert on a

topic that we wanted to examine, and we all had to puzzle through learning about something new together. We did not need to rely on there always being a master of a topic or concept because we could use our collective knowledge as a group to question things and push our thinking while we tried to learn something new. For example, none of us really knew how Newsela worked when it initially came to our attention. Although, Sophia wrote to her son's teacher to learn more, we also did not wait around for an answer. Ann mentioned that she and Sophia found an article that they wanted to try with their students and asked "if we could we'd like to spend a couple of minutes here [at the study group meeting] trying to figure out how to set it up." We continued as a group to work through the different features together. We tried different features to see what they did and we discussed the various ways we could bring these non-fiction current event articles into our English and social studies classes. For example, we mentioned how being able to adjust the Lexile levels of any given article would allow us to use the same content with students who read at widely varying levels, making the texts more accessible for our students with special needs and our English language learners.

It is also interesting to note that a novice to a particular topic can raise questions that the experts of a topic do not necessarily think about. Cassandra was often the person who was good at questioning certain things that got our group talking and pushed our thinking. As someone who did not teach English and did not teach sixth grade, she did not use Achieve 3000 and had very limited exposure to it. As the novice to Achieve 3000, she pushed our assumptions and made us think about certain things from a different perspective. For instance, while we were discussing how Achieve 3000 is used in the

second marking period with sixth grade English classes and in the third marking period with sixth grade social studies classes, Cassandra posed the question "Do you think it would have been better if social studies picks it up first because it goes better with your curriculum?" This then provoked discussion about the strengths and weaknesses of the current order of utilizing Achieve 3000 in the two courses. We ultimately decided that even though content-wise it might make more sense to have social studies go first, we liked that the English classes set the ground rules of acceptable work completed in Achieve 3000. As Ann put it:

I think that now we are doing it second they're already coming into social studies with the idea that this is kind of a language arts based thing that they're doing so they're already coming with the sense that "well my paragraphs need to be in a certain form . . . You know how sometimes they write perfectly good paragraphs in language arts, and then they get to social studies and, you know, all rules of grammar and mechanics goes out the window. I think they're kind of importing that sense of the language arts needs into social studies, and I think we benefit from that.

Even though we decided to not ask our department supervisors to consider changing the order of instruction, it was important for us as a group to consider why we were doing things a certain way. Cassandra, as the novice or outsider to using Achieve 3000, challenged our assumptions and got us thinking about if we should change the current way of doing things. By working through puzzling ideas together and by relying on each

other to push our thinking, we were stronger together than individually. We collectively could create a type of expertise that we would not have been able to do individually.

Expertise does not have to be a dichotomy, it can be a spectrum. The words "expert" and "novice" are typically thought to exist as a dichotomy, that once one gains significant experience, that person is no longer a novice but has become an expert. However, expertise should be viewed as more of a spectrum, that one can exist somewhere on the range of expertise and that positionality is not fixed but rather is fluid. It is possible to be an expert and a novice at the same time. For instance, a mathematics teacher with over a decade of experience teaching calculus to high school students would be considered an expert in his or her course. Now that same teacher has been asked to teach pre-algebra to middle school students. This teacher could be considered a novice at teaching the content of pre-algebra or perhaps a novice at teaching middle school students. Similarly, if this mathematics teacher has now been asked to incorporate essay writing in mathematics, he or she might be considered a novice to teaching the writing process.

Similarly, participants in our study group reflected the concept of a spectrum of expertise. We might be experts in our particular fields, but novices when it came to topics not directly related to what we taught. By having a mix of both English and social studies teachers in the study group, we could be considered as being novices in the fields that are not our own. It was important for us to get perspectives and ideas from those outside our own content areas. Ann stressed this importance in her interview:

So I felt like going into it [being a part of the study group] I was a little worried about it, that it was going to be too much of a commitment. Then when I was in it I thought this is so great to have time to sit and really hear, not just what other teachers in my own discipline have to say but people who are not my discipline. That was really enlightening for me to hear how they did things, what things they were working on, how they would work with writing with their kids, how they worked with reading with their kids, and that was great. So I think one of the beauties of the group was having people outside of just one discipline. And then, you know, I was very excited to go ahead and do it in the second year, and I thought in the second year it really just sort of all came together.

Ann highlights how as a social studies teacher, she was able to get ideas about teaching reading and writing from the English teachers in our group. Similarly, Rachel mentioned "I like the fact that I could work with you as a Social Studies teacher because we were doing historical fiction [in her classes]." Rachel appreciated being able to tap into the expertise of the social studies teachers for historical context and suggestions of historical fiction novels to use with her students.

To an outsider looking in, our study group probably does not reflect what professional development traditionally looks like, and that is not a bad thing. Meaningful professional development does not always have to have an expert leading a group of novices. It *can* be that, but it does not *have* to be. Gee's (2004, 2007, 2015) affinity space concept provides a framework for ways meaningful learning can take place while the role of expert remains fluid. Masters and newbies are welcome and valued in an

affinity space. Although status in an affinity space can be linked to experience and expertise, it is not the only path to status. Nor are people excluded from the affinity space due to lack of experience as "the whole continuum of people from new to experienced, from unskilled to highly skilled, from minorly interested to addicted, and everything in between, is accommodated in the same space" (Gee, 2004, p. 85). In other words, people with all levels of experience are welcome in the space. In our group, we saw that several members initially took on the role of expert or master on a topic: I did for general educational technology, Rachel with BitStrips for Schools, Sophia for Achieve 3000, and Jessica for how to use Lexile levels. We also saw instances where novices or newbies pushed the thinking of the experts, the way Cassandra did for those of us using Achieve 3000 or the way the English teachers tapped into the knowledge of the social studies teachers for ideas for historical fiction. This reinforces the idea that an affinity space can, and should be, shared by those with varying levels of expertise. Similarly, learning in professional development spaces does not need to replicate traditional expert/ novice power structures. In order to do this, it must be recognized that learners in a professional development space bring with them a variety of expertise. The expertise might not be on the specific topic of that particular professional development, but what they have is of value, much the way Cassandra's experience as a teacher allowed her to question our ways of implementing Achieve 3000 even though she did not have experience with that program. Additionally, it needs to be recognized that expertise exists on a spectrum. One can be a novice and an expert at the same time. This spectrum of expertise means that professional development opportunities need to redefine roles

beyond having an expert talk to a group of learners. The learners in a professional development setting bring with them tacit knowledge and experience that inform not only how they learn but also how they can interact in a professional development space. An expert can share what they know with a group, but it is not the only way that teachers can learn, so it is not the only way meaningful professional development should look. If meaningful professional development does not have to contain traditional power structures, we also need to question if meaningful professional development has to take place in traditional settings.

" . . . It's Like We All Had an Epiphany.": Meaningful Professional Development Does Not Have to be Held in Traditional Learning Spaces

The role that physical location played in the learning context of this group cannot be overstated. The meetings in the first year and part of the second were held in classrooms at one of the middle schools. Later meetings in the second year were held off-site at a local restaurant. At the end of the first off-site meeting, group members brought up the charged atmosphere and heightened energy of this meeting compared to the first two of the year held at school:

Sophia: This was a really good meeting

Brenna: Yeah . . . We're solving world problems!

Sophia: We are, it's like we all had an epiphany

Dean: We should come here more often.

Sophia: I know

Brenna: Yeah. We should

Sophia: Could have every meeting here.

Ann: But that's the beauty of a group of people getting, I mean this is why collaboration is so important. You don't . . . kick these things around by yourself

Dean: It's also good that you don't have to do a write-up of your goal and then a conclusion . . . It's like you actually get time to do, to do stuff, to take care of things

This exchange demonstrates how various participants of the group felt that this meeting was extremely productive for our own learning, but it also illustrates perhaps the negative connotations of other professional development experiences held at school or in formal classroom settings. We trusted each other to be professionals and did not need to have measures in place that we were used to having to ensure that we were utilizing our time wisely. Sophia's comment "it's like we all had an epiphany" really highlights how we started to see that meaningful professional development did not need to replicate what we had experienced before, neither in the physical location of the learning nor in how the learning was structured. The two vignettes at the beginning of this section conjured images of two teachers who learn about an educational technology program: one attends a workshop held on a university campus and the other holds a meeting with other like minded teachers at his house. In both instances, the teachers involved felt meaningful professional learning had occurred, albeit both occurred in very different settings. Meaningful professional development does not have to happen in traditional locations, such as university campuses or school spaces like classrooms and auditoriums. It can, but it does not have to. For our group, meaningful professional learning occurred in two

locations not typically associated with traditionally structured professional development: online in a virtual space that we created and physically at a local restaurant. Yet, participants in the group still felt that meaningful professional learning still took place in these non-traditional locations.

Learning together online as well as in person. During the first two years of our study group, we utilized Google Docs as a place to record our thoughts and research outside of our physical meetings. We also used it as a place to write notes during some of our in-person meetings. At the beginning of our third year, we switched to our district's newly unlocked Google Classroom feature for this same purpose: to stay in touch between in-person meetings and to prompt our discussions the next time we were together physically. For instance, during the last in-person meeting of our second year, I recalled a contribution that Ann made to the Google Doc as a starting point for discussion:

Brenna: I know the possibilities [of resources to purchase] we put out, I think Ann you said on the sheet in the last week or two what are we doing. The book or we doing a subscription . . .

Ann: Right

Brenna: . . . of the electronic non-fiction. So I guess it kind of depends on what we want to do. And I think we started off with the electronic database kind of stuff, and I think then we kind of moved towards the books.

This exchange makes reference to a post Ann made earlier in the month where she said "I am wondering where we are with this. Are we hoping to spend the grant money on

buying some books for our classes? Or are we looking at spending the money on an online subscription to a leveled reading site?" Two other Google Docs had been created to write down notes about our research on books we considered purchasing and how those books would fit into each of our curricula. We then used this list to assign each person/ grade level group a selection of books to examine more closely:

Cassandra: So pick three off of that list? And see what works?

Brenna: Or, or in general if there's something not on the list, like if there's nothing lower [reading level] on this list, let's see what's out there.

Cassandra: Ok

Rachel: Should we write the Lexile levels on the list?

Brenna: We could, if it's [the Lexile level] available.

This exchange demonstrates how our online space was fluid and adapted to fit the needs of the group. Anyone in the group could edit the documents or add categories as needed. We spent a lot of our time together during the second year discussing how to utilize Lexile levels in social studies to help ensure that students were getting the most out of material by receiving readings on their level. This was something most of us had not consciously done before, but since it was part of an initiative that the English department was doing, and several of our group participants were in the English department, it made sense that it became part of our discussion as well. Therefore, we adapted our online discussion space to meet the ever-changing needs of our study group. Though part of our discussion reinforced this topic of Lexile levels that was discussed in school during

traditional professional development sessions, we adapted the topic to fit our own needs and similarly adapted our online learning space to reflect what would work best for us.

We continued to find ways to adapt our online learning environment to meet our needs, even if that meant changing the actual online space itself. At one point, we had to adapt our online space to help alleviate confusion caused by creating two Google Docs dedicated to researching books we wanted to purchase with the grant funds:

Ann: Is it [the Google Doc] already broken out, I can't remember, I haven't looked at it in a little bit. Is it broken out by grade level or is it just . . . ?

Rachel: Yeah it's by grade level and by topic

Ann: It is?

Brenna: I think so.

Ann: We were working with two different Google Docs at once . . . are we all on one Google Doc?

Brenna: Yeah, let's smush it into one

Rachel: Yeah, let's make one

Again, we continued to adapt our online documents in such a way to fit the needs of our group. In this case, we took two very similar documents started by two different group members, and blended aspects of each into one reference space. One would assume that if traditional professional development were to occur online, then the structure would most likely be more fixed and static. The online space would have a pre-established structure that would be followed and honored. A leader of some sort would have organized the space so it would not have gotten confusing and messy in the first place.

But for our study group, the "smushing" of the two Google Docs reflects the organic nature of the group. Things got a bit confusing and a bit messy, but it was easily self-corrected without needing a leader or an expert to come in and clean things up for us.

But did meaningful professional learning occur in this, at times, slightly messy and confusing online space? In his individual interview, Dean reflected on how the group's use of the main Google Doc as a place for discussion was meaningful for his own learning. Although Dean was not one of the most vocal participants on the discussion page, only posting two times over the course of two school years, he found it helpful as a reference point:

Honestly I think the way that we've used the technology too, like having our study group have like almost like a message board or a shared document online that we kind of use like a message board, I think that's really helpful because, I must admit, that's not something that I would initiate myself . . . So it has kind of opened up paths of communication and collaboration as well . . . I don't know if I would have taken the initiative to set up a shared Google Doc and treat it like a message board. So that's been really, really helpful.

Dean's experience is representative of how other participants in the study group felt about our non-traditional learning spaces. Dean highlights how collaboration and communication were facilitated in this space when we could not be together, but also could be used as a point of reference for when we were physically together in-person.

Learning together does not have to happen just in a school space. Just as our online learning space was open to adapting and changing to fit the needs of our group, so

too was the location of our in-person learning. As noted earlier, we started by hosting our study group meetings in classrooms in one of the school buildings. However, Sophia suggested that we should meet at a restaurant for one of our meetings during our second year working together. As evident in the quote at the beginning of this section, group participants noticed a definitive change in tone and structure of the meeting, changes for the better. Further reflection on this became evident in group participants' individual interviews. For instance, Dean noted in his interview that:

Even when we were meeting in certain buildings it could be kind of a drag because you spent the whole day in the building and then you're hungry, you're tired, you've been looking at the same walls for a while. But then we started grabbing dinner, and kind of coupling it with that, so it gives it kind of an air of informality, and I feel like my best professional development comes with just talking to my peers. It's kind of the same way. It gives it an informal thing where it feels like we are just meeting up, we're really getting a lot of valuable work done. So, overall I think the entire experience has been pretty good. It's been pretty enriching.

Throughout his interview, Dean stressed how important conversations with colleagues, not just those in the study group, are to his personal professional learning. He noted that conversations with his grade level partner influenced changes in his teaching practice:

. . . even though it's informal, and I didn't get a certificate at the end of that conversation, those are almost the things that I kind of get the most from, because

then I walk back into my class and say "alright I'll explain this point a little bit further." It's immediate use.

So it makes sense that for Dean, a less formal setting is conducive to his professional learning experience. In his mind, professional development does not mean something where you "get a certificate at the end" but rather should be something that he can meaningfully use as a teacher. However, Dean is not the only participant in the study group to stress the importance of the physical location where we conducted our meetings.

Ann stated:

I think for the second year because we moved out of the classroom, it was a good move. It really gave a whole different tenor to what we were doing and working on together. I felt like as a group, we sort of bonded, for lack of a better term, better in the second year, than in the first year sitting in somebody's classroom with various desks.

Ann felt moving the location of the meetings helped to not only facilitate discussions but also to facilitate relationships between the members of the study group. Although we all knew each other from working together, being outside of school allowed us to bond and have the types of conversations that we had not previously had in a school setting.

Several participants in their respective interviews all used the term "relaxed" in their explanations of what they feel happened when the group moved the meeting locations out of the district and to the restaurant. Rachel explained:

I think people were more relaxed. I liked having it off site. I don't know. It just seemed like a more relaxed atmosphere and it seemed like people were opening

up a little bit more. You didn't feel like you were in the school building. You're still stressed, you're still in the place where you just finished working. It was a more casual atmosphere and I think people are more apt to open up in a casual atmosphere. So, I preferred that actually.

Like Ann, Rachel noted the shift in the group dynamic where people were opening up more about their teaching practice as well as about their personal lives. Sophia similarly expressed that the conversational tone of the meetings felt more natural at the restaurant:

. . . it was more organic, I felt. Especially the second year when we moved our meetings to the restaurant. It was just more relaxed, and it's just colleagues talking about what we needed and what we felt the kids needed, and I think that that was very helpful to use and I really enjoyed being a part of it. I felt, aside from the Google Classroom [in district training], that was probably the best of professional development that I have done, that I have been a part of because I really felt like we all contributed to the direction and we all contributed to the final product.

