Democratic Values in the 21st Century: Addressing Our Transforming Society in the K12 Classroom

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DEMOCRATIC VALUES IN THE 21ST CENTURY:
ADDRESSING OUR TRANSFORMING SOCIETY IN THE K12 CLASSROOM

by

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The professional experience of K12 teachers in the United States is marked by transformation. The K12 classroom has been a consistent presence in the history of the U.S., with the specifics of the teacher’s role regularly transforming over time. With the spread of the internet and the increasing ubiquity of web-enabled digital devices (e.g., smartphones, tablets) to our social lives, K12 teacher’s in the current historical moment face a unique challenge. They must reckon with adjusting their instructional practice to account for the ways our increasing uses of digital media and technology have transformed the nature of social interaction in our world. Additionally, many teachers are increasingly concerned with the impact this pervasive connectivity has on the social development of their students. This project aims to explore the current experience of K12 teachers in the United States and apply new understandings towards resources and strategies for helping teachers promote democratic values of the importance of community-minded action for responsible social change.

This dissertation approaches understanding the experience of K12 teachers in the U.S. through multiple perspectives, including the works of John Dewey, macro-oriented social theory, the neoliberal incursion on the K12 classroom, current literature from the fields of media studies and education, and contemporary media theory. These perspectives will be brought into conversation through Stuart Hall’s concept of the “conjuncture.” The resulting analysis is then applied to qualitative field research with K12 teachers and educators, including in-depth interviews and participant observations. An inductive analysis is performed on the collected data and applied towards creating prototypes of resources and strategies for promoting democratic values for the 21st Century.
For Sarah, my wife and teammate
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# Table of Contents

Introduction ............................................................................................................. 1
Pragmatism in Philosophy ....................................................................................... 3
21st Century K12 Teacher Experience: A Conjuncture ........................................ 4
The Digital and Democracy ................................................................................. 6
Pragmatism in Approach, Interpretation, and Outputs ......................................... 6
John Dewey and Works: Personal and Philosophical Influence ............................. 9
  Who was John Dewey and Why He Speaks to Me ............................................. 9
  Pragmatism and The Co-Constructed Nature of Reality ................................... 11
  Dewey on Education, Teaching, and Learning .................................................... 14
  Aims of Democracy ........................................................................................... 17
  Democratic Education ......................................................................................... 18
  Dewey’s Works as a Contemporary Provocation for Action ............................... 20
Experience Within A Social World Defined By Transformation .......................... 24
  Affordances of Digital Media and Technology .................................................. 26
  Speed and Social Acceleration .......................................................................... 27
  Logic of The Information Age ............................................................................ 35
  The World is Different. Now what? .................................................................... 38
Teacher Experience in the United States, Past and Present .................................. 41
  From Grammar Schools to Common Schools .................................................... 42
  Creating a New Normal to Be Challenged: The Normal School and the Progressive Reaction .. 45
  March Towards Progressivism ......................................................................... 46
  Federal Policy Sets Up Heightened Accountability for Teachers ......................... 48
  A Nation at Risk Ushers in the Accountability Regime ....................................... 50
  No Child Left Behind and the Welcoming of Neoliberalism into the Classroom .... 51
  NCLB Heightens Tech’s Profile, Making It A Critical Part of the Conversation .... 52
  Educational Technology Shifts from Luxury to Imperative ............................... 53
  What resources are available to all Teachers to support the 21st-Century classroom? .... 56
  The Neoliberal Intrusion’s Place in the Conjuncture ......................................... 64
Literature Review .................................................................................................. 65
  Search Parameters .............................................................................................. 66
  Media Studies Field ............................................................................................ 67
  Education Field .................................................................................................. 75
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deweyan Scholarship</td>
<td>83</td>
</tr>
<tr>
<td>The Academy’s Place in the Conjuncture</td>
<td>84</td>
</tr>
<tr>
<td>A Final Conjuncture Element and How to Approach Challenging it Through Practice</td>
<td>86</td>
</tr>
<tr>
<td>Complicating How ‘Media and Technology’ are Approached in Inquiry</td>
<td>87</td>
</tr>
<tr>
<td>Hypermediation in the Conjuncture</td>
<td>90</td>
</tr>
<tr>
<td>Pulling on the Thread of Democracy</td>
<td>91</td>
</tr>
<tr>
<td>Where do I Begin Conceiving of Tools or Strategies?</td>
<td>94</td>
</tr>
<tr>
<td>Methods for Pragmatic Inquiry</td>
<td>100</td>
</tr>
<tr>
<td>Pragmatic Inquiry as a Research Paradigm</td>
<td>101</td>
</tr>
<tr>
<td>Pragmatic Pacing of Inquiry: Two Rounds of Field Work</td>
<td>103</td>
</tr>
<tr>
<td>General Considerations</td>
<td>105</td>
</tr>
<tr>
<td>Recruitment and Procedures for Interviews</td>
<td>109</td>
</tr>
<tr>
<td>Recruitment and Procedures for Participant Observations</td>
<td>111</td>
</tr>
<tr>
<td>Method of Analysis</td>
<td>115</td>
</tr>
<tr>
<td>Data and Analysis</td>
<td>119</td>
</tr>
<tr>
<td>Stage 1 Interviews and Analysis</td>
<td>119</td>
</tr>
<tr>
<td>Stage 1 Participant Observations with Follow-up Interviews and Analysis</td>
<td>138</td>
</tr>
<tr>
<td>Stage 2 Interviews and Analysis</td>
<td>156</td>
</tr>
<tr>
<td>Stage 2 Participant Observations with Follow-up Interviews</td>
<td>170</td>
</tr>
<tr>
<td>Prototypes of Resources and Strategies for Developing an Interruption Mindset and Looking Forward</td>
<td>180</td>
</tr>
<tr>
<td>Prototypes of Resources for Teachers</td>
<td>181</td>
</tr>
<tr>
<td>Prototypes of Strategies for Teachers</td>
<td>183</td>
</tr>
<tr>
<td>Next Steps For This Inquiry</td>
<td>185</td>
</tr>
<tr>
<td>Contribution to the Academy</td>
<td>186</td>
</tr>
<tr>
<td>Revisiting Dewey’s Provocation</td>
<td>189</td>
</tr>
<tr>
<td>References</td>
<td>192</td>
</tr>
<tr>
<td>Appendices</td>
<td>200</td>
</tr>
</tbody>
</table>
TABLES