Although Gee (2004, 2007, 2015) notes that a common endeavor is more important than personal relationships in an affinity space, for our group being more comfortable with each other and bonding meant that we could discuss thoughts and ideas that we might not necessarily feel comfortable sharing. Talking about our students and our practice is something very intimate for teachers. In order to do so without fear of reprisal, we would need to feel comfortable and relaxed with each other. In part, by changing the location of our meetings, we fostered an environment where we felt we could discuss our students and our practice freely.

Informal and non-formal learning in a professional development affinity

space. Can meaningful professional development occur in non-traditional spaces like an online learning environment or even in a restaurant? Eshach (2007) pushes back against the idea that learning that happens in school is formal and learning that happens outside of school is informal. Though his work centers on students learning about science inside and outside of school, it is certainly applicable to teacher learning inside and outside of school as well. He stresses that learning organized outside of school, such as going to a museum, should not be considered informal learning, but rather non-formal learning. He explains that non-formal learning is different than informal learning since non-formal learning is planned to a certain degree, but it is flexible and "the motivation for learning may be wholly intrinsic to the learner" and the learning is not evaluated the way it would be in a formal learning setting (p. 173). This differs from informal learning which happens spontaneously and without any structure or leadership.

The work that we did together in our study group could best be characterized as a combination of Eshach's (2007) descriptions of non-formal and informal learning. Our meetings were pre-arranged, structured to a point since we had an overarching topic we examined each year, and contained extrinsic motivation in terms of the grant money received which are some of the characteristics of non-formal learning. However, our study group also fit some of the characteristics of informal learning. We also were there on a voluntary basis, the participants as learners guided the instruction, our learning as not formally evaluated, and what we learned was non-sequential as we jumped around to various subtopics within our annual overarching topic. Just because we were more

relaxed at our study group meetings held at the restaurant did not mean that learning had stopped. We created opportunities for non-formal and informal learning for ourselves. Aspects of both informal and non-formal learning can be witnessed in affinity spaces (Gee 2004, 2007, 2015). The learning that occurs in an affinity space is voluntary, non-sequential, learner guided, and without formal evaluation—all characteristics of informal learning. The learning is also non-formal because there are structures and rules to affinity spaces. Gee (2015) notes that "such spaces are often organized well for deep learning and mastery and for the production of knowledge, products, practices, and ideas, not just consumption. However, they are not all organized the same way" (p. 239). All affinity spaces are not organized the same way. There is an organization to each one and a structure that participants follow in order to best facilitate learning and skill mastery. This type of learning affords more fluidity in both the structure of the space, either virtual or physical, but also allows more flexibility in how knowledge is gained and shared among participants within that space.

Dean's experience reading the group posts but not necessarily producing his own content is not uncommon in an affinity space. Gee (2004) notes that in an affinity space there is no requirement for how often someone has to actively produce content for that space. He even provides the example that less skilled participants may be "'lurking' on advanced forums where they may be too unskilled to do anything but listen in on the experts" (p.85). This means that that just because someone is less knowledgeable on a topic or lacks visible active participation, they should not be precluded from being a part of the affinity space. Gee (2012) later expands on this idea by stating:

People can lurk in the space or come for only a specific task, they can come and go, they can contribute a little or a lot, but if they have "stepped" inside the space, they are "in" it and their contributions, large or small, can "count." People can choose to be central to the space or not and they can use it as stepping stone to another space or as their more permanent "home". (p. 239)

Dean expressed in his interview that he found the group Google Doc discussion thread to be valuable to his professional development experience, even though he was not a frequent poster he was still part of the virtual space we created because he was a reader of the content produced. This type of learning would probably not be defined as professional development the way it is currently experienced by most teachers. However, Gee's (2004, 2007, 2015) affinity space concept provides a useful lens for helping shape the definition of professional learning taking place in non-traditional spaces. This was not informal learning but it was not non-formal learning either. We had a structure, though we were also willing to adapt our structure as needed. We also recognized that some group participants may not be as active posting online, but that did not mean they were not "getting" something out of the experience.

Similarly, our group was willing to step outside the confines of the school and take our professional learning experience to a restaurant, a physical location not usually associated with how traditional professional development is structured.

When asked about what "professional development" means to them, the study group participants were adamant about what they believed professional development should look like, and often times what it should not look like. In his follow-up interview,

Dean further expanded on why he felt our study group was a meaningful form of professional development for him compared to others that he was required to attend:

. . . things like our study group where we come up with lessons and I learn a lot of new technology from you and learn a lot about some of the other people, like the language arts teachers. I feel like I'm receiving some kind of professional development, as opposed to kind of just sitting there and checking off I've heard the speech . . . The study group has been beneficial and . . . I think the model that we're doing is more effective and really could be the future of professional development where instead of just having everyone down in the cafeteria: "We're going to watch a Power Point and then you guys can go home." Really having it be where we break up into groups and focus on one topic and really dive into that topic . . . I think this study group is a way more effective way of providing professional development, and even as I'm saying this I'm trying to think of like the logistics of that, and if it's even possible to do it. But, just as a kind of a dream this is the way to go about professional development. Like I said as opposed to "everyone watch a Power Point, and now you guys learned about that."

For Dean, professional development opportunities that allowed him to collaborate with colleagues and provided him with ideas that he could take back to his classroom were more meaningful than ones where he was required to listen to a speaker and sign-off that he attended. He even referenced the physical space of a school's cafeteria as one that he associates with professional development that was not personally meaningful. Similarly,

Sophia expressed that being able to directly apply concepts learned in professional development and having a choice in what those discussions would look like was important to her:

I have loved being part of this study group. I think that when colleagues just get together and have a general direction, and we just start talking, and we figured it out on our own through talking and nobody told us what to do, and nobody pointed us in a direction. It generated itself, it was more organic I felt . . . I think that teacher-driven professional development is the key to good professional development. I think that when you tap into the teacher's needs and interests, because they're the ones who are with the kids on a daily basis. They know what their students need. Not that administrators don't, but they're more removed from it. I think it definitely should be a grassroots effort, and I think that teacher input is important into creating valuable professional development.

To Sophia, it is the teachers, not the administrators, who should be directing how professional development should look because the teachers were the ones who interacted daily with students in the classroom. Teachers were more in tune with the needs of the students in terms of learning. Therefore, Sophia felt that teachers should be the one steering professional development. Rachel echoed this same sentiment:

I think the key thing with professional development is it should be teacher-driven, and I think it is better to have it that way rather than mandated, like I've had in the past, that's been my experience. Because you can choose the direction you want to go in. I mean not every teacher wants to do, let's say, literature circles . . . But you want to do

something you're interested in doing, not something that somebody says you have to do. I think once you start telling teachers you have to do this, is when you start to get resistance and you start to get people [who are] not as happy doing what they're doing. I think if they can choose the path, I think the people are going to be more successful for sure.

Like Dean, Rachel was not a fan of many mandated professional development sessions attended in the past. She further illustrates that by giving the teachers choice over their professional development activities, then not only are teachers going to get more out of it, but there will be less resistance and possibly an improvement in the learning climate for teachers. Being in a classroom, school cafeteria, or auditorium for professional development conjure images of being talked at and lectured to. These settings often do not facilitate collaboration or free-flowing conversations. These spaces are where teachers work, not necessarily where they learn. By shifting the physical space and moving our meetings to a restaurant, we were defining our professional development together as being different from the mandated sessions that we were required to attend. Similarly, by utilizing an online space for asynchronous discussion, we were not only creating a professional development experience that was not quite like anything we had done before, but we were also honoring the time demands faced by teachers who could not always physically meet at the same time as the other participants in the group.

"I Don't Know That the Money Was Ever the Impetus Behind It.": Meaningful Professional Development Does Not Have to Cost Much, Though Money Can be Helpful for Achieving Goals

As noted earlier, professional development that is recognized by school districts to count towards teachers' required professional development hours typically follow more traditional structures: taking place at a university or a district-approved workshop with an expert presenting information to a group that is "less knowledgeable" about the topic at hand. At the end, a certificate or other proof of participation is distributed to teachers have to validate that they learned something. In some ways, receiving a grant for our study group helped to "legitimize" our work together. In order to receive the grant money we had to meet certain qualifications and after those obligations were met, we would be issued certificates of professional development. However, we received those long after our district hours for the year were due in May, so we could not use them as official proof of professional development. Despite this, the \$500 grant money did provide the momentum for starting the study group. It helped to define the space, but it did not define the work that we did. Over time, we were paid in other ways, receiving intrinsic benefits that would have been possible without the extrinsic benefit of receiving a grant for our work.

Grant provided us with an opportunity to collaborate with each other but an obligation to spend it. One of the biggest intrinsic benefits we received was the opportunity to work together. Participants in the study group felt that the professional collaboration was more valuable than the grant money received. Jessica noted:

I don't know that the money was ever the impetus behind it. Sometimes we kind of struggle with what to even do with the money. So I think that there is value in it even if it's just a professional group getting together to talk, especially since it's not a mandated professional learning community thing where you have to write up what you did or you have to do this because the administration is telling you. It's just "hey we want to improve our practice." Let's get together and talk about stuff.

Jessica's comment about struggling with what to do with the money reflects how sometimes our conversations had to focus on what to spend the grant money on. We received \$500 each year which does not go very far when shared between seven different teachers from three different buildings and in several different content areas. We would sometimes have to pause our discussions about classroom practice in order to research and figure how to make the money work best for the most members of the group. For Jessica, the grant did not provide motivation for remaining in the study group. In fact, the grant money sometimes provided a hindrance to the work that we wanted to do since we had to shift our conversations away from our practice to what we want to spend the money on. While the money was very helpful the first year as providing legitimacy to the group to those outside of the group, it did not necessarily provide an incentive for study group participants to stay in the group.

Cassandra echoed a similar sentiment about opportunities to collaborate, rather than the grant money, being a motivator for her remaining in the group:

. . . it's never been about the money because we personally don't get the money. It goes towards the classroom which is great so it's not like I have a personal interest agenda for me . . . It's something that's not a waste of time like some of those developments I mentioned to you. It's, I think, something that's needed and more people should do and if you get the groups together and the right people that are willing to share . . . then it's worth it whether it's a grant group or not.

Similarly, the other participants in the study group said that they would continue working with the study group even if we did not receive the grant in the future as they felt being provided with an opportunity to collaborate with colleagues was meaningful to their own professional development.

Applying for a grant provided us with a common focus but one we altered as necessary to fit our needs. However, having the grant money did provide our group with a starting point and ultimately a focus for our work each year. When we applied for the grant each year we had to provide a shared common endeavor that our study group would focus on. During the first year our group formed, we focused on ways of integrating technology into our curricula. We shifted our focus to integrating non-fiction and historical fiction texts into our curricula for our second year. In our third year, we are focusing on utilizing Google Classroom as an online space to discuss literature, which takes elements from the first two years— technology and utilizing texts— and blends them together. Ann noted the significance of having a group common endeavor to strive for each year:

But we had an end goal. We worked towards the end goal, not that we didn't have fun, not that we didn't catch up with each other's lives, but we had a goal. To me, I think that that was one of the things that made this a valuable experience.

Had we just met as a group without a particular goal in mind, it is possible that we would not have had conversations that were as focused or may not have made steps to try new things together as part of our practice. We were still able to communicate congenially and even have fun together, but our work together shaped the overall tone of each meeting.

Though the grant money provided us with a specific common endeavor that we focused on, several other goals permeated through our work together. Had we not had applied for the grant money with a specific overarching goal, we may not have also uncovered these "unofficial" goals in our work as well.

Our focus on our students' learning was certainly our overarching focus no matter what we listed on our grant application as our common endeavor. Even when we were focusing on concepts like integrating technology or examining the use of various texts in our courses, the needs of our students was always in the foreground of our discussions. The specific term "social justice" is one that would most likely not be familiar to all participants of the study group; therefore, it is not necessarily a term we would use to describe our work. But the types of questions we examined and the work that we did could be defined as being socially just in nature. Making our class content accessible was a major concern for our group. Nearly every member of the group has classes with special education students, English language learners, or students without any formal

accommodations who were not performing on grade level. We started to shift our common endeavor from using technology to support reading to focusing on literacy in general. Numerous times throughout the meetings, members expressed concern for making work accessible to students with special needs or students with limited English proficiency. Sophia noted during one meeting that "anything that they can get their hands on to read is good" which foreshadowed our shift away from finding reading materials via a subscription database and concentrating more on finding a variety of books that can be accessible to all types of learners.

We did not want students reading at a lower Lexile level to end up with books that were several grade levels above where they currently were and not get anything but frustration out of the experience. We wanted to make sure that we were finding ways to help those particular students who are often marginalized by the traditional academic system. We were most concerned with making sure our English language learners and students with special needs were able to access resources that were written at their level in order to get the most out of the material, as evident in this exchange from one of our meetings:

Sophia: I think you might want to get some books that are lower level too. Like maybe a copy of ten. I have a multi-graded class that would benefit from a read aloud or something but would need a lower, much lower reading level.

Brenna: Or our ESL students.

Dean: Yeah, absolutely. Or the [named a self-contained specialized class for students with delays placing them several grade levels below their peers]

Sophia: Even in picture books there's value in those things too.

Later we decided to focus on finding middle school appropriate picture books to utilize in our classes as either read-alouds or as shorter readings for learning centers. We wanted to find picture books that were meant for older elementary or middle school students so that they would not be considered "babyish." Books in this particular format would have pictures to assist struggling readers, and would also be short enough to be utilized in learning centers so several copies could go a long way in a class of twenty or more students. Several members even experimented with reading picture books aloud to their whole class as either an introduction to a concept or to illustrate something more abstract in a concrete way. Ann acquired a children's picture book adaptation of the *Epic of Gilgamesh* and used that as a springboard to teach her 6th grade students about mythology in ancient Mesopotamia. I utilized a picture book about a real-life child's experience during the Great Depression with my 8th grade students and that led to an unexpected discussion in one class about their own family experiences with more recent economic conditions in the United States and abroad.

On the surface, picture books may not seem like a likely vehicle for helping to achieve social justice. However, by reading these stories to our students, Ann and I were providing a common experience for all of our students through the stories. Depending on their personal backgrounds, some of our students had more knowledge of various historical topics than others. Using picture books was a way of introducing the topics to all of our students by not alienating any student or group of students that may not have prior background knowledge with these concepts. Additionally, several of the titles that

we purchased had social justice themes to them, like one about the civil rights movement and school integration and one that examined the roles Frederick Douglass and Susan B. Anthony played in the abolition and women's suffrage movements. These picture books provided nonthreatening ways of bringing awareness to students on certain topics that they may not know about and provided us as teachers with student-friendly materials that allow us to broach these concepts in class. The grant money we received, though sometimes hindered our conversations and took us out of the flow of what we wanted to discuss since we had to figure out what to spend the money on, ultimately did provide us with the unexpected opportunity of opening our eyes to the idea of using picture books with our classes in this fashion. Since we only needed to purchase one picture book for each school on a given topic compared to needing a class set of novel-length books, we could make the limited funds that we had go a bit further.

Receiving a \$500 grant to do our work together provided us with a common goal each year that we work towards. Those goals of integrating technology or utilizing non-fiction and historical fiction also had deeper goals associated with them. Ultimately, our overarching goal was making learning accessible to all of our students. A major characteristic of an affinity space is a common endeavor. In fact, Gee (2004, 2007, 2015) notes that the common endeavor of the affinity space is primary, taking precedent over other things like the relationships between group members and even individual identities. In our study group, our common goals as outlined by the grant, as well as our underlying goal of making learning accessible to all students, took precedent over our individual features. It did not matter that we taught different subjects and courses. For instance, the

social studies teachers in the group did not shy away from discussions about literacy skills because they were not English teachers. What mattered to us was our students' learning. Having a grant gave us the financial means to purchase resources to put our ideas in practice. But ultimately the money did not define our work together.