TABLE 1: INTERVIEWEES ........................................................................................................110
TABLE 2: OBSERVED TEACHERS ............................................................................................112
TABLE 3: EXAMPLE DOMAIN .................................................................................................117
TABLE 4: STAGE 1 INTERVIEWEES ............................................................................................121
TABLE 5: STRESS AND TENSION FROM INSTRUCTIONAL TECHNOLOGY .................................122
TABLE 6: INEFFECTIVENESS OF PRESCRIBED USE OF INSTRUCTIONAL TECHNOLOGY ........127
TABLE 7: NEED FOR FAMILIARITY WITH TECHNOLOGY .......................................................131
TABLE 8: STAGE 1 OBSERVED TEACHERS ..............................................................................139
TABLE 9: EMBEDDED NEOLIBERAL LANGUAGE/LOGIC .........................................................141
TABLE 10: ADDITIONAL EXAMPLES OF EMBEDDED NEOLIBERAL
LANGUAGE/LOGIC .....................................................................................................................144
TABLE 11: AFFORDANCES OF DIGITAL MEDIA AND TECHNOLOGY .......................................145
TABLE 12: STAGE 2 INTERVIEWEES .........................................................................................157
TABLE 13: NEED TO PROMOTE COMMUNITY-DRIVEN DEMOCRATIC VALUES .......................158
TABLE 14: SKILLS FOR COMMUNITY-MINDED DEMOCRATIC VALUES ..................................161
TABLE 15: POSSIBLE STRATEGIES TO ADDRESS INNOVATION BARRIERS ............................165
TABLE 16: STAGE 2 OBSERVED TEACHERS .............................................................................170
TABLE 17: COMPLICATING THE DEMOCRATIC IDEA OF 'COMMUNITY' ...............................171
TABLE 18: TEACHER AS INTERRUPTER ....................................................................................177
TABLE 19: INTERRUPTIBLE MOMENTS ....................................................................................178
FIGURES

FIGURE 1: THE ‘GOOD STUFF’ BETWEEN THEORY AND PRACTICE ........................................22

FIGURE 2: HARTMUT ROSA’S CIRCLE OF ACCELERATION ..........................................................29

FIGURE 3: CIRCLE OF ACCELERATION WITH K12 EXAMPLE ....................................................31

FIGURE 4: FIRST ADDITION TO THE CONJUNCTURE OF K12 TEACHER

EXPERIENCE IN THE 21ST CENTURY .........................................................................................40

FIGURE 5: SECOND ADDITION TO THE CONJUNCTURE OF K12 TEACHER

EXPERIENCE IN THE 21ST CENTURY .........................................................................................65

FIGURE 6: TPACK MODEL ..............................................................................................................81

FIGURE 7: THIRD ADDITION TO THE CONJUNCTURE OF K12 TEACHER

EXPERIENCE IN THE 21ST CENTURY .........................................................................................85

FIGURE 9: FINAL ADDITION TO THE CONJUNCTURE OF K12 TEACHER EXPERIENCE

IN THE 21ST CENTURY ................................................................................................................92

FIGURE 10: DATA COLLECTION AND ANALYSIS DESIGN ...........................................................104
Introduction

“The teacher will not verify what the student has found; [s]/he will verify that the student has searched.”


This line from The Ignorant Schoolmaster has been rattling around my head since I first read it a few years ago. Rancière’s broader argument is one that I whole-heartedly agree with: a teacher who seeks to uncover the genuine heights of students’ abilities must purposefully distance themselves from presenting his or herself as a keeper or arbiter of ‘worthy knowledge.’ The teacher must be ‘ignorant’ by decentering the primacy of the teacher’s knowledge and treating it as equal to the knowledge students bring to the classroom. According to the Rancière (1991), “Equality was not an end to attain, but a point of departure, a supposition to maintain in every circumstance” (p. 138).

Imagining what would be possible in a learning environment that fully prescribes to this philosophical argument is undoubtedly intoxicating; student-driven learning with aims of orienting young people towards understandings of the world through their own perspectives rather than a prescribed lens from the teacher. But the reason the initial quote has rattled around in my head for the past few years is less due its lofty idealism, more because of the impracticality of it when considering a current K12 teacher in the United States. The quote implies a teacher’s job is not to assess, or ‘verify’ particular skills or standards, but rather to orient instructional efforts around the student’s learning process: ‘the search’ for knowledge. In theory, this is an inspiring provocation; however, there are a myriad of structural requirements placed on K12 teachers (e.g., state assessments, report cards, academic growth scores impacting school funding) and increasing pressure to equip students with skills to be successful in our digitally saturated society. It’s ridiculous to think even close to a majority of K12 teachers would have the time or mental bandwidth to
consistently attend to both verifying the student knowledge acquired and the efficacy of the student’s search for that knowledge.

With the tension between an incredibly alluring ideal of pedagogy and the lived reality of K12 teachers today, I was stumped for a time in developing my approach to explore what central aim of this project: the possible strategies which could help current teachers attend to developing democratic citizenry in their students given the contemporary unmatched social complexity afforded by digital media and technology. Should I use my scholarly training to construct a theoretical argument utilizing the works of writers who have made a lasting impact on me and the way I think? Or should I eschew theory like Rancière where practical application is not self-evident, and use my methodological training to focus on the lived experiences of teachers, identifying the needs/wants of K12 teachers in for developing engaged citizens capable of dissent and responsible social change in our 21st Century Society? After reflection, discussions with colleagues/mentors, and a lot of additional reading, the path forward became clear: I have to do both. I felt compelled to do both regarding my project, but I believe this gap between theory and practice is one which all scholars must work to bridge. This project is my attempt, but others must work towards this same aim if theory and practice are to be brought into purposeful conversation.

My aim for this work is to balance theoretical and empirical sensibilities towards a unique approach for synthesizing strategies for teachers. In the case of this project, I work towards strategies for supporting K12 teachers in the development of engaged democratic citizens. Additionally, the arguments I make are meant to be relational to how I believe scholars and researchers should approach creating supports for K12 classroom teachers. In this introduction, I will introduce the fundamental tenets of this approach and how they fit together, including pragmatism (and specifically John Dewey) as a grounding influence in both my philosophical and methodological approach, how I am framing/defining the current unique moment in history for the
experience of a K12 classroom teacher, and why useful democratic development is so complicated in the current era.

**Pragmatism in Philosophy**

Setting out on this endeavor of gaining a deeper understanding of the K12 classroom space through the teacher’s perspectives towards creating strategies for supporting teachers in fostering contemporary citizenry, I very quickly felt tension in embracing any particular paradigmatic framing to the questions I wanted to ask. Should I stick to the critical lens as a means to lift the veil and show how socio-structural inequalities are unknowingly perpetuated by institutions of K12 schools, leading to increased teacher despair and burnout? Or, should I perhaps adopt a constructivist perspective, learning from actual K12 teachers how they co-construct their classroom (physically and culturally) with their students and what they see as the most significant needs for children to eventually develop into engaged citizens? Or if I want to create actionable strategies of use for teachers, would a post-positivist framing be appropriate as a means to approximate greater understandings of teacher’s needs and perceptions regarding digital media, their practice, and democracy? This tension was wholly broken by embracing the number one rule of improv comedy: Yes, and ... How socio-structural inequalities perpetuate in classrooms and its impact on teachers must be explored further. YES! AND ... an exploration of the lived experience of real K12 teachers to understand the priorities and current techniques for pushing democratic outcomes to inform how to approach creating new strategies in a practically minded way. YES! AND … striving to approximate experience towards strategies which could help any teacher is something scholars and researchers should be striving for. I am embracing the idea that progress is made by reflecting on how one’s beliefs inform their actions and how their actions then inform their beliefs (and so on ...). I am
embracing that ‘action’ means different things to different people, but that does not mean the ‘action’ taken by a critical scholar is inherently ‘better’ or ‘worse’ than that of a post-positivist or a constructivist scholar. I am embracing a perspective that does not privilege the ‘action’ of ANY scholar as inherently superior to the ‘action’ of a K12 classroom teacher. I am embracing that the trajectories of multiple traditions of thought (within the university or the K12 school) must be brought into conversation with one another to break endless cycles of trying to create progress in an echo chamber. I am embracing pragmatism.

As will be explained in greater detail in Chapter 1, pragmatism (particularly the works of John Dewey) presented itself as a natural fit for my aims because it affords flexibility and grounds itself in lived experience. I necessarily entered this pragmatic inquiry with a high level of humility regarding bringing traditionally segregated ontology and epistemology into a conversation. I assume there will be plenty of room for critique and suggestions from intellectual traditionalists; however, this project is not only about adding to the cavernous depths of knowledge produced within the academy. This project is about demonstrating how different perspectives interact with one another how that interaction uncovers insight previously unreachable.

21st Century K12 Teacher Experience: A Conjuncture

A crucial foundational step in my endeavor involves explicating what tensions beneath this current historical moment in our society creates an exceptionally complex environment for teachers to promote democratic citizenry with their students. To achieve responsible social progress, we must strive to understand the complexities, seen and unseen, of the current moment. We need to ‘detangle’ and ‘declutter’ multiple discourses to realize the most effective path forward. To do this, I use a concept from seminal cultural theorist Stuart Hall: the conjuncture.
Hall (2011) utilized the concept of the conjuncture to interpret and analyze the contemporary state of British politics through the lens of the previous 30 years being steeped in neoliberalism as a hegemonic process. He states:

“Gramsci argued that, though the economic must never be forgotten, conjunctural crises are never solely economic, or economically-determined ‘in the last instance.’ They arise when many contradictions at work in different key practices and sites come together - or ‘con-join’ - in the same moment and political space and, as Althusser said, ‘fuse in a ruptural unity.’ The analysis here focuses on crises and breaks, and the distinctive character of the ‘historic settlements’ which follow. The condensation of forces during a period of crisis, and the new social configurations which result, mark a new ‘conjuncture”’ (p. 9).

A conjuncture is a tool for describing the socially-constructed structural features of society at a given historical moment which impact the day-to-day lives of people. Hall’s concept pushes scholars to privilege the plurality of features which impact social life. While the heuristic efficacy of ‘the conjuncture’ is undeniably part of its appeal, its primary draw for me was how Hall’s use of it has been understood not solely as a descriptive tool, but as a productive tool as well. Bennet (2016) argues, “For Stuart [Hall], conjuncture was both a moment of danger and one of opportunity; it was something to intervene in, a configuration whose components were to be rearranged through practice. It was a call to action — intellectual, social, cultural, political” (n.p.).

As it relates to the current project, Chapters 2, 3, and 4 will be used to ‘map’ the conjuncture of 21st Century K12 teacher experience as it relates to developing democratic citizens. This includes implications for K12 teachers from the societal logics of social acceleration and the information age, the historical difference in the experience of a K12 teacher of the current moment to previous eras, and how lack of interdisciplinary endeavors has made it stunted the capacity from the academy to make contributions which practically assist actual K12 teachers in any way. It is in this ‘critical lens’ endeavor that I will engage with reflections of my past experience as a kindergarten and first grade
teacher. My hope is my unique positioning as a former teacher provides a novel perspective on how elements of the conjuncture manifest in the day-to-day lives of teachers.

**The Digital and Democracy**

As noted, the idea of the conjuncture will help describe an experiential moment in history as means to begin a discussion on how the elements of the conjuncture can be rearranged or transformed through embodying and privileging democratic values in one’s practice. Envisioning the ‘practice’ capable of transformation requires an additional theoretical discussion and exploration of the unique way the role digital media and technology relates to the John Dewey concept of experience, in which humans rationalize their beliefs to inform their actions and then interpret their actions to inform their beliefs. Particularly with democratically oriented inquiries, there is a crucial question of how digital media and technology have contributed to a transformation in the experience of democracy and thus a transformation in how we must approach preparing students to be engaged, democratic citizens. In Chapter 5, I will explore and defend how the conjuncture of 21st Century K12 Teacher Experience necessitates a specific understanding of the role digital media and technology play in the lived experience of teachers and how that relates to instilling democratic values. The theoretical concept of hypermediation facilitates that understanding and how using this lens informs the contemporarily complex nature of being a ‘citizen,’ thus requiring a novel approach to develop strategies for K12 teachers to employ.

**Pragmatism in Approach, Interpretation, and Outputs**

The works of John Dewey and pragmatism’s influence on my grounding philosophy established, this intellectual tradition’s values are also apparent in the methodological approach to field research and the interpretation of data collected. Broadly speaking, the field research presented and interpreted in
this work is not meant to be understood as the start or completion of an ahistorical project. These chapters are segments in an ongoing project. It is an indispensably important segment, but a segment none the less.

For this project, I reflect, interpret, and apply my past experience as a K12 teacher, and even as a student, as part of my process for interpreting collected data. This approach means this project began years ago through reflection on my past experience in K12 classrooms. After the final chapter, by no means is this project complete. My place of understanding around questions of democracy in the contemporary K12 classroom at the time of writing is thick but not ossified. I attempt to keep my perceptions and insights in a liquid state; eager to be presented to more teachers and transform in unknown, indeterministic ways. This project represents the initiation of further inquiry, in one form or another, a passion to follow.

In Chapter 6, I define, explain, and defend using pragmatic inquiry as a research paradigm for the methodological approach to the field research presented in this work, followed by an overview of field research and the inductive analysis of collected data in Chapter 7. This work will close in Chapter 8 by attempting to operationalize my current level of understanding and insight about teaching democracy in the contemporary K12 classroom into real strategies which I could present to real K12 teachers that could facilitate real change by empowering future generations with the tools to become engaged democratic citizens. This will necessarily include the current plan for the next steps in my continuing project.

Teaching in a K12 classroom in the United States brings contextual complexities into the educative process that Rancière does not account for—nor should he be expected to. It would be delusional to expect all scholarship to attend to the intersection of theory and practice. There will always be theoretical ideals and contextual truth which mitigate them from manifesting; however,
more scholars need to bring that theory into social spaces to not see if the ideal is possible, but to see what parts of the ideal are possible and how can we continue to push towards it.
Chapter 1

John Dewey and Works: Personal and Philosophical Influence

I begin with a deep-dive into John Dewey not to claim his thoughts (or those inspired by him) inform my analytical approach dogmatically, but because his influence on my thinking is about both his understanding of the nature of reality and the tools he uses to learn more about that reality. With this chapter, I intend to highlight the critical parts of Dewey’s life and works which play a significant role in this inquiry. This is also necessary as there is specific Dewey-inspired terminology I will be using throughout this dissertation, and concisely defining these terms is essential to understanding why I purposefully use them.