Final Thoughts

In general, teachers tend to take for granted that professional development has to follow certain rules in order to "count." Those rules typically include traditional classroom or school spaces, an expert leading the discussion or just talking to the audience, and often some sort of recognition in the form of a certificate of attendance or approval from the district. While these rules that traditionally govern professional development can be beneficial to some teachers under certain conditions, it is not the only way that teachers can learn. Therefore, alternative means of what counts as professional development should be recognized. However, it can be difficult for teachers to "break the rules" of professional development when striking out on their own to create something new, in part because these more traditional structures are familiar. This was the case with our study group, and we did not bend those rules overnight. We had to reconsider the role expertise plays in the group, and ultimately not have one lone expert but rather value the expertise that each person brought to the table. Similarly, we adjusted our mindset of where meaningful professional development could occur, and that learning outside of school and online could be valuable to us. We also had to recognize how funding could help us achieve what we wanted to get out of professional

development in terms of collaboration and reaching our goals, but that money did not need to drive how we conducted our work.

Developing Professionally as Opposed to Going to Professional Development

Earlier I described a few imaginary scenarios involving two teachers introducing an archaeology lesson in very different ways and two teachers seeking professional development via two very different structures. These scenarios, though not based on one specific real-life example, are meant to provide a glimpse into the world of teaching. Teaching is a multifaceted profession, one where the individual must both be able to spend hours researching and planning effective lessons and yet be able to make split-second decisions in the classroom on concepts that they did not plan for. With so much variety in the daily life of a teacher, how can there be just one "correct" way to experience professional development? Like our students, teachers are learners who experience the world in unique and individual ways. So why do traditional professional development structures often assume that a teacher's career trajectory can be pigeonholed into a few different categories? Let us look at two commonly accepted paths teachers take as means of professional development:

- One teacher completes professional development hours in their own content area. This particular teacher would not be able to change his or her position in the field of education, meaning that he or she would remain teaching the same content and grade level previously taught. However he or she now has a deeper understanding of the content and how to convey that content knowledge to students.
- Another teacher completes professional development hours via university

coursework in order to eventually change his or her position in the field of education. This could take the form of earning an administrative license and leaving the classroom completely or perhaps earning an endorsement in a different content area and staying in the classroom but teaching something very different than what he or she previously taught. Either way, the teacher could eventually move to a completely different position than the one currently held.

Either the teacher stays in the classroom for his or her entire career or the teacher leaves the classroom to become an administrator. The type of professional development teachers can seek out either provides them with opportunities to improve their teaching or coursework that allows them to make the jump from teacher to administrator or to a different specialization while remaining in the classroom. In both cases these teachers have completed this professional development voluntarily as something that they wanted to do for themselves. They are developing professionally more so than if they were just merely attending professional development. But are these narrow tracks the only possibilities for teachers? Are there ways for teachers to become leaders in the school without leaving the classroom? In our study group, we not only found ways of changing our practice in the classroom, as illustrated in the first scenario, but also found ways of developing professionally. A key difference between what we did in the study group and what often happens to teachers attending professional development is that we did this for ourselves. We were not subjected to professional development that we *had* to attend. we made conscious decisions as professionals who wanted to find ways to *develop as professionals*. By doing this work, we also started to see our work spill outside of our

study group and start to ripple into the larger community. As Figure 4.1 illustrates, our learning started at the individual level, but rippled out not just to other members of the study group as might be expected, but to others outside of our group.

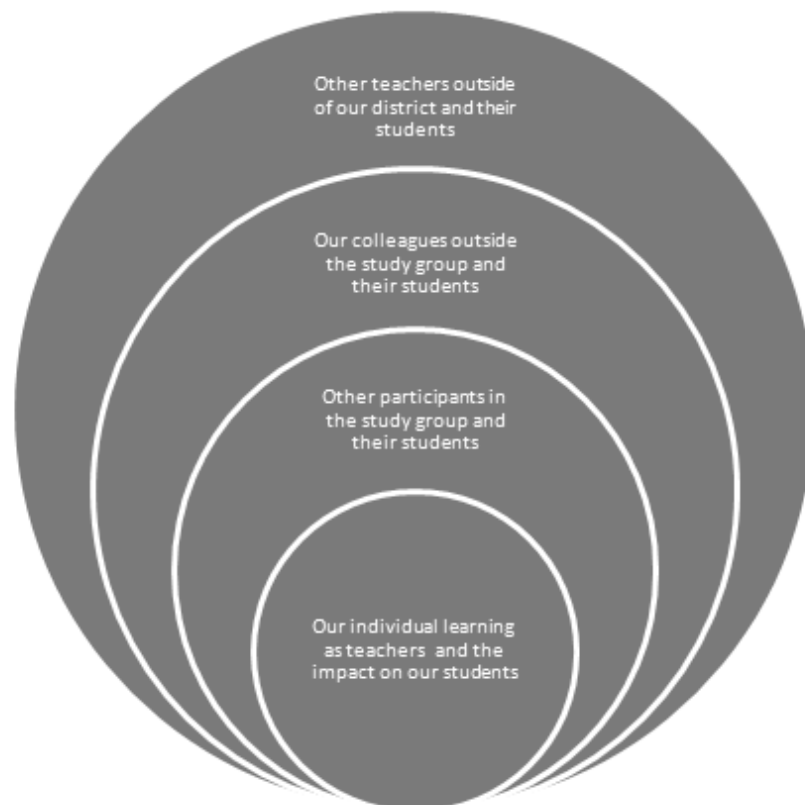


Figure 4.1. The ripple effect of our work

In this section I will examine how participants in the study group saw changes ranging from their own personal and professional learning as well as how the study group's work spilled out of the group and rippled into the professional lives of colleagues and other educators. I will first look at how my individual learning was affected from interactions with the group, as well as how the group's dynamic was altered to meet the

needs of another participant who experienced professional change. This first ripple in Figure 4.1 represents this individual level change. Then, I will discuss how participants in the group made changes to their classroom practices due to conversations we had in the study group, which is represented by the second ripple in Figure 4.1. Finally, I will examine how our learning in the study group did not stay confined to the group participants, and how our work spread to our colleagues both inside and out of district, as noted in the third and last ripples in Figure 4.1. Saying that we "attended professional development" does not fully capture what happened with our study group. Rather, as our meetings together continued, we developed as professionals.

"I'm Still Trying to Carve Out What Exactly My Role Is": Professional Changes as We Develop Professionally

By participating in a self-directed study group, all participants were making a professional change. We were actively taking control over our own learning as rather than accepting that passive means of information transmission were the only way of receiving professional development. By collaborating with each other and selecting topics that were of interest to us, we were truly participating in our own professional development. Though changes in practice are one of the primary goals of professional development, these changes are not the only result. Professional development, by its definition, should develop the professional. This can mean making changes beyond classroom practice and other areas of a teacher's professional life.

But for certain participants in the group, changes to our professional life affected how we participated in the study group. Namely, Jessica and I experienced these types of

changes. My change stemmed from progressing further in my doctoral program and starting to shift my dissertation focus to teacher-driven professional development, something that I would not have thought to focus on had I not been a part of this study group. Jessica's change involved accepting a new position in the district that shifted her from being a classroom teacher to one where she had daily contact with students, though through working with other teachers' classes. Since the rest of the group during the first two years consisted solely of classroom teachers, Jessica had to negotiate both what group participation meant to her and what that participation would look like.

Interactions with the study group shaped my academic learning. When we started this study group, I was enrolled in my doctoral program and working on completing my coursework. I originally wanted to focus on the role social media could play in professional development, stemming from curiosity in learning that some teachers participated in professional development via Twitter. But much as the collective group identity was shaped by both internal and external factors, so too was my identity in the group shaped by the outside factor of my role as a researcher. After our study group's first year together, I was inspired by how this less formal professional development experience was shaping our experiences as teachers. I wanted to know more about it. So my dissertation interest shifted away from the use of social media in professional development to teacher-driven professional development. During the second year of the study group, I took an action research elective, where my professor encouraged me to look at this study group as a teacher researcher. This would mean adjusting my identity in the group as I would be both a participant *in* the group and a researcher *of* the group.

Experiencing various aspects of identity as a teacher researcher is not uncommon. Herr and Anderson (2015) note that

each of us as researchers occupies multiple positions that intersect and may bring us into conflicting allegiances or alliances within our research sites. We may occupy positions where we are included as insiders while simultaneously, in some dimensions, we identify as outsiders. (p. 55)

In other words, one can be an insider to a site but still be considered an outsider in some way. Although I always tried to make sure my identity as a teacher came first and that I only brought up my role as researcher when necessary, there were certain instances where my identity as a researcher was made explicit. As a practitioner researcher, my own identity was constantly being formed and reformed throughout the teacher research process. I always had to remain cognizant that I was a researcher and needed to take certain steps to ensure the anonymity and safety of the other group members as they shared their unfiltered thoughts on topics in education at both the state and district levels. But at the same time, I am also a teacher who was participating in a study group with colleagues before it became part of my dissertation study, and my role as a teacher who is a member of this group to continue improving my own practice would need to supersede my role as researcher.

By assuming the new role as researcher, I was not only making changes to my own professional life, but I was inadvertently changing the group dynamic at least temporarily. In our earliest recorded meetings, group participants were more aware of the presence of the recording device I used, so it took a while for dialogue to become

more authentic and conversational. On several occasions, participants asked if the device was still recording or to strike something from the record if something was said that could be perceived as critical of the district or if it was about issues with particular students. As the researcher, I had to acknowledge that the recorder was making people nervous and to reinforce that confidentiality would be kept if something was said that could cause trouble for a participant. However, more often than not the self-editing or censoring of selves and others during the meetings were fairly innocuous and would not have been given a second thought if the recorder was not present. For instance, while discussing Newsela, one participant was not sure if she should mention that teachers could print the reading quizzes and distribute them for free even though paid accounts were needed to electronically push reading quizzes out to student accounts. Reassurance had to be given that the Newsela website said this practice was perfectly fine to do so there should not be concerns about this being on the recording.

More often than not, when my role of researcher was made explicit by other study group participants, it was often in a humorous way. While Rachel was teaching us how to create avatars in BitStrips, Sophia exclaimed "Brenna, you getting all this?" in reference to the avatar making process and picking out eyelashes and eyebrows for our individual characters, resulting in hysterical laughter from the group covering up the next several comments on the recording.

While setting up the new Google Doc for our second year of meetings, I had to acknowledge that I would be using the Google Doc notes as part of my research so

making notations of who was writing in which color was important so I would know who was who. This then led to the following interaction:

Ann: The long discussion. [paraphrasing another member's comment] "I'll be blue and this is the reason why I'm going to be blue."

Sophia: Make sure you talk about this in, in your paper too

Dean: Yeah make sure this is in your Works Cited.

This exchange shows how participants in the study group were aware that they were part of a research process, but at the same time were poking fun at me balancing both my role as a participant in the group and as someone studying what happened in the group. A similar instance occurred at a later meeting when I disclosed to the group that I had spoken about our work at an out-of-state university's practitioner research conference as part of the initial steps of trying to get my thoughts together for eventually writing my proposal and dissertation. I explained to the group that the response from the crowd about our work was positive and that I created pseudonyms to ensure anonymity of each member, though that they would be allowed to select their pseudonyms for my dissertation if they so chose. That led to a playful discussion of various members wanting to select pop culture related pseudonyms like "Terminator", "Jessica Rabbit", and "Ferris Bueller". This can be seen as a way of our group trying to not take the role of being researched so seriously. One of the most striking features of the meeting tapes is how much we laughed and joked around. In a way, this banter can be seen as a way of the group self-regulating. We all knew that our work together was being researched by me, but we were also all there as practitioners first since that is why the group developed

in the first place. Our sense of humor about the situation can be seen as making sure the group always acknowledged our position as an affinity group first, reinforcing that we were not just being studied academically.

Not every instance of my role as researcher being made explicit was during a humorous scenario. Sometimes participants made my identity as researcher explicit because they wanted to be helpful. When Sophia called her son to get information on how his teacher used Newsela with his classes, and as she was hanging up the phone, she said "Ok <son answers> Got it. Ok. Thank you for your help. Bye. I should've put him on speaker you could've had him in your notes." To me, this is an example of how participants in the study group respected the fact that I had this dual identity as a researcher and wanted to help me. They acknowledged that my role in the group as a researcher was important to me as it signified a shift in my own professional development. However, my foray into academia is not the only professional change that was made by a member of this group.

Jessica's professional change both redefines her role in the group and how the group could meet her new needs. As mentioned earlier, between the first and second years of our study group, Jessica's professional role shifted out of the classroom. Prior to her shift out of the classroom, she noted that she did try to use some of the resources we learned about in the study group, such as Newsela and Zaption. However, in the second year of the study group, she was not able to utilize as much since she was not in the classroom daily and was still learning what her new role entailed:

I would like to use more of it going forward, and like I said, I'm still trying to carve out what exactly my role is and how I can be of the most use to the teachers there and all of it is new. Last year I had no idea what to expect . . . so I think in the second year [of having this new position] I will have a better opportunity to use some of the resources that we were talking about because I have a better idea of what's coming at me.

Jessica's experience was unique in the group since she was no longer a classroom teacher, but she still anticipated that what we were learning in our study group would spillover into her new work, especially once she had a year of experience in the position. She further noted in her individual interview:

I'm basically a first year teacher over again. So trying to figure out how to fit what we were doing in the group into my practice [in this position] is harder but, I think it would be harder for anyone, because I was new at it.

Though active in our group during her first year in this new position and sharing her experiences as a teacher when possible, Jessica's concerns about her practice mirrored that of a novice teacher. Fuller's (1969) stages of concern focused on the series of concern stages that teachers go through, with novice teachers facing self concerns, then task concerns as they gain more experience, and finally impact concerns. While the rest of us were experienced teachers in our current positions, Jessica was a novice in her current position. It makes sense that she would be less focused than everyone else about the impact of implementing new innovations into lessons and be more focused on the daily tasks of her new role.

As Jessica became more comfortable in her new position during the third year of the study group, she was able to bring her new experiences and resources to the group. She was also able to bring us into greater contact with two other staff members whom we invited to join us in the third year. These staff members shared a similar position to Jessica in other buildings, and various participants in the group had reached out to them for help before. Had Jessica not been in her new position, I am not sure we would have been as comfortable extending the invitation. Also, the presence of these new group participants enabled Jessica to structure part of the group to better fit her changing professional needs by including people who performed a similar job in the district. By adding these two other staff members to our study group, we were able to accommodate Jessica's changing needs and not lose her as a valued participant in our group. Having three people in the study group who were not daily classroom teachers allowed conversations to start expanding past the impact on our own individual classrooms and shifting more towards making small changes that would have a greater-reaching impact. Because our group was not rigid with membership from year to year, we could expand and dynamically change to accommodate new situations as they arose.

Gee (2004, 2007, 2015) notes that in an affinity space, the common endeavor takes supersedes other factors like personal identity. However, our identities as teachers still played a role in this particular group. This shaped both our interactions with the other participants, as well as how we participated in the group. Both Jessica and I had various personal learning experiences outside of the group that were brought into the group. For me, it was my work as a doctoral student. For Jessica, it was her new role

outside of the classroom. Though identity is not a defining feature of an affinity space, elements of identity can be seen in the form of newbies and masters, a concept discussed earlier, as people often center their personal identities around their experiences. All participants in an affinity space bring with them knowledge or experience about the common endeavor, placing them as a newbie, a novice on the given topic, or a master, someone with more experience. As noted earlier, this can probably be seen as more of a spectrum, that one can be in a space between newbie and master. For Jessica, she was an experienced teacher but new in her current position. Depending on the topic at a meeting, she could be a master or a newbie at the same time. Like Jessica, I am an experienced teacher, but I am new to academic research at the doctoral level. I brought with me my mastery as a teacher to meetings, but my inexperience as a researcher. My colleagues in the study group wanted to find ways to help me, like when Sophia wished she put her son on speaker phone so I could have the information on the recording. We also wanted to help Jessica by inviting two other staff members into the group who shared a position similar to her new job. As we continued our work together, our learning rippled out beyond just our individual selves to touch the practice of the other participants in the group.

" . . . It Is a Technology That I Was Able to [Use] Then, I Found Something That Was Similar and I Felt Comfortable With It, When I Wouldn't Have Had I Not Been Comfortable Using Zaption": What Changed in Our Classroom Practice

The primary goal of professional development is to improve teacher practice in order to advance student achievement. In order to make changes to their practice,

teachers need to be treated like the adult learners that they are, capable of making decisions about instruction and not just replicating what has been presented to them in a "show-and-tell" workshop setting. Ongoing support and follow-up are necessary for teachers to implement meaningful changes in their practice. Because our study group was teacher-driven, we made the decisions about what we wanted to learn about and how to go about that learning process. We also provided each other with a support system, creating a space for ourselves where we could ask each other questions and follow-up with each other. This allowed us to make changes to our classroom practice that we may not have necessarily made otherwise had we explored these same topics via more traditional professional development measures.

The process of learning how to use educational technology was more important than learning how to use a specific program. One of the major focal points of our study group's work was to integrate technology into our teaching. Although we had all attended professional development sessions both inside and outside of the district with technology as a focus, we had not necessarily integrated any type of technology that was not explicitly shown to us. For instance, during our work together as a group, we learned about Zaption and were curious as to how this program could be used with our classes. The concept of inserting text and questions into video clips appealed to us, but since we were creating our own professional development experience and not attending a workshop that explicitly provided us with examples of how to use this program, we would also have to learn on our own how we could each best make use of Zaption. Had we attended a workshop training us in the features of this program, we may have learned

how to use the program but may not have necessarily learned how to evaluate a program to see if it fit our needs.

Ann described how working with our study group not only helped her learn how to use Zaption with her classes, but she also learned how to research educational technology programs to meet the needs of her classroom practice. Over the summer between the second and third years of our study group, Ann found out that Zaption was bought by another company and would no longer be available in the upcoming school year. She found that having students watch videos and interact with that digital media via questions or text that she inserted into the videos was meaningful for her students. So over the summer, Ann explored other options and found EdPuzzle to be a program that still provided her with the functions that she liked from Zaption. She emailed what she found to the other members of the study group so we would have that information once school started. In her follow-up interview, Ann noted:

Even though Zaption itself is no longer available, it is a technology that I was able to use. Then, I found something that was similar and I felt comfortable with it, when I wouldn't have, had I not been comfortable with Zaption. So I did think that was valuable. So in the first year when we came up with Zaption, and really beyond Zaption, the idea of finding short clips that you can interact with and allow the kids to interact with that was new and different for me, and I absolutely put that to use in the classroom. We did it sometimes as a whole class. Often times I would give it as homework, sometimes it would be as a review for an upcoming vocabulary quiz.

For Ann, working with our study group provided her with a not only a new technology that she could use with her students, but also gave her the confidence and skills to find something similar when she needed to replace Zaption. She attributed her work in the study group by making her comfortable with Zaption and that allowed her to then apply what she learned to a different program, which she did not think she would have done on her own. Ann did not just learn how to use a piece of educational technology; she learned how she could best use it with her students and how to transfer the skill of evaluating technology to another setting when the need arose.

Reevaluating what counts as literacy skills. As a group, we also started to reconsider what counted as literacy skills. Through our conversations together, we recognized that the literacy skills our students need today are not just gained through traditional reading and writing activities. We wanted to exposure our students to a number of different types of media to improve their literacy. For example, the PARCC test requires our students to have knowledge of how to utilize videos as an information source in order to cite evidence from it in a research-simulation writing assignment; therefore, we needed to prepare our students to meet that challenge even if we disagreed with the concept of the test itself. But more importantly, information in our world is presented in increasingly more audio-visual ways and our students are used to getting their information from non-text based media. Cassandra expressed in her post-interview that utilizing a variety of resources helps to reach students where they are via the visual medium of short video clips that they are comfortable with, but may not associate with learning when exposed to short video clips outside of school:

They [the students] don't realize that if you're picking the right video all those facts and information is getting stuck in their head easily [when] that question or a fact comes up, it pops up on the screen. They can multitask to an extent because they can watch a video and see a pop-up because they do those things on their phone. They would be doing one thing and something else will pop up. So as long as it's the right video and the right amount of information you're throwing at them at the same time, they get more out of it than just reading about something. For the grade level that I teach especially, and they're still trying to figure out who they are themselves and [how] to learn. It just gives them another avenue to try to figure out a certain subject that we're talking about.

Cassandra believed that since her students were used to experiencing the world through short bursts of information with texts and visuals blended together, that by bringing part of that experience into her classroom, she could reach students in ways familiar to them. Her students did not necessarily know that video clips on sources like YouTube can be used for gaining information, not just entertainment. It was important to Cassandra to not only use these videos to reach her students, but also to teach them how to watch a video and critically view it in such a way that it could be used as an alternative text for gaining information.

Similarly, Sophia noted that using videos and written texts were both important sources of information for her students to learn to work with:

And [the Zaption videos] gave them visual media as a source just like you would use a book or a primary document or something like that. So that, that I enjoyed.

I use that in my classroom and I plan on using the picture books and the stories in read aloud which I like to do with my language arts classes, so to bring it into social studies as well is something that I think is going to be very helpful because all kids, no matter what age they are, like to be to [be read to] and like to look at the pictures. And when you can connect what they're hearing to something visual it helps them make connections as well which I am looking forward to doing that this year.

Sophia not only notes the importance of wanting to provide her students with resources that would allow them to make connections to what they were learning about in class, but also reinforces the use of each of these sources as important texts for improving literacy skills by putting videos and reading aloud picture books with middle school students in the same category as more traditional informational sources like a textbook.

For a number the study group participants, reading aloud stories to students was not actually a new classroom practice, but rather the reviving of one that had fallen by the wayside. Before a number of political climate changes that have caused us to alter our teaching methods, most of us had used pictures books and other read-alouds with our classes. For example, our 6th grade social studies course used to be an American history class. When the Common Core was implemented in our state, the social studies curriculum in our district changed and the 6th grade curriculum was changed to ancient world history. Ann had previously read picture books to her classes when the course was an American history course, but the comparative lack of similar resources for ancient history had caused her to abandon the practice. Dean echoed a similar sentiment when he

recalled that he used to do historical fiction novel studies in the old 6th grade course but no longer did so with the newer ancient history course:

Everything that we've discussed [in our study group] I've used in class, and it's at least made me think . . . I haven't thought about that [using novels and picture books] since I stopped doing the US I [US One] thing, Cassandra used to do that. And, and I'm like, yeah, this would actually be kind of good and to have an ancient world larger piece of writing that we can really dive into. I think it would really be beneficial for the kids and I would never have thought about that if we didn't have the group.

Dean noted that when he and Cassandra were grade level partners with the old 6th grade American history course that he used to use novels to illustrate concepts for their students. For example, Cassandra, Dean, and I used to do a read-aloud of the historical novel *Soldier's Heart* by Gary Paulsen with our students when studying the Civil War. However, shorter novels and even picture books related to the ancient history course were more difficult to find. For Dean, being able to work with our study group allowed him to reconsider bringing back an element of his practice that he had not done in a long time:

I totally plan on doing [something with the purchased books] even if it's just excerpts because again I know for ancient world it's tough to get historical fiction books . . . I think it would be good because I have been really trying to get the kids to, at least mentally, go back to some of these civilizations and get what life for everyday people would be like. I think because for them it's so alien. You know, they kind of have a good idea of what life in early America would be like

because, it's part of our mythology. They've seen pictures of George Washington so they know how people dressed and they know what the climate was like and things like that. But try and have them envision what it would be like in Mesopotamia and what the climate is like. A lot of them have not been outside our immediate region so it's difficult for them to do that. So when we get pieces of writing that can illustrate that in a way that's not [just me] telling them it was a desert but there were rivers. I think that would really be helpful.

For Dean, having non-textbook resources that he could use with his students meant providing them with experiences that they could not necessarily get from the textbook or from him merely telling students about these ancient cultures. He knew that students had a better background in American history and could envision things about America's past simply because it was part of our larger culture, and they had been exposed to things that were part our cultural mythology. Concepts from American history, whether historically accurate facts or perpetuated myths like George Washington chopping down a cherry tree, are often included in media like books, movies, and television programs, that students will have been exposed to at some point before arriving in middle school. Dean hoped that by utilizing the books we purchased through the grant, he could provide his students with stories that could illustrate the concepts he was teaching in a more enticing way than the textbook could.

Meaningful teacher learning happened in the affinity space we created.

Would we have made these types of shifts to our teaching practices had we been told about Zaption at a workshop or been told to implement alternative forms of literature into

our middle school courses? During the individual post-interviews various study group participants expressed that they have implemented concepts we discussed in our meetings into their lessons with students. They attributed these changes to the fact that we were exploring these concepts together and created for ourselves a support system. Dean best expressed this sentiment in his interview:

Being able to work in a small group, I think was really, really effective and not just doing it where at the end of the afternoon, "ok, now you know Zaption. Have fun." But being able to go back and provide feedback and also receive feedback from other people with their experience . . . But I really liked how with our study group we can really kind of sink our teeth into something. And again, I know it sounds like I'm being critical of the district, and I realize they have a lot of things that they need to touch upon, but I think the most enriching story of professional development experience has been when we can work in the small group.

Here Dean illustrates that professional development should be more than just learning how to use a particular tool or strategy, but should provide teachers with opportunities to collaborate with each other and to concentrate for a sustained period of time on an area of interest in order to bring about meaningful changes in practice. Professional development should provide teachers with opportunities for feedback after trying new ideas in the classroom. We provided each other with that in our study group.

One of our common endeavors to focus on as a group was our work in literacy skills in the classroom. Through our conversations together, our study group started to reconsider what we counted as "literacy" work in our practice. The traditional image of a

student practicing literacy skills considers of a student working on his or her reading and writing in isolation from other students. New literacies are seen as a shift in thinking about literacy in more of a social learning context. Lankshear and Knobel (2011) stated that “this paradigmatic sense of ‘new’ in relation to literacy is not concerned with new literacies as such, but, rather, with a new approach to thinking about literacy as a social phenomenon” (p. 27). Further, they stress that “we think of some literacies being ‘new’ without them necessarily involving the use of new digital electronic technologies (Lankshear & Knobel, 2011, p. 29). In a sense, in starting to explore the use of picture books and text-embedded video clips with our middle school students, we were redefining what literacy meant for ourselves and our third year goal to utilize Google Classroom with our students would further push their learning into the social sphere. We recognized that traditional textbooks were not the only way for our students to gain academic language and knowledge. This parallels how we were redefining what professional development meant for ourselves. Much as our students did not have to learn just from traditional textbooks, so too did we not need to learn in a traditional professional development structure. Both textbooks and traditional professional development are valuable in their own way and can be used to gain knowledge, but they are not the only way. The participants in this study group were finding meaningful learning happening in the social space we created for ourselves. Gee (2004, 2007, 2015) noted that in an affinity space content organization is transformed by interactional organization, which refers to how interactions between participants in the space can change the content that brought them together. In these ways, the interactions among

participants in the group caused changes to the “content” that brought the group together. We started off with the focus of integrating technology and looking to include more non-fiction texts, but we branched out future to other related areas that expanded for us what it meant by literacy skills.

Gee (2004, 2007, 2015) notes that participating in an affinity space is fluid and that it is not always clear who is in the space since membership is not clearly defined. For our study group, membership was clearly defined since we had seven people that regularly met in person and online. However, this did not mean that we kept the knowledge gained from working with each other to ourselves. We shared what we learned with others not directly involved in the study group. More often than not that took the form of sharing what we learned with our grade level partners and other colleagues in our building. But as we have continued our work together, we have had opportunities to share we have learned in the group with the larger district, and even with fellow educators outside of our district.

**"I Have Had a Really Varied Background [and] Professional Experience, so I Like Sharing That With Other People, and They Can Take From It What They Will":
Ripple Effects of Our Study Group As We Share What We Learned With Others**

Herr (1999) reminds us that teacher research causes certain questions to be asked and that this inquiry causes "ripples" to spread out beyond the teacher and into other areas. Several studies in the literature review section of this dissertation highlight how changes at the school or district level happened as a result of teachers' participating in teacher-driven professional development (Chandler-Olcott, 2002; Clarke, 2012; Gilles et

al., 2010; Roberts et al., 2010). Similarly, in our study group, we not only saw changes to our own practice as teachers, we saw what was happening in our study group start to spillover into other areas as we shared what we learned with those outside of the group.

Sharing what we learned with colleagues through traditional structures. As mentioned earlier, I presented the premise of our study group's work at a major university's practitioner research conference, but that is not the only time the work of our study group had been presented at a larger level. One of the conditions of the grant we received was that we, along with other grant recipients, had to present at the local university's annual conference and share what we had done in our work together. We have presented at this conference each year since we initially applied for the grant, each time with more members of our group able to attend. The first year we presented, we stuck to a fairly traditional model of talking to the audience because that is what we thought we were expected to do. The second year, we let go of some of that traditional structure and tried to be more discussion oriented. By the third year, we were comfortable enough to give a few opening remarks to let the audience know who we were, then positioned ourselves at three different stations where audience members could explore what we set up, engage in conversation, and ask questions. After the second year's presentation, I received an email from teachers in another district who had heard about our work and wanted to know more both about the work we have done as a group and how they could apply for the same grant. I shared that information with them and encouraged them to apply. This is probably the most global example of our work spilling over outside of our group; most instances have been more localized. We have presented

our work to colleagues in our district during larger professional development sessions and also to grade level partners in less formal settings.

Since the premise of our group was to conduct our own professional development without direct oversight from district administrators, we were both surprised and pleased that our work received acknowledgement from those in positions of power. There have been several instances where our whole group or individual participants in our group have been asked to present at a variety of district workshops or meetings. At the end of our first year together, we applied for and were accepted to create a workshop for our district's end of the year in-service day. The focus of the day was to have teachers learning from each other by signing up for workshop sessions led by other teachers. Although the in-service day was set up by the district administration, the sessions themselves were created and led by teachers. This set-up meshed nicely with what we were doing as a group and felt like a good extension to our work. We created a workshop where we briefly shared our experiences working together as a study group and shared what we learned about Zaption. We then taught our colleagues how to use Zaption by affording them the time to practice using it and make video question sets that they could use in their own classes while we provided technical support, answered questions, and sat one-on-one with those who required more assistance. The workshop was well-attended and we had to lead two sessions due to its popularity. We told by several attendees that they felt it was a worthwhile experience for them, and they enjoyed learning with us.

Although we applied to present at this particular in-service, there were other instances later on where district administrators have asked members of our study group to

present aspects of our work to our colleagues or in other settings. Sophia and Ann were asked by their principal to turnkey what they learned about Zaption to their building's staff. Sophia mentioned that they received from one of the department supervisors a glowing letter thanking them for their presentation. Sophia, Ann, and I also presented at a board of education technology committee meeting, upon the request of our building principals, about our study group's work and how we used Zaption in the classroom. Additionally, several of us conducted a technology integration workshop as part of the new teacher induction series. Where possible, we tried to make the session that we led meaningful for the participants by keeping in mind factors that worked for our study group. We tried to incorporate conversation and individual exploration time where we worked with those in attendance one-on-one or in smaller groups to meet their needs. Since these sessions were set-up as single session workshops, we could not develop the type of dialogue that we could in our more sustained study group, but we were mindful of not spending workshop sessions talking at the teachers in attendance.