This chapter is not intended as an exhaustive account of Dewey’s work and should not be read as such. The purpose of this chapter is to precisely explain how John Dewey’s writings and thoughts on education and democracy have influenced my analytical thinking and the provocation his works provide in my reading regarding how/why technology in the classroom can/should be leveraged towards democratic aims. To do this, I will start with a brief description of John Dewey and how his influence on this work should be understood, followed by overviews of how Dewey presents the nature of reality (and how it should be approached), his experience-centered view of education, and how democracy must be indelibly a part of conversations about K12 education. The chapter will close by returning to my personal connection to Dewey, explicating what actions I am compelled to take through reflection on his work in my desire to support K12 teachers.

Who was John Dewey and Why He Speaks to Me

John Dewey was born in Burlington, Vermont, in 1859 to the spectacularly named Archibald Sprague Dewey and Lucina Artemisia Rich Dewey. His upbringing and path to becoming an
influential progressive voices for education reform in the 20th Century have been well covered\textsuperscript{1} but the parallels between the life of John Dewey and the life of Colin Ackerman and how those parallels contributed to the personal resonance of Dewey’s mission of educational reform are important to examine.

John Dewey grew up as the middle child with of three boys; as did I. After receiving his bachelor’s degree, Dewey taught in public schools, including at the elementary school level; as did I. After a few years of teaching, Dewey decided the job of classroom teacher didn’t suit him, and he returned to school to work towards his PhD; as did I. I draw these comparisons to emphasize my connection with John Dewey on more than an intellectual level, and to note that his ideas have not merely contributed to my ontological, epistemological, or methodological approach for this particular project. His views contribute to a necessary perspective for precipitating responsible social progress in the current age — privileging an individual’s personal experience as productive tool which, through rational human action and interaction, can help uncover insights about how and why our society (including schools) operates the way it does.

Dewey’s perspectives from his time as a classroom teacher undoubtedly informed why he sought to extend those understandings through academia. I lament that Dewey remained academy-located for the entirety of his intellectual career. While he stayed within the protective palisades of the university, Dewey appeared to do all he could to relentlessly advance his perpetually transforming democratic vision of “the great community.” Dewey frequently embodied his idea that participation, not representation, is the essence of democracy (Dewey, 1924).

\textsuperscript{1} See Martin (2003).
As a public-facing activist, Dewey was a major advocate for academic freedom within the university\(^2\) and protecting the agency of individual democratic citizens.\(^3\) Additionally, he served as the president for the League for Industrial Democracy, a mission-driven organization which aimed to educate young people about labor issues. While his public activities are not unimpeachable, such as his chairmanship of the Congress for Cultural Freedom,\(^4\) Dewey embodies the kind of academic I would like to be. The type of academic who arguably is not an ‘academic,’ in the traditional sense, at all. The kind of academic who does not just observe and critique, but explores outside the University with vigor whenever there is an opportunity to learn about the experiences of others.

**Pragmatism and The Co-Constructed Nature of Reality**

Dewey (1938) asked the question, “How shall the young become acquainted with the past in such a way that the acquaintance is a potent agent in appreciation of the living present?” (p. 23). Dewey claimed the past was not solely an informational source, but a critical tool which, if framed effectively, can inform the shaping of our present. This thought highlights the guiding principle of the philosophical tradition of pragmatism — where knowledge, language, concepts, meaning, belief, and science are all best viewed regarding their practical use. Pragmatism began in the United States in the 1870s through the works of philosophers such William James and Charles Sanders Peirce (and of course, John Dewey). The philosophical tradition grew out of the view that reality is as “a changing universe, rather than an unchanging one as the Idealists and Realists had claimed” (Gutek,

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\(^2\) Dewey & Kallen (1941) edited a series of articles on the topic of the dismissal of tenured Bertrand Russell from Columbia University found him to be morally unfit to teach philosophy due to his academic work which advocated for, among other things, sex before marriage.

\(^3\) See Jansen (2009) for an accurate contemporary framing of the John Dewey/Walter Lippman debates regarding the democratic agency of citizens.

\(^4\) Dewey participated in the controversial Congress on Cultural Freedom, which was an anti-communist organization funded by the American Central Intelligence Agency. This organization has been seen to have contributed to the harmful ‘red panic’ of the 1950s.
2014, p. 76). Pragmatists argue there is an external world which exists independent of our minds and our experiences, but humans are always socially and historically situated and thus can be understood within the context of that situation. Key to understanding Dewey’s pragmatic approach to education (and other domains) are its two most distinct components: transactional realism and viewing communication as practical intersubjectivity.

According to Biesta & Burbules (2003), with Dewey’s transactional approach “knowledge manifests itself first of all in the way in which organisms transact with and respond to changes in their environment” (p. 11). This means a student’s capacity and opportunity for knowledge lies in his or her actions and interactions within a given environment. This has implications in particular for the K12 classroom space, as the classroom is a curated environment which is (ideally) designed to maximize learning potential. According to Dewey’s transactional reality, a teacher constructing their classroom environment independently (e.g., establishing norms/culture as well the physical set up of the room) would betray the overlapping lived realities of each student. Instead, these overlapping lived realities must be transnationally negotiated into a new, contextual classroom reality with the teacher guiding this process. With this transactional understanding of reality, knowledge is not considered a stable thing which exists in the ‘outside world, but a moving, transforming target which is contextually dependent. For teachers, this means they should privilege the context in which teaching and learning are taking place as much as the content which needs to be taught.

The idea of transactional realism is tantamount only to the conception of communication as practical intersubjectivity in Dewey’s work. Biesta & Burbules (2003) state, “Communication is not the simple transfer of information from one mind to another, but the practical coordination and reconstruction of individual patterns of action, which results in the creation of a shared, intersubjective world” (p. 12). Because the intersubjective world is developed through rational human action (and interaction) and not the transference of information from one to another (or
from a teacher to a student), the term ‘practical intersubjectivity’ has been suggested for this dimension of Dewey’s writings (Biesta, 1994).

Within this understanding of communication, teachers do not ‘give’ knowledge to students, they create opportunities for students to interact with knowledge in the context of a transactionally co-constructed classroom. The teacher, being by definition the only adult in the room, has the responsibility to recreate patterns of knowledge (as defined by academic standards) in their lessons so students will build skills towards having efficacy to participate and contribute to the shared, intersubjective world. Essentially, a teacher’s job is not solely to inculcate facts but to also make sure a student knows how to communicate and apply those facts effectively and appropriately.

These two elements of Deweyan pragmatism have greatly informed how I am approaching the questions I am asking for this project. There is an unfortunate trend in research around media technologies and instructional practice which privilege a duality of the mind and body, meaning there is an assumption that the critical moment of learning is in the delivery of content to students. Dewey made clear that “the domain of knowledge and the domain of human action are not separate domains, but are intimately connected: that knowledge emerges from action and feeds back into action and that it does not have a separate existence or function” (Biesta & Burbules, 2003, p. 15).