When interviewed, Sophia noted that these instances of being asked to share our work outside of the group were meaningful to her:

Ann and I have turn keyed Zaption [at our school] and I'm sure [our principal] will ask us about turn keying what we did with the picture books and the novels Colleagues were appreciative we did something at new teacher academy, we did some in-house, so I enjoyed doing that as well. Kind of thinking ahead to when I retire, I think I'd like to mentor young teachers or maybe work at [a local university] . . . But I have found that I like doing that. I like being a mentor. I

have had a really varied background [and] professional experience, so I like sharing that with other people and they can take from it what they will.

Being a part of our study group afforded Sophia the opportunity to share her experiences both as a teacher and as a participant in our study group with colleagues outside of the group. This was meaningful to Sophia because she not only enjoyed the experience, but she also has started to think about how she could continue to share these experiences after she retires, providing another way our work as a group could spillover into areas outside our group.

Sharing what we learned with colleagues in less formal settings. More often than not, examples of the spillover effect of our work comes from sharing what we learned from each other in the study group with other colleagues in less formal settings. These include instances where we planned with our grade level partners. Rachel described how she shared with a grade level partner the titles of the books we discussed in the study group that she then tried with her classes:

I was working with another teacher who also teaches the [pre-honors] classes, and she just took my lead. I said "hey let's try these books." We can use these next year. These were successful. These were not. The kids liked this book. This one was maybe too high of a level. This was too low. She was very willing and able to jump right in with me. So that worked out really well.

With her pre-honors level English class, Rachel tried literature circles with a number of historical fiction books that we either talked in the study group or purchased with the grant money. She did not keep the information gained from that experience to herself.

Rather, she shared what she learned with a grade level partner outside the group. This other teacher taught the same pre-honors level course that Rachel taught and was very receptive to learning from Rachel's experience.

Similarly, Dean shared his experience being observed during a lesson where he used a Zaption video he created on the climate and geography of the Mediterranean Sea area as part of the ancient Greece unit. The lesson was successful and well-received by the observing administrator so Dean noted that "I tossed it to [named his grade level partner not in the group] and he used the same video the next day. Just by proxy these things are kind of going through a person and used in other classrooms too." Like Rachel, Dean had success implementing something he learned in our study group in his class and wanted to then share what he learned with someone outside of the group. He did not keep what he learned to himself. Dean also highlights that by sharing with other teachers, these teachers will then use what we have learned with their students as well, illustrating how our study group's work has a spillover effect beyond our original intent of examining our own practice and learning a few new things to use in our own classrooms.

Gee's (2004, 2007, 2015) affinity space concept takes into consideration the value of dispersed knowledge coming into the space but does not really address in great detail the impact of knowledge leaving the space. Gee does acknowledge that interactions among participants in the space changes the content that brought them together, but again does not address what happens when that changed content leaves the space. In the experience of participants of our study group, the first group of people that experienced

the knowledge that left our study group's space were our own students. The discussions taking place in the study group space did not just stay there. We each took concepts that we learned within the study group and applied those things to our teaching. We would implement concepts discussed in the group with our own students, whether that was trying a read aloud with a picture book or assigning a newly created Zaption video for homework. Once we tried these things with our students, we would often then share what we learned with our colleagues, usually our same-content grade level partners. There were even a few instances where we had the opportunity to share our work with fellow educators on a larger scale, either within our own district or even other teachers outside of our district. As noted earlier, in her follow-up interview Sophia described how when she retires she would like to share what she has learned with new teachers. In doing so, she would then be taking on the role of a master in a new space that she would have created for herself (Gee 2004, 2007, 2015). However, the line between master and newbie is a blurry one. Paulo Freire (2001) wrote that he was constantly conscious of his own "unfinishedness" and that teaching should be about the construction of knowledge, not just the transference of knowledge. He knew that both as an educator and as a human, he was constantly learning and evolving. If that is the case, then Sophia, and other participants in this study group, are continuously masters and newbies as teachers and learners. As we continue to learn, we keep finding that there is more that we still need to learn.

Final Thoughts

When our study group first formed, we saw this as an opportunity to participate in a unique professional development opportunity. We would be in the driver's seat determining what it was that we wanted to learn about and what would be the most meaningful to our own classroom practice. But ultimately we did not just attend professional development together. Instead, we found ourselves changing and developing as professionals. For Jessica and me, our personal and professional changes were both affected by the group and influenced the dynamics of the group itself. Discussions that happened during study group meetings lead to changes in our practice, not just in terms of incorporating a new type of educational technology into lessons but also teaching us skills like evaluating technology programs or looking at literacy a different way. These types of changes are more likely to stick with us than being shown how to do something. Finally, we did not just keep what we learned in the study group to ourselves. There were times where we were asked to share what we learned with other educators in more traditional settings, but more often than not, we shared what we learned with our colleagues less formally.

CHAPTER FIVE: CONCLUSIONS AND IMPLICATIONS

The central question that guided this study was: What does professional development look when we, as teachers, gather to examine element of classroom practice that are meaningful to us? Much of the work that teachers do happens behind closed doors. Most people are familiar with what teaching looks like from their own experiences being students in a classroom, yet are unaware of the work that occurs behind the scenes to ensure students are learning. Teachers are professionals who are constantly learning and cultivating their practice. Although most professional development opportunities take the form of district-sanctioned workshops or university courses, these traditional paths are not the only way. Eshach (2007) stressed the importance informal and non-formal learning environments play in students' science learning. Likewise, teacher learning can, and does, occur in the informal and non-formal spaces.

This dissertation afforded me the opportunity to document teachers' professional learning in a self-designed study group. Numerous parallels can be drawn between the work that occurred in this study group and the characteristics of Gee's (2004, 2007, 2015) affinity space concept. This final chapter will be divided into two major sections. First, I will discuss the findings of this study and how this work both reinforces Gee's affinity space concept but also notes the gaps that the affinity space concept does not address when applied to in-person professional development. Then, I will present the implications of this research and provide recommendations based on the findings of the study related to professional development as well as for further research.

Discussion of Findings

This section will explore in more detail some of the points brought up in the previous chapter's presentation of this study's findings. The two major lessons that this study teaches about professional development are the fluid nature of expertise and space and how professional development needs to meet teachers' actual needs. Gee's (2004, 2007, 2015) affinity space concept informs this discussion, though I will also talk about areas this conceptual framework does not explicitly address when applied to professional development.

First, I will examine how expertise and space are fluid concepts when related to professional development. I will start by discussing the journey my study group took away from the traditional "sage on the stage" transmission model. Then I will push back against the idea that expertise is a static concept and how the expert and the learner can be one and the same. I will end that section by looking at how teacher learning can take place outside of spaces traditionally associated with professional development.

In the second section, I will examine how professional development should meet teachers actual, rather than their perceived, needs. I will discuss the importance of meeting teachers where they currently are so that meaningful learning can happen. Then, I will reflect on how teachers have multiple learning goals that change over time. Professional development needs to address those ever-changing goals. I will also examine several of the enduring tensions that arise when teachers participate in self-directed professional development through practitioner action research.

In the final section of this discussion, I will take a closer look at the affinity space concept and how professional development can be reimaged as affinity spaces. I will start by looking at the importance of valuing different forms of expertise in professional development affinity spaces. Then, I will discuss how one of the defining hallmarks of an affinity space, having a common endeavor, is important but also needs to be flexible when considering professional development. Next, I will evaluate the role space plays in affinity spaces. The affinity space concept is most often applied to digital spaces, though professional development frequently occurs in physical settings though that does not mean that face-to-face professional development cannot share characteristics of an affinity space. I will end by reflecting on how the spillover effect can be a consequence of affinity space participation, an area that Gee (2004, 2007, 2015) did not explicitly discuss but something that was evident in my study.

Fluidity of Expertise and Space

In most traditional professional development settings, teachers are relatively passive participants in their own learning. Workshops are led by experts who transmit their knowledge to the teachers. While learning can, and does, take place in this type of setting, it is not the only way that professional development needs to look. My overarching goal in this study was to see what professional development looks like when teachers are the ones directing their own learning in a self-designed study group. Would our own professional development study group take on a similar look to traditional professional development structures? Would our work together purposely look completely different than what we were used to?

Journey away from the sage on the stage. When our study group first started, our earlier meetings took place in my classroom with me demonstrating different forms of educational technology that the group wanted to learn more about. Our common endeavor that first year was integrating educational technology into our teaching. Due to my background as my school's webmaster and my role in several technology-related committees, I became the de facto technology expert. Although we would have conversations about technology and all participants in the study group would share their ideas, I was the one initiating conversations and conducting demonstrations. Others would share their ideas or discuss their experiences trying different programs with their students, but I was still the "sage on the stage" which I had hoped to avoid, but I did not know how to break out of that role. It was not until Rachel had a positive experience using BitStrips for Schools with her students that someone else took on the role of expert for the entire meeting, and I could truly take on the role of learner. Over time, other participants in the study group took on the role of expert on certain topics of interest, as Jessica had with subscription databases and Lexile levels. We also valued the expertise brought into the group from outsiders, as when Sophia reached out to her son's teacher about Newsela.

As someone who was in a doctoral program learning about problems related to traditional power structures and hierarchies within society, it was uncomfortable to find myself in the position that semi-replicated the same power structures that I wanted to avoid. Teachers are not always trusted with their own learning in ways that are recognized by administrators. Records of professional development need to be kept and

the sources of that professional development must be sanctioned by the district. The sources that are sanctioned are those that follow some sort of typical model with an expert leading a group. When our study group formed, I had hoped that we would initially break away from that traditional model. Instead, we inadvertently began to replicate that model because it was something familiar. We did have more discussions and had complete control over the agenda in ways we had not had before, but we were still sitting in a classroom being led by the perceived expert on a topic. Even when Rachel took over one meeting, we still replicating the sage on the stage model, though this did open the door for other participants to feel comfortable demonstrating their knowledge about topics. Over time, we did start to make the shift away from professional development led by one single expert towards a more collectively constructed experience. But this was not something that occurred right away.

Expert and learner can be one and the same. The concepts of learner and expert do not have to exist in a vacuum. One can be both learner and expert at the same time. As experienced teachers, we were all experts in our craft. Our aim as a study group was to learn how to become better teachers. This meant we would also have to learn how to be practitioner researchers. In other words, we had to learn how to examine our own teaching and to learn about the new topics that we were exploring together. To use Gee's (2004, 2007, 2015) terminology, we had to take on the roles of master and newbie at the same time. Expertise in our group existed on a spectrum. We could all be experts and novices at the same time. Our tacit knowledge as teachers informed the way that we talked about and learned of topics which we were not familiar. For example,

Cassandra's experience as a teacher allowed her to question the way the way other participants were implementing Achieve 3000 although she did not have experience with that particular program.

Most importantly, we learned to become uncomfortable when there was no expert. Expertise could belong to the collective memory of the group, rather than existing solely in each individual. When we wanted to learn how to use Newsela, we did not wait for Sophia's son's teacher to get back to us with information. We explored the program, we asked each other questions, and we took control of our own learning. As a group, we could collectively generate knowledge together. This pushes back against the notion of what it means to be an expert. We created expertise together that we probably would not have as individuals. We could bounce ideas off of each other and question our own assumptions.

Learning outside of traditional spaces. Once we had "broken" one rule of professional development, that is challenging what expertise should look like, we were free to break other rules. We were used to professional development occurring in a school setting: a classroom, an auditorium, the cafeteria. Teacher learning did not have to happen solely within the walls of a school. We decided that since our meetings often lasted until dinner time, why not have a meeting at a local restaurant. As noted in the previous chapter, we left that meeting feeling like we had better conversations than at our other meetings and broached topics that we had not considered before. We were sitting at a table together instead of in desks at the school so conversation was better facilitated. We were more relaxed since our learning was not occurring at the same site where we

worked. We were also well-fed, so we were not ending conversations early just to go back to our homes to arrange dinner for ourselves and our families.

We also experienced what it was like to continue our learning together online. Our group Google Doc connected us with each other, even when we were not able to meet physically. It also served the purpose of providing us with a place to record ideas that we wanted to bring up to the group at our in-person meetings. We were also free to adapt our Google Doc to fit our needs at that particular moment. During our third year together, we established a Google Classroom instead of using the document we had been posted in for the previous two years. We gave ourselves permission to be comfortable with the constantly changing nature of our online learning space. Online communication is not necessarily uncommon in professional development as many universities or school workshops begin to establish an online presence. However, we did not have to wonder what an administrator would think of our posted questions or messy, sometimes overlapping discussions. We did not have to worry about earning a grade or participating enough to receive credit. Some participants like Ann or Sophia would post more frequently whereas others like Dean could have limited participation in our online spaces but still find value in the knowledge that we had collectively constructed in that space.

The answer to my original research question of "What does professional development look when we, as teachers, gather to examine element of classroom practice that are meaningful to us?" is not a simple one. At least in our case, when teachers create their own professional development experience, it initially reflected the traditional power structure and settings that we were used to experiencing. We were not able to break

away from this overnight. We had to slowly chip away from a transmission model to one that was more fluid. We disrupted the notion of professional development led by a single expert to one where expertise was collectively generated and shared. We recognized that learning did not have to take place in the four walls of a classroom. We started with a Google Doc to record our thoughts and ideas when we could not be together, but we also took our meetings off of school property. We made these changes because we needed the group to adapt to our changing collective needs.

Professional Development Should Meet Teachers' Actual, and Not Perceived, Needs

Traditional professional development structures often do not take into consideration teachers' actual needs. District-mandated professional development might address needs that impact the school as a whole, but not teachers at an individual level. For example, workshops might be conducted on implementing a new writing program based on the need to increase students' writing scores on a standardized assessment, but that these workshops might not necessarily be tiered in a way that address the teachers' individual needs. The English teachers who have extensive education related to teaching students how to write are going to have very different needs than the mathematics teachers who might not have had instruction in how to teach students how to write. Additionally, professional development should also address the changing needs of teachers as their professional roles shift over time. The needs of a first-year teacher are not necessarily going to be the same needs as someone who has been teaching for at least a decade. However, it should also be acknowledged that there are enduring tensions that

need to be recognized when teachers are involved with self-directed professional development efforts.

Meeting teachers where they currently are. A refrain often heard by prospective teachers in their preservice education classes is that a teacher needs to meet the students where they are. Yet this is not something that is necessarily taken into consideration in the settings where in-service teachers learn. Adults learn well when they are active participants in their own learning, and professional development in the form of a practitioner action research group is compatible with this concept (Hase & Kenyon, 2001). But too often professional development is structured as one-shot workshops conveyed in a transmission model with very little follow-up to see if and how the teachers have implemented the concepts learned. In their follow-up interviews, all participants in this study group cited examples of professional development sessions they had attended in the past that they felt they did not benefit from. For the most part, these sessions were about topics that had very little to do with their actual classroom practice. The types of professional development they felt they benefited from, such as training in using various applications in the Google suite of products, had more relevance to what they were doing or wanted to do in their classrooms. Because our study group sessions were purely focused on topics that were directly related to what we did or wanted to do in our classrooms, study group participants found our work together meaningful and continued to come together even after our initial grant period had ended.