I firmly believe, according to Dewey’s pragmatism, the site of excavation for questions about how media and technology impacts the learning process (or any questions about learning and instruction) is in the full breadth of joint physical and mental interactions students have with content and not in the delivery mechanism of the material solely. In seeking to understand how existing teacher practice can be leveraged towards developing a 21st-century democratic citizenry and find pragmatic solutions, I am defining the K12 classroom as a transactionally co-constructed space where teachers aim to create successful students capable of deftly and progressively participating in the continually transforming intersubjective world.
Dewey on Education, Teaching, and Learning

Pragmatism encourages empirical thinking in this most straightforward sense, with human experience being the ultimate area of inquiry to uncover new insights about society. This application of thought as a tool for problem-solving and action made John Dewey’s pragmatic approach particularly resonate in public facing areas of society including journalism, public administration, and, as is the focus of this entire dissertation, education. For me in particular, the primary importance of experience in the learning process, the role of inquiry in teaching and learning, and education being a directional process towards aims are crucial elements to my grounding as a researcher. This is apparent in my approach to this project and thus necessitates explication.

With Experience and Education, Dewey (1938) sought to problematize the traditional, subject-matter centric approach to education towards a new, progressive philosophy (this progressive turn will be placed in a historical context in Chapter 4). Dewey posited “that the fundamental unity of the newer philosophy is found in the idea that there is an intimate and necessary relationship between the processes of actual experience and education” (p. 20). In seeking a theory of experience, Dewey wanted to turn emphasis away from abstract concerns such as the nature of truth and reality towards a focus on the lived truth and reality experienced by individuals on a day-to-day basis. This centrality of experience in understanding social spaces is inherent to my dissatisfaction with the quiescent discussions about teachers and technology coming from the academy (to be discussed in Chapter 4).

For Dewey, the understanding of experience is rooted in two key questions: Where do our beliefs come from? And, what are the meanings of our actions? According to Morgan (2014), “The answers to these two questions are linked in a cycle, in which the origins of our beliefs arise from our prior actions, and the outcomes of our actions are found in our beliefs. Experiences create
meaning by bringing beliefs and actions in contact with each other” (p. 1046). For every experience, there is an inherent process of interpretations. Beliefs must be interpreted to inform and generate actions and actions must be construed to inform and create beliefs. One outcome of this interpretation can be the creation of habits, in which experience is approached passively and leads to perfunctory modes of action. Alternatively, interpretation of experience can occur through what Dewey calls inquiry, a self-conscious process of decision making which requires a thoughtful reflection on experience.

Dewey posited a systematic approach to inquiry which Morgan (2014) summarizes as follows:

1. Recognizing a situation as problematic;
2. Considering the differences it makes to define the problem one way rather than another;
3. Developing a possible line of action as a response to the problem;
4. Evaluating potential actions in terms of their likely consequences;
5. And, taking actions that are felt to be likely to address the problematic situation (p.1047).

While this ordered list may make it seem like inquiry is a process which is added to experience, Morgan (2014) calls for beliefs and their interpretations operate throughout, rather than a step-by-step linear process, as potential actions are mentally rehearsed and evaluated. Inquiry is thus, like any form of experience, a continuous process that may involve many cycles between beliefs and actions before there is any sense of resolution. Biesta & Burbules (2004) succinctly distinguish the process of inquiry from the process of research in stating, “inquiry refers to all processes of intelligent experimental problem solving, while research denotes the deliberate instigation of intelligent experimental problem-solving to generate knowledge and understanding” (p. 57).

This informs how I believe teachers should approach developing/changing their teaching practice regarding technology and democratic citizenship: rather than deliberately instigating a formalized endeavor to find out how to best leverage media and technology towards democratic
learning outcomes, a teacher simply must teach. They must teach, actively reflect on the successes and shortcomings of their teaching, come up with possible adjustments which would work for them personally, and then teach again. Inquiry can be reductively labeled as ‘trial and error,’ but inquiry is distinguished because the transformation of the situation (in this example, teaching practice) is driven utilizing reflection or thinking, not simply blind guessing. Additionally, Dewey’s process of inquiry greatly informs my methodological approach (as will be discussed in Chapter 6).

But what is a teacher’s inquiry working towards? There are of content-based learning outcomes, prescribed through academic standards/curriculum, a teacher must develop their teaching practice towards (e.g., reading fluency, mathematical operations, etc.). But, according to Dewey, there are also more intangible directions teaching should guide students in, such as democratic values like critical thinking, dissent, and self-expression. Teachers must intrinsically practice inquiry in their teaching to develop the aims of education for their unique classroom. An aim of education, according to Dewey (1916), “denotes the result of any natural process brought to consciousness and made a factor in determining present observation and choice of ways of acting” (p. 107). An aim is distinguished from a goal in that a goal connotates an endpoint — a moment where the goal is ‘met.’ Aims “belong within the process in which they operate” and have value “in the fact that we can use it to change conditions” (Dewey, 1916, p. 100/p.105).

In my understanding, academic standards present ‘goals’ for which teachers must move their students towards (developing that approach through inquiry), whereas aims are trajectories without finite endpoints. I am considering helping teachers find ways to leverage their teaching practice (with or without the use of instructional technology) towards building democratic citizenry in students appropriate for the 21st Century. Democracy, as will be discussed in the next section, is an always transforming ideal of community. Democracy is not a state of being, but an aim of which people must utilize rational, experience-based inquiry to work towards continually. With the recent rapid
entrance of digital media and technology into the K12 classroom (see Chapter 3), I intend to find strategies for facilitating teachers in identifying, embodying, and promoting aims of democratic values in their teaching practice.

**Aims of Democracy**

A central argument in Dewey’s 1924 essay The Public and its Problem is that ‘democracy’ should not be thought of solely as a system of government antithetical to communism or other forms of political organization. He advocated understanding ‘democracy’ as an idea:

> Regarded as an idea, democracy is not an alternative to other principles of associate life. It is the idea of community life itself. It is an ideal in the only intelligible sense of an ideal: namely, the tendency and movement of something which exists carried to its final limit, viewed as completed, perfected. Since things do not attain such fulfillment but are in actuality distracted and interfered with, democracy in this sense is not a fact and never will be. But neither in this sense is there or has there ever been anything which is a community in its full measure, a community unalloyed by alien elements (p. 148).

If democracy, as the “idea of community life itself,” is an unattainable state which has never existed fully, what is the purpose of democracy? For Dewey, the value democracy brings to society is found in the active pursuit of it — the pursuit of what Dewey called the “Great Community.” People should act and interact in a society striving towards the aims of democracy. This makes democracy an ethical and always transforming project which requires consistent public engagement and participation of citizens towards aims of equality and free-thought.

> There are no ‘ends’ in democracy; no ‘mission accomplished.’ There are only aims and the relentless pursuit of them. Dewey (1925) contended the United States Democratic System of

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5 “Equality does not signify that kind of mathematical or physical equivalence in virtue of which any one element may be substituted for another. It denotes active regard for whatever is distinctive and unique in each, irrespective of physical and psychological inequalities. It is not a natural possession but is a fruit of the community when its action is directed by its character as a community” (Dewey, 1924, pp. 150-151).
Government represented a false end where “general suffrage, executives and legislators chosen by majority vote, have also brought about conditions which halt the social and humane ideals that demand the utilization of government as the genuine instrumentality of an inclusive and fraternally associated public …. The democratic public is still largely inchoate and unorganized” (p. 109). The way the United States Democratic System is organized creates the illusion of existing in an already fully-formed ‘state’ of democracy, and thus lessens the urgency of citizens to live their lives in pursuit of the “Great Community.” People must learn to embrace this understanding of democracy and embody its ethos in their socially constructive actions and interactions.

Dewey (1925) believed “… the period in which education [towards democracy] is possible to an effective degree is that of childhood; if this time is not taken advantage of the consequences are irreparable. The neglect can rarely be made up later” (p. 63). While I am more optimistic than Dewey in believing democracy in the Deweyan sense can be learned for the first time in adulthood (I consider myself an embodied example of that), I do agree childhood is the most fertile time for a person to learn how to actualize democracy through his or her actions. Dewey’s passion and experience with education led him to inquire what a ‘democratic education’ indeed is eventually.

**Democratic Education**

Democracy/democratic practice and its application for education are two of the more dominant themes throughout Dewey’s writings. In propagating everyday democratic life as the full embodiment of democracy, rather than prescriptions of means leading towards a single end of ‘democracy,’ Dewey sets up essential implications for education. He states, “The conception of education as a social process and function has no definite meaning until we define the kind of society we have in mind” (1916, p. 97). Seeing as the United States has historically prided itself (whether warranted or not) on being a beacon of democracy, education must be “bound up with the
very idea of education as a freeing of individual capacity in a progressive growth directed to social aims; [democracy, in the case of the United States]” (Dewey, 1916, p. 98).

Democracy as an ‘idea of community life itself’ means there cannot be a predetermined ‘end’ or ‘goal’ to the education process. According to his tenets of transactional realism and practical intersubjectivity, an education in a democratic society must facilitate the discovery and refinement of any number of democratic sensibilities which will undoubtedly change and evolve over time, making the idea of a ‘single outcome’ of education problematic. Dewey (1916) states, “Where only a single outcome has been thought of, the mind has nothing else to think of; the meaning attaching to the act is limited. One only steams ahead toward the mark” (p. 103). This narrow tactic may be useful in certain societies, but it untenable if the aim is democratic citizenry.

Inquiry using Dewey’s conception of democratic education, in line with the larger umbrella of pragmatism, in my opinion, cannot happen from a posturing outside of the classroom. Regardless if one is asking questions about political economy, identity, culture, or any other area of inquiry, questions about education must give deference to the importance of the transactional reality and practical intersubjectivities created in the classroom between both teachers and students and students and other students. This is a critical grounding for my desire to understand how democratic education does (or does not) manifest and how digital media and technology (both in and outside the classroom) complicate that manifestation. To understand the purpose of public education, one must understand, in detail, what is actually occurring in K12 classrooms. And this understanding is necessarily complicated and non-resolute with a bevy of contextual factors informing differences in every individual classroom. There can be no ideal ends but only ideal aims which is what a ‘purpose’ of public education should focus on.
Dewey’s Works as a Contemporary Provocation for Action

Aside from my personal connection and theoretical alignment with Dewey, there is a provocation for scholars today to be found in the works of John Dewey in spite of him passing away prior to the technological advancements which strongly contribute to how we define sociality today. John Dewey died in 1952, just as the television revolution was beginning in the post-WWII United States. Dewey indeed saw the popularity of radio, the spectacle of film, and the oncoming influence of television but did not dedicate any substantial part of his intellectual inquiry to how these emerging mass media critically complicate the nature of a person’s, or student’s, lived experience. Dewey (1916) did understand to a certain degree the transformative potential of technology, stating, “Progress is not steady and continuous. Retrogression is as periodic as advance. Industry and inventions in technology, for example, create means which alter the modes of associated behavior and which radically change the quantity, character, and place of impact of their indirect consequences” (p. 30). Though he saw a connection between technology and the altering of social behavior, his conceptions are critically lacking in this area in comparison to the subsequent work of media ecology scholars like Marshall McLuhan and Neil Postman.

The latter half of the 20th Century up through today has seen unbridled theoretical innovation from the academy when it comes to the impact of media and technology on conceptions of society. From McCombs & Shaw’s agenda-setting theory to emerging concepts such as mediatization, scholars have continually sought to explore the complex relationship between

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6 Media ecology, defined broadly, is the study of media, technology, and communication and how they affect human environments (West & Turner, 2010). Ecology in this context refers to the environment in which media is utilized (e.g., the classroom, the home, etc.) and how media impacts the actions and interactions in those environments. There is an active historical component to media ecology, with its practitioners claiming the progression of society is coupled with innovations of media and technology. Technical advancements such as the written word, the printing press, and the telegraph were the tools (not the causes) of societal change and improvement once they were introduced and used widely by humans (McLuhan, 1966; Postman, 1985).

7 See McCombs & Shaw (1972).

8 See Hepp et al. (2015).
transformations of technology and transformations within other domains of culture and society. This work does not purport to consider of every tradition of media/technology-related theory, but in reflecting on my experience becoming versed in various intellectual strains my brain always came to the same roadblock of a thought: ‘This is a fascinating and important way to thinking about society … but how do I use it to help people?’

Dewey’s scholarship did not sufficiently address the role of media and technology in this theory. However, as I further reflect on his ideas on teaching, learning, and democracy, the degree to which he sufficiently did or did not incorporate media and technology becomes unimportant. In fact, Dewey’s words from a 1904 publication addressing the education/training of public school teachers in the United States speaks to my concerns about lack of a clear path for using theory to help people:

“On the one hand, we may carry on the practical work with the object of giving teachers-in-training working command of the necessary tools of their profession; control of the technique of class instruction and management; skill and proficiency in the work of teaching. With this aim in view, practice work is, as far as it goes, of the nature of apprenticeship. On the other hand, we may propose to use practice work as an instrument in making real and vital theoretical instruction” (p. 9).

Dewey argues a teacher’s ‘practice’ (and work towards improving a teacher’s practice) does not solely have to be understood as developing the surface level elements of pedagogy regarding discipline and transferring standards-based content to students. It is also an opportunity to develop a teacher’s theoretical approach to their practice; paying attention to and reflecting on the observed experience of students to inform the underpinning aims (e.g., democracy) of their classroom. Dewey’s attention to the importance of practice, experience, and reflection in the development of theory towards real world application presents the provocation of which I referenced.
For me, Dewey provokes action, but action which does not abjure theory. As mentioned, the deep theoretical traditions built surrounding the implications of media and technology’s continual proliferation in social life provide amazing insight into the subtle dynamics of humans’ relationships with their technology, but too often those contributing to developing theoretical traditions do not look to the lived reality where their theory purportedly manifests. Furthermore, efforts for sharing, debating, and developing the tenets of deep theoretical conceptions are with non-scholarly audiences are rare, with the discourse favoring to occur at academic conferences or in the pages of peer-reviewed journals. My experience within the academy aligns with positions others have taken; too frequently in scholarship, theory lives separate from the practice.9 Dewey serves as a reminder that the in-between is where the good stuff lies (Figure 1).