Our group also adapted over time to meet the changing professional needs of our participants. Jessica's role as an educator changed between our first and second years

together. She went from having a daily schedule of classes of her own students to a schedule where she had contact with students every day but they were in other teachers' classes. Instead of Jessica leaving the group, we found ways of making the study group relevant to her new position. We valued the experience she brought to the group as a teacher and in her new role outside of the classroom. In the third year, we invited new members who held roles in the district similar to Jessica's. My needs changed as I progressed through my doctoral studies. My interactions with the study group informed my areas of interest for my dissertation research. I had been interested in teacher-driven professional development at an individual level in how teachers used social media to further their own learning, but my experiences being in this study group caused me to shift my focus to a more collective experience. The participants were aware that my academic learning was important to me and sometimes our interactions at meetings made it clear that the group was being studied, like when participants would tease me about making sure silly anecdotes made their way into my dissertation or when they wanted to make sure information from the meeting that they thought was important made it onto the recording. These instances showed me that the study group respected my dual identities as teacher participant in the group and researcher learning to think like an academic.

Teachers have multiple learning goals that change over time. Our study group originally had the goal of learning more about various types of educational technology that we could use in our classroom. Although that still remained one of our goals throughout our years together, we did not remain solely focused on that. Our second year together focused on finding ways to bringing in more historical fiction and

non-fiction texts to assist our students in improving their literacy skills, but in that process we, as teachers, shifted our mindset as to what counted as literacy. In our third year, we wanted to examine the role Google Classroom could play in helping us achieve some of our goals of improving our students' literacy skills. These may have been our stated goals when asked about the purpose of our study group, but we also had other overarching common endeavors that persisted throughout our work together. Many of our conversations focused on making our courses accessible for all of our students. Nearly everyone in the group had classes with special education students, English language learners, or students who were not performing on grade level for a variety of reasons. We wanted to make sure we found ways to reach those students who were often marginalized. This not only meant shifting our own assumptions about what literacy is but also providing our students with common learning experiences that reading middle school appropriate picture books could provide. These stories could provide all students with common background knowledge and make more abstract concepts a bit more concrete. We could also introduce topics with social justice themes such as economic inequality through a story about the Great Depression and use that as a platform to talk about modern day economic struggles.

Our study group was not afraid to be a bit messy in terms of our goals. We could have mandated that we had one goal and stuck with that goal until we felt we "completed" or "achieved" it, but that is not the nature of learning nor of action research. Learning is messy, so is action research. We had to become comfortable in the

uncertainty, but in doing so, we had conversations and teacher learning experiences that we probably would not have had otherwise.

Striking the balance with enduring tensions. Even when teachers have an opportunity to be the driving force behind their own professional development, there are several enduring tensions that need to be negotiated. In our study group, we recognized that we had various district or state mandates that we had to deal with, even though those concepts were not part of our study group topics. For example, PARCC testing was brought up in many of our conversations. Although we did not agree with the test, we knew we had to administer it to our students. We acknowledged how some of our topics of research, such as helping our students use videos as a text source or working on our students' literacy skills, could help their performance on this assessment, but we did not allow the PARCC to become the driving force of our work. Similarly, our district's Achieve 3000 initiative was something that we had to participate in, but we discussed the best ways we could use that program with our students. We tried to make that program fit our own goals of helping our students become better readers without allowing the program's implementation become the focus of our work. All participants in this particular study group were veteran teachers. None of us were new teachers, so we did not have to worry about our conversations not making us sound like "team-players." We could take risks and experiment with trying something different in our classes because we were doing so collectively.

As teachers, we cannot make tensions such outside mandates disappear, but it was helpful for us that we had administrators in the English and social studies departments

who provided a climate that fostered this type of work. Both administrators were supportive of our efforts to create a teacher-driven study group. They were both open to providing us with resources when we asked for them, and both attended the summer conferences where we presented our work to show their support. Our particular administrators recognized that as teachers, we had expertise and knowledge about our students and about our practice that was valuable. They did not try to impose that they were the experts because of their status as our supervisors. They were encouraging and provided us with platforms to share our work with others in our respective departments. They did not ask for reports of our meetings and allowed us the space to talk freely among ourselves.

Having administrators who supported our efforts was helpful in balancing the tensions created by possibly opposing forces like outside mandates and the work that we as teachers wanted to engage in. However, we as teachers also have to negotiate the innate tension of discomfort that comes with this type of work. This study group engaged in work that did not always have a clear-cut resolution. We sometimes started meetings talking about one topic, but ended up discussing something completely different by the end. For me personally, I had to learn to become comfortable with being uncomfortable. Action research does not have clean, clear-cut answers. I had to come to terms with the messiness of this work and learn to accept not having a definitive answer right away.

This type of uncertainty is different than what is usually accepted as the norm in both traditional research and traditional professional development. Traditional academic research typically involves creating a hypothesis, conducting a study and collecting data,

then drawing a conclusion related to the original hypothesis. Action research, particularly practitioner action research, does not follow this linear path. Practitioner researchers do formulate questions to examine and collect data, but this does not necessarily lead to a conclusion. More often than not, practitioner action research leads to more questions and a continued cycle of research (Anderson et al., 2007). In our study group, we asked how we could implement technology into our classes, but this led to questions about integrating literacy. As we continue to work together, we continue to come up with new topics to examine.

Similarly, professional development will look different for teachers participating in practitioner action research. Traditional professional development efforts typically involves an outside expert telling you what you should know by the end of the session. Traditional professional development ends with a resolution and has a concrete objective that will be achieved. Teacher-driven efforts through means like action research do not get wrapped up so neatly. Any teachers looking to engage in something similar will need to be prepared to be at peace with the idea that this work is not linear and that there will be diversions from the original topics or ideas that brought the group together. We found that sometimes no one in the group had experience or knowledge about the concept we wanted to examine, but we learned to be comfortable creating collective expertise in those situations. Again, this group engaged in this work collectively, which provided us with safety in numbers when trying new things with our practice. Perhaps that made us more comfortable with taking risks and accepting that we would leave some of our meetings without a clear resolution or solution.

Reimagining Professional Development As Affinity Spaces

In examining the interactions of this study group, various parallels can be drawn between our work together and what happens in affinity spaces (Gee, 2004, 2007, 2015). As noted earlier, affinity spaces are not a type of professional development nor was this concept designed for examining professional development. However, the affinity space concept does explain a way of learning that can be useful when looking at teacher learning and professional development. Professional development should be first and foremost concerned with teacher learning. If meaningful teacher learning does not take place during professional development, then it is unlikely that teachers will make changes in their practice to impact student learning (Borko, 2004; Putnam & Borko, 2000). In that regard, the experience of this particular teacher study group parallels what happens in an affinity space but also raises new questions.

Valuing different forms of expertise. Gee (2004, 2007, 2015) notes that masters and newbies are both participants in affinity spaces. Affinity spaces are places where masters of a topic can share what they know and newbies to a topic are valued participants as well. As noted earlier, participants in this study group brought with them their expertise on various topics and shared what they knew with the group. However, the role that collective expertise played in our group is also important. There were topics that we did not individually know much about, but collectively we were able to generate knowledge and learn about these topics together. We were able to be both masters and newbies at the same time. We brought our expertise as teachers into each discussion, even if we were newbies at the particular topic at hand. I did not find any evidence of

Gee's affinity space concept explicitly addressing how participants in an affinity space can be both newbies and experts at the same time. Gee does note that identity is subordinate in an affinity space compared to one's dedication to the common endeavor. So perhaps in that regard, Gee alludes to one's role as an expert or newbie as being a component of identity and thus less important than one's interest in the topic.

A common endeavor is important but needs to be flexible. Having a common goal or endeavor is not new to the idea of teacher-driven professional development efforts (Arnold, 2002; Bintz & Dillard, 2007; Cawthon, Dawson, Judd-Glossy, & Ihorn, 2012; Chandler-Olcott, 2002; Clarke, 2012; Dever & Lash, 2013; Gilles, Wilson, & Elias, 2010; Murata, 2002; Parsons, Metzger, Askew, & Carswell, 2011; Roberts, Crawford, & Hickmann, 2010; Rock & Wilson, 2005; Ryan, 2016). Similarly, a common endeavor that unifies all participants is a defining feature of an affinity space (Gee, 2004, 2007, 2015). Although Gee notes that content within the affinity space changes over time through the interactions between participants, he does not explicitly discuss how the common endeavor could be altered as a result of these interactions. In this study, it was noted that the overt common endeavor of the group changed each school year when the group reapplied for the local university's grant. The goal changed based on interactions of the study group the previous year as new questions arose and new topics came to light that participants wanted to examine. More broad based objectives, such as reaching students of differing ability levels, continued to be goals no matter what the umbrella topic of the study group was that year; though, goals like that which center on student learning should be the focus of professional development regardless. For this study

group, participants did have common endeavors that brought us together, but we were open to the idea of those goals changing over time. This aligns well with the idea of spiral-like nature of practitioner action research, where there is no start or end point and questions evolve as a natural consequence of that work.

Consider the role space plays. Gee (2004) includes in his definition of an affinity space that it can be a place that is physical, virtual, or a combination of the two. He does not limit affinity spaces to the virtual sphere, although this concept is frequently applied to digital spaces (Brass & Mecoli, 2011; Duncan, 2012; Duncan & Hayes, 2012; Durga, 2012; King, 2012). Conversations in digital spaces are not conducted face-to-face and often involve pseudonyms, which affords a degree of anonymity that allows participants the ability to speak a bit more freely than they might otherwise. It is also possible to participate in an online affinity space without consideration to location as the internet allows for broad based global communication. Comparatively, interactions that occur in physical affinity spaces do not afford participants a level of anonymity and are relatively limited to other like-minded people in the nearby geographical region.

This study featured a group that conducted their learning primarily physically though there was a secondary virtual space where group learning continued to take place. There was no degree of anonymity in our interactions, either physical or virtual, as we already had working relationships with each other. Even those participants who did not know each other well at the start had at least a degree of familiarity with the others in the group since we worked in the same district. Therefore, we needed to establish a level of trust with each other before we could discuss something as intimate and personal as our

classroom practices as teachers. Gee (2004, 2007, 2015) repeatedly highlights that personal relationships are secondary to the common endeavor of the group; however, when applying the affinity space concept to the professional development of teachers, relationships with others in the group must be taken into consideration to some degree. Supportive conditions for teacher learning are vital when teachers engage in collective learning (Hord, 1997).

Additionally, the location of physical space should be taken into consideration when planning teacher-driven professional development. The participants in this study overwhelmingly felt that the move off-campus to a local restaurant was a contributing factor in the changed tenor of our meetings during the latter half of our second year together, so much so that we only met at the school when we required the use of particular resources that were located in the building. Teachers spend their working lives in school, so holding professional development sessions outside of traditional spaces like classrooms and school cafeterias could afford teachers with unique opportunities to let their guards down and speak more freely than they might otherwise.

Spillover as a consequence of affinity space participation. Herr (1999) described the spillover effect that comes about from asking questions within the context of a school and the ripples that are created as a result of asking those questions. Although not explicitly labeled as a spillover effect, previous studies on teacher-driven professional development illustrate ways that schools are transformed due to interactions within those professional development groups (Bintz & Dillard, 2007; Chandler-Olcott, 2002; Clarke, 2012; Gilles et al., 2010; Murata, 2002; Roberts et al., 2010; Ryan, 2016). The two areas

spillover effect was illustrated in those studies were in changes of classroom practice and through changes in school culture.

It was apparent in this study that the interactions of this teacher-driven professional development group resulted in a spillover effect that reached beyond changes in participants' individual classroom practices. Although changes in practice are ultimately a large goal of professional development, it should be noted that teacher-driven professional development such as this can have longer-reaching effects than just in the individual participant. Participants in this study group had the ripple effect of influencing each other's classroom practice, reaching colleagues outside of study group by sharing what they learned, and even on a limited basis extending that knowledge to other educators outside of our district. For example, when asked by district administrators to lead professional development sessions about Zaption, participants in this study group tried to replicate the experience of experimenting with the program for those in attendance rather than talking at them the entire time. Similarly, when we presented at the local university's summer conferences our presentations evolved from the first year's fairly presenter-centered talk to the third year's audience-centered "science fair" type set-up. As we became more comfortable with the uncertainty of what learning could look like when we were left to our own devices, we also became more confident teaching other adults in that same manner.

Finally, others get involved when professional development is compelling. During our study group's third year, two new faculty members joined the group. We reached out to them to join as Jessica's role in the district had changed and these two

individuals held the same role in different buildings. However, both individuals were aware of our study group's work from either the professional development sessions various participants led at the invitation of district administrators or from casual conversations with participants. Both individuals were excited at the prospect of learning together with us and readily became active participants along with the rest of us. In an ideal world, professional development should be something that teachers are excited to be a part of, not something that they attend only out of obligation, or worse dread attending.

Recommendations and Implications

Recommendations and Implications for Professional Development

Teacher education is typically associated with pre-service teachers and their needs. However, it should always be remembered that professional development is teacher education for in-service teachers. This type of teacher education is just as important as the teacher education of pre-service teachers.

Teachers need time to learn with and from each other (Drago-Severson, 2009). This means allowing teachers to lead professional development, not just be passive participants in their own learning. Participation in a self-directed group with like-minded educators provides teachers with an opportunity to talk about their own practice, work with colleagues, and ask the type of questions that will directly relate to their own work. These are holistic, authentic experiences grounded in inquiry and can be made specific to the context in which the teachers are currently working (Cochran-Smith & Lytle, 1993, 2009; Darling-Hammond & McLaughlin, 2011; Webster-Wright, 2009).

Practitioner inquiry through research designs like action research and teacher research should be considered as viable means of professional development on a much broader scale. A teacher-driven study group, such as this one, was able to work collaboratively on topics that were of local interest and generated their own knowledge by focusing on topics that mattered to them (Anderson et al., 2007; Bredeson, 2003; Zepeda, 1999, 2012). In the case of our study group, we were told of the opportunity to receive grant funding by the social studies department supervisor. Both the English and social studies supervisors saw the value in our work, even asking various group participants to share what we were learning with others outside of the group. But we were ultimately trusted as professionals to conduct our research as we saw fit without direct administrative oversight. Administrators play an important role in providing opportunities for professional development and creating a school culture where inquiry and collaboration are valued (Drago-Severson, 2009; Ryan, 2016; Zepeda, 1999, 2012). It is recommended that administrators create an environment that encourages professional collaboration among faculty members without micromanaging the entire process. This can come in the form of providing meeting time for the inquiry process or steering teachers towards grants that would enable them to facilitate a study group as we did. But ultimately the teachers should be the driving force behind the topics that they feel they need to learn more about in order to grow as more effective teachers.

Recommendations and Implications for Teacher Education Research

This particular study focused on a group of teachers who worked in the same school district, though not all at the same school. All were secondary level teachers with

experiences in either English or social studies. As a result, each teacher in the study group was somehow connected to at least one other participant prior to the group's formation. Although not every participant in the group knew each other well before we started to examine our practice together, there were still some personal and professional relationships present. It is recommended that further study be conducted on teacher-directed study groups where the participants do not already have a pre-existing professional relationship. In the case of our group, we were able to be comfortable talking to each other fairly early in the process, but that still did not stop us from initially replicating traditional power structures. Would a group of teachers without that pre-existing relationship take longer to break away from traditional notions of expertise if at all?

Additionally, English and social studies are linked subjects in the sense that there is a lot of overlap between the types of reading and writing assignments conducted in them. In our district, there is even a little bit of overlap between the content of the courses which made us very willing to work with each other as anything that we did would have an impact on our own classes, even if not directly. Would that necessarily happen with teachers who did not teach connected subjects. For instance, social studies and mathematics are not often linked together with overlapping curricula or expectations. If our study group was comprised of social studies and mathematics teachers, would we have had the same types of conversations and revelations about literacy with our students? What would our conversations have looked like? Similarly, we as we were all secondary level teachers, what would our conversations have looked like if our group

consisted of teachers ranging from elementary to high school? It is recommended that further study be conducted on teacher-driven study groups where the participants do not teach related subjects or even at the same grade levels.