*Figure 1: The ‘Good Stuff’ Between Theory and Practice*

After (assumedly) successfully completing a doctoral degree, I recognize the challenge of reading theory, with each subsequent revisiting dense theoretical works presenting new interpretations and understandings. This does not come as a surprise to me – the most impactful

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9 See Bolder (2003).
academics treat theory as a career-long endeavor and they impart those ideas to their students. But should those not willing/interested in going to graduate school and pause their lives for years to delve into this material not be part of the conversation? In the K12 classroom, the task becomes attending to how theory (in the case of this work, coming largely from the media studies, cultural studies, education, and communication fields) can be pragmatically presented to teachers with proper depth (enough insight for impact, but not so much to overwhelm/discourage for exploration of the theory in their practice). This means findings ways to use theory to innovate teaching practice while still attending to structural requirements such as state assessments and academic standards.

Dewey provokes action, action to find ‘the good stuff’ at the intersections of theory and practice, and how actual, non-academically trained people are critical to uncovering, developing, and applying ‘the good stuff.’ Dewey provokes me as a scholar to bring with me all I have learned from my mentors and scholars past and seeing what is possible theory is unbounded from the university and shared amongst the people. The academy has so much to offer in the way of understanding our complex society, but so do so many others! The overlap of these offerings is what Dewey understood as being uniquely productive, and his writings provoke me (and hopefully others) to work within that overlap, negotiating differing ways of thinking towards uncovering ‘the good stuff’—the innovative thinking which will have effable impact on the social world.
Chapter 2

Experience Within A Social World Defined By Transformation

In the Fall of 2016, I began my second year teaching kindergarten. One of the lessons I learned from the start of the previous school year was not to make ANY assumptions about students existing relationship to ‘school’ or ‘learning.’ Some students come into kindergarten having seemingly been excited to be a student since infancy, while others were seemingly unaware of exactly what ‘school’ was and understandably suspicious of the strange man their parents kept dropping them off with each morning. To take this observation to heart, I decided to spend time in the first week of class reading books about school and discussing what it meant to be a ‘student.’

Ever the naïve enthusiast, I was sure this lesson would go off without a hitch. After gripping readings of Miss Bindergarten Gets Ready for Kindergarten and Kindergarten, Here I Come!1,2, I drew a large Venn diagram and asked the students to think about what is ‘different’ about being a ‘student’ at school rather than just a ‘kid’ at home. After getting going with the discussion, one student, looking somewhat perplexed, thrust her hand in the air and I called on her. What follows is a rough approximation of the exchange:

**Student:** Different how?

**Mr. Ackerman:** My question was how is it different being a student at school rather than being a kid at school?

**Student:** <still looking perplexed, puts her hand up again> But…how do you mean ‘different?’ I still feel like me at home and at school. Am I supposed to be different at school?

**Mr. Ackerman:** Of course you’re the same person! But at school, you do different things and have different rules, so you have to have to be a different version of yourself.

**Student:** <begins to tear up and cry> “But…I don’t think I can change that much! What if everyone else can be different and I can’t! I don’t know how to act different!

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1 See Slate & Wolff (2001).
2 See Steinberg & Chambers (2012).
I don’t remember exactly how I proceeded from there (though, being in my early 20s, I’m sure I handled the suddenly crying young girl with tact and deftness), but that conversation has always stuck with me. Thinking back, who was I to tell a room full of children they needed to act ‘different’ or be ‘students’ instead of ‘kids’? Their worlds had just cataclysmically shifted. Instead of having their comfortable, familiar routines centered around familiar entities like their houses, cars, and families, these kindergarteners suddenly had to cope with a new space. With new rules. Where things were … different.

But … different how?

The American classroom currently exists within a unique point in history in which the affordances of digital media and technology have contributed to transformations in how we act and interact with one another.

Just as the world had changed for my kindergarteners, the world of the classroom has changed for all teachers over the past few decades. Before presenting my theoretical approach for exploring accompanying democratic implications with this change in the classroom, it is necessary to explain how things are different regarding the ways teachers teach. How has humans’ use of digital media and technology made the classroom space different? How must teachers adjust (or not adjust) to these differences? Technological affordances have led to unprecedented levels of speed and social acceleration in our society which, along with the logic of the Information Age, have greatly complicated the job of a teacher. Teachers are called upon to deliver appropriate academic content to students (e.g., academic standards) in an engaging way, but now must also negotiate how to incorporate contemporarily forming (and quickly transforming) social logics. After explaining and
illustrating the implications of contemporary technological affordances, social acceleration, and the logic of the Information Age on the lived reality of a teacher in their classroom, this chapter will close with a discussion of how these areas fit as the broadest piece of the conjuncture of K12 teacher experience in the current era.

**Affordances of Digital Media and Technology**

Before delving into the aforementioned broader social theoretical concepts, it is worth pausing briefly to describe the unique affordances of contemporary media and technology. Technology does not create or force humans to interact it in a particular way but instead allows humans to co-construct logics or patterns of use. An affordance is what an environment or object “offers the animal, what it provides or furnishes, either for good or ill (Gibson, 1979, p.127). For the rest of this work, I will reference the affordances of digital media and technology. When I use this term, I am explicitly referring to immediacy, ubiquity, and pervasivity.

Immediacy can be understood as the desire to make media transparent, meaning there is no barrier in access, understanding, and interaction. This is to say users expect an immediate, uncomplicated connection to a particular medium and its content. Bolter & Grusin (1999) explains a medium which enhances transparent immediacy “would be one that erases itself, so that the user is no longer aware of confronting a medium, but instead stands in an immediate relationship to the contents of that medium” (p. 24). Primarily, people increasingly expect more from their technologies (particularly their mobile technologies) while at the same time demand less impediment on the part of the technology in accessing its content.

The logic of immediacy has led to technologies to be developed to be increasingly mobile and hidden. These characteristics are usefully expanded as ‘ubiquitous and pervasive.’ Pellegrino (2006) explains “the concept of ubiquity focuses on both the mobility and the
pervasivity/embeddedness of technological artifacts that support the emergence of mobile Internetworking in a mobile society” (p. 133). Technology no longer ‘exists’ outside the realm of social interaction to be included/excluded when a person sees fit, but instead have developed to the point of ubiquity and pervasivity in our everyday social life.

For example, when I leave my home for any reason, having my iPhone in my pocket as I leave is not a conscious decision. My iPhone is critical to many of my everyday activities, including having my calendar as a reference of where to go next, telling me the current time, reminding me to complete a particular task at a certain time, holding electronic versions of my movie or concert tickets, and updating me on current breaking news (just to name a few). I have incorporated my iPhone into my routine in such a ubiquitous and pervasive way I do not treat it as a tool to aid me in my everyday life but instead, unconsciously, as an extension of my own human faculties. The affordances for immediacy, ubiquity, and pervasivity found in digital media and technology are critical to understanding the social transformations about to be described. Social acceleration or the logic of the information age do exist because of digital media and technology, but rather through rational human use as afforded by digital media and technology.