A final recommendation is that further study be conducted on teacher-driven study groups utilizing the lens of Gee's (2004, 2007, 2015) affinity space concept. Teacher-driven professional development dovetails nicely with the idea of affinity spaces, though they are not a perfect fit. As noted in this study, there are several areas related to professional development that affinity spaces do not necessarily address. Again, affinity spaces provide a way of examining how people learn and was not designed as a way of professional development, but this concept does shed some light onto what teacher learning can look like when teachers are trusted to direct their own learning.

Final Reflection

This research provides an example of what happens when a group of teachers come together to take control over their own professional learning. It was important to me to document the experiences of teachers working together as professionals without being told what to do by an administrator or an outside expert. When describing the power and possibilities of narrative inquiry in educational research, Connelly and Clandinin (1990) noted that "practitioners have experienced themselves as without voice in the research process and may find it difficult to feel empowered to tell their stories" (p. 4). As both a practicing teacher and a doctoral student, I find myself in a unique position where I can provide voice to practitioners in the research process. At the start of this

dissertation I mentioned the pin I received from my master's thesis advisor that says "ask a teacher how to make schools better." The participants in this study group did just that. We asked ourselves what we could do to make our classroom instruction better. By studying topics that were of interest to us, we had conversations that we would not have necessarily had otherwise, and those conversations affected our interactions with those outside of the study group. From a social justice perspective, teacher-driven professional development opportunities, like what occurred in our study group, push back on the notation that experienced teachers need to learn from so-called experts from the outside. Rather, teachers can be knowledge producers and use that knowledge to enact change both in their classrooms and on a larger social level (Anderson et al., 2007).

References

- Anderson, G. L., Herr, K. G., & Nihlen, A. S. (2007). *Studying your own school: An educator's guide to practitioner action research*. Thousand Oaks, CA: Corwin Press.
- Arnold, P. (2002). Cooperating teachers' professional growth through supervision of student teachers and participation in a collegial study group. *Teacher Education Quarterly*, 29(2), 123. Retrieved from <http://search.proquest.com/docview/222880009?accountid=12536>
- Barth, R. S. (2006). Improving relationships within the schoolhouse. *Educational Leadership*, 63(6), 8-13.
- Berliner, D. (2005). The near impossibility of testing for teacher quality. *Journal of Teacher Education*, 56(3), 205-213.
<http://dx.doi.org/10.1177/0022487105275904>
- Bintz, W. P., & Dillard, J. (2007). Teachers as reflective practitioners: Examining teacher stories of curricular change in a 4th grade classroom. *Reading Horizons*, 47(3), 203-228.
- Bommarito, D. (2014). Tending to change: Toward a situated model of affinity spaces. *E-Learning And Digital Media*, 11(4), 406-417.
<http://dx.doi.org/10.2304/elea.2014.11.4.406>
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
<http://dx.doi.org/10.3102/0013189X033008003>

- Brass, J., & Mecoli, S. (2011). The (failed) case of the Winston Society wikispace: Challenges and opportunities of web 2.0 and teacher education. *Contemporary Issues In Technology And Teacher Education (CITE Journal)*, 11(2), 149-166.
- Bredeson, P.V. (2003). *Designs for learning: a new architecture for professional development in schools*. Thousand Oaks, CA: Corwin Press.
- Cawthon, S. W., Dawson, K. M., Judd-Glossy, L., & Ihorn, S. (2012). Participatory research in an arts integration professional development program. *Teacher Development*, 16(2), 217-234. <http://dx.doi.org/10.1080/13664530.2012.688678>
- Chandler-Olcott, K. (2002). Teacher research as a self-extending system for practitioners. *Teacher Education Quarterly*, 29(1), 23-38.
- Charmaz, K. (2010). Grounded theory: Objectivist and constructivist methods. In W. Luttrell (Ed.) *Qualitative Educational Research: Readings in Reflexive Methodology and Transformative Practice* (pp. 183-207). New York, NY: Routledge.
- Check, J., & Schutt, R. K. (2011). *Research methods in education*. Los Angeles, CA: Sage Publications.
- Christianakis, M. (2010). Collaborative research and teacher education. *Issues In Teacher Education*, 19(2), 109-125.
- Clarke, E. J. (2012). Empowering educators through teacher research: Prompting qualitative inquiry among K-12 educators. *Journal of Ethnographic & Qualitative Research*, 7(2), 64-79.

- Cochran-Smith, M., & Fries, K. (2005). Researching teacher education in changing times: Politics and paradigms. In M. Cochran-Smith, K. M. Zeichner, M. Cochran-Smith, K. M. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research and Teacher Education* (pp. 69-109). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Cochran-Smith, M., & Lytle, S. L. (Eds.). (1993). *Inside/outside: Teacher research and knowledge*. New York, NY: Teachers College Press.
- Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of research in education*, 24(1), 249-305.
- Cochran-Smith, M., & Lytle, S. (2006). Troubling images of teaching in No Child Left Behind. *Harvard Educational Review*, 73(4), 668-697.
<http://dx.doi.org/10.17763/haer.76.4.56v8881368215714>
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York, NY: Teachers College Press.
- Connelly, F.M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14.
<http://dx.doi.org/10.3102/0013189X019005002>
- Cummins, J. (2012). Whole school approaches to academic language proficiency among English learners. In: Calderón, M. (Ed.) *Breaking through: Effective instruction and assessment for reaching English learners*. Bloomington, IN: Solution Tree Press.

Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*.

New York, NY: National Commission on Teaching and America's Future.

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009).

Professional learning in the learning profession: A status report on teacher development in the US and abroad. Technical Report. *National Staff Development Council*.

Darling-Hammond, L., & McLaughlin, M. W. (2011). Policies that support professional

development in an era of reform. *Phi Delta Kappan*, 92(6), 81-92.

<http://dx.doi.org/10.1177/003172171109200622>

Dee, T. S., & Jacob, B. (2011). The impact of No Child Left Behind on student

achievement. *Journal of Policy Analysis and management*, 30(3), 418-446.

<http://dx.doi.org/10.1002/pam.20586>

Demski, J. (2012). Create your own "Un-Conference". *T.H.E. Journal*, 39(5), 42-46.

Dever, R., & Lash, M. J. (2013). Using common planning time to foster professional

learning. *Middle School Journal*, 45(1), 12-17.

<http://dx.doi.org/10.1080/00940771.2013.11461877>

Drago-Severson, E. (2009). *Leading adult learning: Supporting adult development in*

our schools. Thousand Oaks, CA: Crowin.

DuFour, R. (2004). What is a "professional learning community"? *Educational*

Leadership, 61(8), 6-11.

- Duncan, S.C. (2012). Kongregating online: Developing design literacies in a play-based affinity space. In E. Hayes & S. Duncan (eds.), *Learning in video game affinity spaces*. (pp.51-83). New York, NY: Peter Lang.
- Duncan, S.C. & Hayes, E.R. (2012). Expanding the affinity space: An introduction. In E. Hayes & S. Duncan (eds.), *Learning in video game affinity spaces*. (pp.1-22). New York, NY: Peter Lang.
- Durga, S. (2012). Learning to mod in an affinity-based modding community. In E. Hayes & S. Duncan (eds.), *Learning in video game affinity spaces*. (pp.84-102). New York, NY: Peter Lang.
- Eshach, H. (2007). Bridging in-school and out-of-school learning: Formal, non-formal, and informal education. *Journal of Science Education and Technology*, 16(2), 171-190. <http://dx.doi.org/10.1007/s10956-006-9027-1>
- Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015-2016).
- Fountas, I. & Pinnell, G.S. (1996). *Guided reading: Good first teaching for all children*. Portsmouth, NH: Heinemann.
- Freire, P. (2001). *Pedagogy of Freedom: Ethics, Democracy and Civic Courage*. Lanham, MD: Rowman & Littlefield Publishers.
- Fuller, F. (1969). Concerns of teachers: A development conceptualization. *American Educational Research Journal*, 6(2), 207-226. <http://dx.doi.org/10.3102/00028312006002207>
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What Makes Professional Development Effective? Results from a National Sample of

Teachers. *American Educational Research Journal*, (4). 915.

<http://dx.doi.org/10.3102/00028312038004915>

Gee, J. P. (2004). *Situated language and learning: A critique of traditional schooling*.

New York, NY: Routledge.

Gee, J. P. (2007). *Good video games + good learning: Collected essays on video games, learning and literacy*. New York, NY: Peter Lang.

Gee, J. P. (2012). Afterword. In E. Hayes & S. Duncan (eds.), *Learning in video game affinity spaces*. (pp.235-241). New York, NY: Peter Lang.

Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method*. (4th ed.) New York, NY: Routledge.

Gee, J. P. (2015). Accountable talk and learning in popular culture: the game/affinity paradigm. In L. Resnick, C. Asterhamn, & S. Clarke (eds.), *Socializing intelligence through academic talk and dialogue*. (pp. 191-198). New York, NY: American Educational Research Association.

Gee, J. P. & Hayes, E.R. (2011). *Language and learning in the digital age*. New York, NY: Routledge.

Gilles, C., Wilson, J., & Elias, M. (2010). Sustaining teachers' growth and renewal through action research, induction programs, and collaboration. *Teacher Education Quarterly*, 37(1), 91-108.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

- Guba, E.G. & Lincoln, Y.S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology*, 30(4), 233-252.
- Haberman, M. (2004). Can star teachers create learning communities? *Educational Leadership*, 61(8), 52-56.
- Hase, S., & Kenyon, C. (2000). From andragogy to heutagogy. *Ultibase Articles*, 5(3), 1-10.
- Hase, S., & Kenyon, C. (2007). Heutagogy: A child of complexity theory. *Complicity: An International Journal of Complexity and Education*, 4(1), 111-118.
- Herr, K. (1999). Unearthing the unspeakable: When teacher research and political agendas collide. *Language Arts*, 77(1), 10-15.
- Herr, K., & Anderson, G. L. (Eds.). (2015). *The action research dissertation: A guide for students and faculty*. Thousand Oaks, CA: Sage.
- Hirsch, S. (2006) NSDC standards provide a richer definition of professional development than does NCLB. *Journal of Staff Development*, 27(3), 59.
- Hord, S. M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.
- Jarrett, C., Evans, C., Dai, Y., Williams, D., & Rogers, K. (2010). Effect of specialized in-service professional development activities on elementary school students' reading achievement. *National Forum of Teacher Education Journal*, 20(3), 1-13.

- Karelitz, T. M., Fields, E., Levy, A. J., Martinez-Gudapakkam, A., & Jablonski, E. (2011). No teacher left unqualified: How teachers and principals respond to the highly qualified mandate. *Science Educator*, 20(1), 1-11.
- King, E. M. (2012). The productive side of playing in the great indoors. In E. Hayes & S. Duncan (eds.), *Learning in video game affinity spaces*. (pp.103-128). New York, NY: Peter Lang.
- Klingner, J. K., Ahwee, S., van Garderen, D., & Hernandez, C. (2004). Closing the gap: Enhancing student outcomes in an urban professional development school. *Teacher Education And Special Education*, 27(3), 292-306.
<http://dx.doi.org/10.1177/088840640402700308>
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. (Rev. ed.). New York, NY: Cambridge Books.
- Lankshear, C., & Knobel, M. (2011). *New literacies: Everyday practices and social learning*. (3rd ed.). New York, NY: McGraw-Hill International.
- Lauen, D. L., & Gaddis, S. M. (2012). Shining a light or fumbling in the dark? The effects of NCLB's subgroup-specific accountability on student achievement. *Educational Evaluation and Policy Analysis*, 34(2), 185-208.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91(4), 509-536.
- Little, J. W. (2012). Professional community and professional development in the learning-centered school. *Teacher learning that matters: International perspectives*, 22-46.

- Many, T. (2009). A rose by any other name: Professional learning communities. *TEPSA News*, 12(2), 7-15.
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New directions for adult and continuing education*, 2001(89), 3-14.
<http://dx.doi.org/10.1002/ace.3>
- Merriam, S. B. (2009). *Qualitative researcher: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Murata, R. (2002). What does team teaching mean? A case study of interdisciplinary teaming. *Journal of Educational Research*, 96(2), 67.
<http://dx.doi.org/10.1080/00220670209598794>
- Mertler, C. A. (2010) Teachers' perceptions of the influence of No Child Left Behind on classroom practices. *Current Issues in Education*, 13(3). 1-35.
- Nichols, S., Glass, G., & Berliner, D. (2012). High-stakes testing and student achievement: Updated analyses with NAEP data. *Education Policy Analysis Archives*, 20 (20). <http://dx.doi.org/10.14507/epaa.v20n20.2012>
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).
- Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research*, 81(3), 376-407.
<http://dx.doi.org/10.3102/0034654311413609>
- Parsons, S. A., Metzger, S. R., Askew, J., & Carswell, A. R. (2011). Teaching against the grain: One Title I school's journey toward project-based literacy instruction.

Literacy Research and Instruction, 50(1), 1-14.

<http://dx.doi.org/10.1080/19388070903318413>

Peske, H. G., & Haycock, K. (2006). Teaching inequality: How poor and minority students are shortchanged on teacher quality: A report and recommendations by the Education Trust. *Education Trust*.

Phillips, G.W. (2016). *National benchmarks for state achievement standards*. American Institutes for Research. Retrieved from

http://www.air.org/sites/default/files/downloads/report/National-Benchmarks-State-Achievement-Standards-February-2016_rev.pdf

Putnam, R. & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4-15.

<http://dx.doi.org/10.3102/0013189X029001004>

Roberts, S. K., Crawford, P. A., & Hickmann, R. (2010). Teacher research as a robust and reflective path to professional development. *Journal of Early Childhood Teacher Education*, 31(3), 258-275.

<http://dx.doi.org/10.1080/10901027.2010.500557>

Rock, T. C., & Wilson, C. (2005). Improving teaching through lesson study. *Teacher Education Quarterly*, 32(1), 77-92.

Rogers, R. (2004, May). [Interview with James Gee.] In Companion Website to R. Rogers (Ed.) *An Introduction to Critical Discourse Analysis in Education* (second edition). New York: Routledge.

[<http://cw.routledge.com/textbooks/9780415874298>].

- Rust, F. (2009). Teacher research and the problem of practice. *The Teachers College Record*, 111(8), 1882-1893.
- Ryan, M. G. (2016). *Encouraging teachers to design their own professional learning through inquiry: An elementary principal conducts practitioner action research* (Unpublished doctoral dissertation). Montclair State University, Montclair, NJ.
- Saavedra, E. (1996). Teacher study groups: Contexts for transformative learning and action. *Theory Into Practice*, 35(4), 271–277.
<http://dx.doi.org/10.1080/00405849609543734>
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Smith, E. (2005). Raising standards in American schools: the case of No Child Left Behind. *Journal of Education Policy*, 20(4), 507-524.
<http://dx.doi.org/10.1080/02680930500132403>
- Smith, E., & Gorard, S. (2007). Improving teacher quality: lessons from America’s “No Child Left Behind”. *Cambridge Journal Of Education*, 37(2), 191-206.
<http://dx.doi.org/10.1080/03057640701372426>
- Snyder, N. (2016). The new education law and ASHA members. *ASHA Leader*, 21(2), 26-27. <http://dx.doi.org/10.1044/leader.PA.21022016.26>
- Sparks, S. D. (2016). 'Evidence' requirements are redefined in ESSA. *Education Week*, 35(15), 18.

- Stanley, A. M. (2011). Professional development within collaborative teacher study groups: Pitfalls and promises. *Arts Education Policy Review, 112*(2), 71-78.
<http://dx.doi.org/10.1080/10632913.2011.546692>
- Swanson, K. (2014). Edcamp teachers take back professional development. *Educational Leadership, 71*(8), 36-40.
- Teaching Excellence in Adult Literacy Center. (2011). T.E.A.L. center fact sheet no. 11: Adult learning theories. Retrieved from <http://www.commission.wcc.edu/Data/Sites/1/commissionFiles/abe/training/abe-ntt/mod-6-articles/ntt---module-6---fs-11-teal-center-adult-learning-theoryfact-sheet-air-logo-rev12-06-11.pdf>.
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research, 79*(2), 702-739.
<http://dx.doi.org/10.3102/0034654308330970>
- Zeichner, K. M., & Noffke, S. E. (2001). Practitioner research. In V. Richardson (ed.), *Handbook of research on teaching* (4th ed.) (pp. 298-330). Washington, D.C: American Educational Research Association.
- Zeichner, K.M. (2003). Teacher research as professional development for P-12 educators in the USA. *Educational Action Research, 11*(2), 301-326.
<http://dx.doi.org/10.1080/09650790300200211>
- Zepeda, S. (1999). *Staff development: Practices that promote leadership in learning communities*. Larchmont, NY: Eye on Education.

Zepeda, S. (2012). *Professional development: What works*. Larchmont, NY: Eye on Education.

Appendix A

Topics of Focus for the Study Group

School Year	Research Question Submitted on Grant Application	Notes
2014-2015	What are the best practices for technology infusion across the curriculum?	<ul style="list-style-type: none"> ● The majority of this year's meetings occurred before the group was formally studied, with only the last meeting being audio recorded. ● Purchased Zaption accounts for each participant with the grant money.
2015-16	In what ways can we make our curricula accessible to all learners, particularly in the area of non-fiction texts?	<ul style="list-style-type: none"> ● This year was the primary focus of this study. Meetings were recorded and transcribed. ● As the year progressed, we added utilizing historical fictions texts as well to our focus. ● Purchased numerous historical fiction and non-fiction novels and picture books with the grant money.
2016-17	How can we use Google Classroom as a platform for facilitating online discussions of literature and nonfiction texts between our students?	<ul style="list-style-type: none"> ● This year's meetings started after initial data analysis was completed. The meetings are still ongoing. ● Two other teachers joined our group, though they are not included in this study since they joined outside the IRB parameters of when new participants could be added to the study.

Appendix B

Grant Approval Notification

2014-15 Approval

Hello Ms. Bohny,

Congratulations! Your _____ Teacher Study Group Grant for the 2014-2015 academic year has been approved for \$500.00!

Thank you for taking your time and effort in leading an _____ Teacher Study Group (TSG) grant this year. Now that your Teacher Study Group has been approved and the grant is to be awarded, we wanted to send along the following required forms to help you in organizing your work and your reports. All TSG group members are asked to download and read all of the information and forms. Completed forms must be submitted with your final report. The Teacher Study Group Coordinator should be responsible for making sure that completed forms are submitted **by June 1, 2015**.

Here are the forms you each need to download and read:

- 1. Teacher Study Group Grant Report Guidelines**
- 2. Form A** – Attendance Roster (Please make copies and use a separate attendance roster for each meeting. Original copies of the attendance rosters must be submitted to the _____ by the end of the year and attached to your final report)
- 3. Form B** – Expense Report (In excel, please record all grant expenditures during the course of the year and be sure to attach original receipts to this page. Please note: If purchase is made by debit or credit card, in addition to the original receipt, you must submit your credit or debit card statement (with account and confidential information redacted) including your name and address and mark the purchase on the statement)
- 4. Form C** – Hours and Participant information chart-Please submit total of all hours per participant
- 5. Form D** – Final report work page - **PLEASE NOTE: This is a work page only ALL REPORTS MUST BE DONE IN NARRATIVE FORM AND WILL BE DUE BY JUNE 1, 2015 .**

As a reminder, the funds granted may be used for:

- Books
- Materials
- Refreshments (not to exceed \$100)
- Guest speakers

The funds granted may **not** be used for:

- Release time
- Substitute coverage

- Travel reimbursement
- Anything not directly related to your area of study

Kindly review the attached and if you have any questions please do not hesitate to let us know. Once again, our congratulations!

2015-16 Approval

Dear Ms. Brenna Bohny,

Congratulations! Your _____ Teacher Research Group Grant for the 2015-2016 academic year has been approved for \$500.00!

Thank you for taking your time and effort in leading an _____ Teacher Research Group (TRG) grant this year. Now that your Teacher Research Group has been approved and the grant is to be awarded, we wanted to send along the following required forms to help you in organizing your work and your reports. All TRG members are asked to download and read all of the information and forms. Completed forms must be submitted with your final report. The Teacher Research Group Coordinator should be responsible for making sure that completed forms are submitted **by June 1, 2016**.

Here are the forms you each need to download and read:

1. Teacher Research Group Grant Report Guidelines

(Forms A-D are on individual tabs in the attached Excel workbook 'FORMS A-D TRG 2015-2016')

2. Form A – Attendance Roster (Please make copies and use a separate attendance roster for each meeting. Original copies of the attendance rosters must be submitted to the _____ by the end of the year and attached to your final report)

3. Form B – Expense Report (In excel, please record all grant expenditures during the course of the year and be sure to attach original receipts to this page. Please note: If purchase is made by debit or credit card, in addition to the original receipt, you must submit your credit or debit card statement (with account and confidential information redacted) including your name and address and mark the purchase on the statement)

4. Form C – Hours and Participant information chart-Please submit total of all hours per participant

5. Form D – Final report work page - **PLEASE NOTE: This is a work page only ALL REPORTS MUST BE DONE IN NARRATIVE FORM AND WILL BE DUE BY JUNE 1, 2016.**

As a reminder, the funds granted may be used for:

- Books
- Materials
- Refreshments (not to exceed \$100)

- Guest speakers

The funds granted may **not** be used for:

- Release time
- Substitute coverage
- Travel reimbursement
- Anything not directly related to your area of study

Kindly review the attached and if you have any questions please do not hesitate to let us know.

Once again, our congratulations!

Appendix C

Sample Interview Questions

1. What do you consider to be professional development?
2. Before participating in this study group, what have your experiences with professional development been like?
3. Before joining this study group, what was your usual source of professional development, inside the district, outside, a little of both?
4. Can you tell me about a specific experience that you feel might have been a waste of time for you?
5. Describe your experience with this study group?
6. Why did you choose to continue with this study group after the initial 2014-15 grant period ended?
7. Describe one experience with this study group that you have been able to directly use in your teaching practice.
8. Is there anything else you want to mention about professional development or your experience with this study group?

Appendix D

Sample Codes

code	definition	example of coded data
trying the same thing in different ways	references instance of one group member trying the same thing as a different group member by using a different approach	“Sophia located a video on the importance of music for the Ancient Greeks. We worked with this video by attempting to add different types of questions. Our thought is that we will include this in the Greece Learning Stations exercise as a separate optional station. The vocabulary is at a higher level than our students might be used to but as the station will be optional and students have the ability to view the short (3-4 minute) video as often as they like we feel that they can be successful” (Ann, Feb. 24, 2015 group Google Doc).
changes in practice	references instance of group member trying something that is a change to their usual practice in the classroom	“Let me start off by saying the Flubaroo add-on was a life saver. I can remember what a massive undertaking grading this assignment was last year and being able to

		<p>automatically and electronically grade nearly half the assignment made this manageable. I also think the students responded to the half digital / half paper format.” (Dean, April 2, 2015 group Google Doc).</p>
<p>learning from other teachers</p>	<p>references instance where a group member learned from another teacher either inside the group or outside of the group</p>	<p>“As I’ve been uploading artifacts to my log, I have been reflecting on usefull [sic] this group’s work has been to my professional experience. Investigating new technological resources, piloting these with students and working on them with colleagues has been rewarding. As someone who has been in education for over 20 years, I have enjoyed these new aspects of education. Zaption is definitely something I am finding useful and worthwhile. I am continuing to investigate and utilize more Google Apps in my everyday teaching as well” (Sophia, April 15 group Google Doc)</p>
<p>shifting leadership roles</p>	<p>references instance where</p>	<p>“It felt like we really</p>

	<p>member of the group takes on a leadership role within the group</p>	<p>started to discuss our practice and what we were comfortable or not comfortable doing and getting ideas from each other. I felt like this is the first meeting where I got to be a co-learner with everyone else because I was not the one leading the discussion. I still participated and shared my thoughts, but I wasn't the one generating all the ideas and that's good. Perhaps it took everyone playing with Zaption on their own since we then all had the same background knowledge to have the discussion? Perhaps it was because Sophia and Ann had wrote out in the group Google Doc before coming to the meeting what their experiences were like so they already had something in mind to discuss?" (researcher's journal, Feb. 26, 2015)</p>
--	--	---

Appendix E

Sample Memo

After reading from March 7, 2016 meeting transcript:

Present: Jessica, Sophia, Dean, and Brenna

Absent: Rachel, Ann, Cassandra

Summary:

- Jessica shared information from a young adult literature book she received that has sections on historical fiction books (summaries and other info)
- Idea of doing Literature Circles in social studies as a way of bringing in historical fiction
 - Jessica shared how it was done in English classes by borrowing books from the high school's nuclear fallout shelter book room
 - Discussion on maybe spending the grant money on 7 copies of various titles to try literature circles
 - Jessica shared how they did a 7 Themes for Understanding World History IR project for historical fiction last year
- Discussed how to implement a SS IR-like project without the end product being an essay
 - Text evidence as supporting a claim important PARCC skill to reinforce what's being taught in the English classes
- Discussed struggles of doing the RST in SS being many of the English classes had a chance to do it first
 - Our task was unit-specific and had to be done in MP 3
- Brenna brought up to the group her presentation on our work together at the [named a specific conference at an out-of-state university]
 - Discussion on pseudonyms used
 - Brenna mentioned how in the presentation she talked about why she thought the professional development we are doing together without administrative oversight is important and asked the other members of the group what their thoughts were, if it's meaningful to them
 - Group responses start on Line 418-around 470: too long to copy & paste here

Reflective Memo:

Patterns or Themes emerging from the data (might be important later so making note now):

- Joking with group members occurs frequently throughout and also in the other tapes as well
 - Lots of laughter around the use of pseudonyms (around Line 354) for instance, Dean wanted to be called Terminator in my dissertation
 - (Lines 386-404) Brenna: . . . besides the fun names. Great, now when I type up this transcript I'm going to have to say you know, Terminator said
 - Dean: That was my idea
 - Sophia: What's with this name and Terminator
 - *[cut out longer portion continuing this line of thought]*
 - *laughter from group*
 - Brenna: Why are all the names in your paper pop culture references, umm?
 - Jessica: <laughs>
 - Dean: <indistinguishable> a similar time period
 - Sophia: Want to be Ferris Bueller? Bueller?
 - Jessica: <laughs>
 - Sophia: You can just refer to me as Bueller in your paper. Voodoo economics. <laughs>
 - Tease Dean about bringing part of his dinner home in a non-transcribed portion (~23:54 minutes)
- Sharing personal life info
 - Jessica discussing her new role and the differences with that and being a classroom teacher
- Outside resources being brought into the group
 - YA Lit overview book Jessica has
- Puzzling through things together
 - Discussing various ways we could implement a historical fiction/ non-fiction assignment in SS without the end product being an essay
- Role of researcher made explicit (either by self or by others)
 - Brenna brought up the conference where she presented our work together as a teacher researcher (started Line 324)
 - Lines 506-511: Group says my work sounds cool and asks some questions about the presentation
- Relying on each other's expertise
 - Brenna shares how Rachel went through her conference presentation to make sure it made sense and represented the group's experience (Lines 527-528)

Appendix F

IRB Approval

Re: IRB Number: **001650**

Project Title: **Technology Infusion Best Practices Across the Curriculum Teacher Study Group**

Dear Ms. Bohny:

After an expedited 6 & 7 review, [REDACTED]'s Institutional Review Board (IRB) approved this protocol on **February 23, 2015**. The study is valid for one year and will expire on **February 23, 2016**.

Before requesting amendments, extensions, or project closure, please reference [REDACTED]'s IRB website and download the current forms.

Should you wish to make changes to the IRB-approved procedures, prior to the expiration of your approval, submit your requests using the Amendment form.

For Continuing Review, it is advised that you submit your form 60 days before the month of the expiration date above. If you have not received [REDACTED]'s IRB approval by your study's expiration date, ALL research activities must STOP, including data analysis. If your research continues without [REDACTED]'s IRB approval, you will be in violation of Federal and other regulations.

Please note, as the principal investigator, you are required to maintain a file of approved human subject's research documents, for each IRB application, to comply with federal and institutional policies on record retention.

After your study is completed, submit your Project Completion form.

If you have any questions regarding the IRB requirements, please contact me at [REDACTED] or the Institutional Review Board.

Re: IRB Number: **001650**

Project Title: **Technology Infusion Best Practices Across the Curriculum Teacher Study Group**

Dear Ms. Bohny:

After an expedited 6 & 7 review, [REDACTED]'s Institutional Review Board (IRB) approved your Continuing Review request on **February 2, 2016**. The continuation is valid for one year and will expire on **February 1, 2017**. [REDACTED] has been removed as a faculty sponsor. [REDACTED] will replace Dr. [REDACTED] as a faculty sponsor.

As noted on your Continuing Review Form, this study is now **closed to enrollment** of new participants.

Before requesting amendments, extensions, or project closure, please reference [REDACTED]'s IRB website and download the current forms.

Should you wish to make changes to the IRB-approved procedures, prior to the expiration of your approval, submit your requests using the Amendment form.

For Continuing Review, it is advised that you submit your form 60 days before the month of the expiration date above. If you have not received [REDACTED]'s IRB approval by your study's expiration date, ALL research activities must STOP, including data analysis. If your research continues without [REDACTED]'s IRB approval, you will be in violation of Federal and other regulations.

After your study is completed, submit your Project Completion form.

If you have any questions regarding the IRB requirements, please contact me at [REDACTED] or the Institutional Review Board.

Appendix G

Descriptions of Technologies Examined by the Group

Name	Brief Description
Achieve 3000 http://www.achieve3000.com/	Program purchased by our district around the same time our study group started meeting. Readings and questions are created at a variety of Lexile levels. Teachers select the reading and Achieve 3000 sends the appropriate reading level of the article to students. Sixth grade English and social studies teachers were required to use it in their classes regularly by assigning various readings and activities to their students. Seventh and eighth grade English teachers were required to use it to acquire student Lexile levels and track changes at certain benchmarks during the year.
BitStrips for Schools http://www.bitstripsforschools.com/	Website that allowed users to create cartoon avatars and put those characters into various settings and insert dialogue. The "BitStrips for Schools" version allowed teachers to create class codes and invite students to a class. Although the regular BitStrips site is still active, the BitStrips for Schools version no longer exists at time of this writing.
EdPuzzle https://edpuzzle.com/	Website that allows users to insert questions and text into videos. Several members of our study group started using this as an alternative to Zaption when Zaption was no longer available.
Google for Education https://edu.google.com/products/productivity-	Google offers school districts a variety of their products, including but not

tools/	limited to Google Drive, Google Classroom, Gmail, and Google Slides, under the school's own domain.
Kahoot https://getkahoot.com/	Website that allows teachers to create multiple choice games. The questions are projected on a screen in front of the room, students respond on laptops, phones, or other devices
Newsela https://newsela.com/	Website that teachers can register to use to provide their students with current event news articles. The articles can be read at a variety of Lexile levels and reading quizzes are also provided. Teachers can print the articles and questions or electronically push them out to student accounts.
Zaption https://zaption.com	Website that allowed users to insert questions, text, and pictures into videos. The videos could be user-made or found elsewhere on the internet, such as on YouTube. Our study group purchased an account for each participant after the first year and planned to make long-term use of it. However, it was purchased by another company at the end of the second year of our study group and no longer exists at the time of this writing.