**Speed and Social Acceleration**

There is no doubt that digital technology is an accelerant in the social world, with people’s internet-enabled phones and devices affording unmatched levels of productivity, both socially and professionally. While this increase in speed may on the surface seem beneficial (after all, what bad could come of getting more work done or being able to connect more readily with friends?), but the late self-proclaimed ‘dromologist’ “[Paul] Virilio has insisted that we must ‘politicize speed,’ whether it be ‘metabolic speed (the speed of the living being, or reflexes) or technological speed,’ because, in
his view, ‘speed is just as important as wealth in founding politics’ in pre-modernity and modernity” (Redhead, 2004, p. 38).

While Virilio’s works have influenced my thinking about nature of digital media and technology’s impact on society, his conception of speed as a “pathologization of technology on the body” (Redhead, 2004, p. 42), privileges technological speed as a primary driver of social change while metabolic speed is secondary, thus throttling the overall impact of rational human action and interaction on social transformations. Hartmut Rosa (2015) challenges Virilio (and others theorists examining speed and acceleration) when he postulates that while technological acceleration is a critical area of importance, the acceleration of the rate of social change and the acceleration of the pace of social life are co-equal facets which must be explored simultaneously:

In almost all the studies done on the theme of acceleration, one of these three forms or spheres of social acceleration is, for the most part unreflectively, placed front and center while phenomena in the other domains are falsely subsumed under the chosen category. Thus the work of Paul Virilio, for instance, circles around the phenomena of technological acceleration, while Hermann Lübbe or Matthias Eberling concentrate on the acceleration of social change, and Georg Simmel or Robert Levine occupy themselves with the acceleration of the pace of life. Doubtless the most interesting question, however, concerns the internal connection between these categories of acceleration (p. 65).

Rosa sought to de-centralize any one conception speed or acceleration to show technology and human agency as co-constitutive, where one does not take precedence over the other. To demonstrate the interdependence between categories of acceleration, Rosa created a heuristic called ‘the circle of acceleration’ (Figure 2).
This model’s greatest strength is its simplicity. I have personally referenced and explained this model when speaking with teachers and educators who immediately identified examples of the circle of acceleration in their own lives. After briefly describing the model further, I will provide an illustrative example from my teaching experience to show how social acceleration impacts teacher experience relating to their classroom instruction.

The circle of acceleration posits how technological acceleration, acceleration of social change, and acceleration of the pace of life interact with one another in a cyclical, co-equal way. According to Rosa, technological acceleration ignites the acceleration of social change. If technology allows a person to perform a task faster or more efficiently, then there will be a higher rate of turnover of social norms and expectations. The progressive acceleration of social change means “the tempo of [social] transformation has been heightened from an intergenerational speed of change in early modernity through a phase of approximate synchronization with the sequence of generations in ‘classical modernity’ to a tendency toward an intragenerational tempo in late modernity” (Rosa, 2015, p. 110). As the acceleration of social change leads to intragenerational differences (as opposed to intergenerational differences), this will drive the acceleration of the pace of life, which is “an increase in the aggregated speed of action as well as the transformation of the experience of time in everyday life” (p. 122). People will live their lives with greater urgency and speed to keep pace with the increased rate of social change. When people are striving to live their lives at a faster pace, they
will inevitably look to their most pervasive technologies to facilitate this which in turn creates motivation for continued commercial investment and effort into further technological acceleration.

This cycle has arguably always existed; however, the unprecedented technological innovation from the 1990s through today has made it increasingly difficult for a person to ‘keep up.’ Due to social acceleration, people “operate under conditions of permanent multidimensional change that make standing still by not acting or not deciding impossible” (Rosa, 2015, p. 117). This condition of feeling like one is always on a ‘slippery slope,’ being compelled to move forward constantly without ample to time ruminate on options. This dynamic is one K12 classroom teachers certainly identify with: the feeling of never quite being ‘caught up.’ Never quite being caught up with how to use the latest software purchased by the school. Never quite being caught up to students’ fads and trends. Speaking from experience, never feeling ‘caught up’ or ‘on the slippery slope’ has significant implications for the experience of the teacher.

For example (Figure 3), when I was teaching 1st grade our school was given two classroom sets of laptops through a district initiative and teachers were instructed to use them. We were not told how we should be using them, but merely that they should/must be used. Like many overly-confident/ambitious young teachers, I dove headfirst into using the laptops. At first, I had my students use them to explore the pre-installed software (e.g., typing lessons, a digital library of books) and I quickly realized/decided using laptops could allow me to fit more into my day. More instruction. More lessons. More learning. Students could learn and achieve even if I was not directly present with them, which would free me up to pull small groups for more differentiated instruction. The laptops afforded technological acceleration, which I naively believed would only bring positive progress to my classroom and my teaching practice.
As I continued to use the laptops, my principal encouraged me to go online and look at popular teacher blogs or resource sharing websites\(^3\) to see how other teachers are implementing similar laptop sets into instruction. A simple web search produced dozens of examples and suggestions for using laptops like the one which precipitously appeared at my school. A deluge of new ways to integrate laptops into my instruction flushed through my brain, and I wanted to implement as many new strategies as possible. This includes using laptops to ‘publish’ journal entries after going through a drafting process, using Wikipedia to facilitate self-guided exploration of knowledge, and having students use google drive so their parents can access their work from home. Every month or so I would revisit this search, and undoubtedly there would be at least one or two new methods for effective pedagogy with laptops to be found. In addition to this, my school and district offered many different professional development training opportunities, each presenting even more novel ways to use laptops in instruction. The technological acceleration afforded by the laptops led to an acceleration of social change: curriculum researchers, administrators, and other teachers were investing more time and resources into pedagogical innovation than previously because the technology afforded so many new and unknown means of student engagement.

*Figure 3: Circle of Acceleration with K12 Example*

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\(^3\) Edutopia.org – for example
I felt an obligation to keep up with new ways of using laptops out of fear of not doing everything I could for my students. To keep up with all this information, I did what any young teacher blindly passionate about driving student achievement by whatever means necessary would do: I worked harder. I dedicated more time before school, during school, after school, and on the weekends to innovating my teaching practice, striving to give my student the ‘best’ educational experience as possible (in addition to still ensuring my students were being taught the academic content towards appropriate achievement). The acceleration of social change in the development of pedagogy with laptops prompted me to choose to increase my pace of social life. I moved faster. I worked harder. To be clear, moving faster and working harder was my choice. The technology or the subsequent acceleration of social change did not force me to change how I acted. Instead, they gave me a reason to believe changing the pace of my social life would be the salve for not falling behind the curve of pedagogical innovation.

With my overarching project being focused on the experiential reality of the teacher, the most salient emotion to share about that experience (in my opinion) was the guilt and anxiety. Guilt and anxiety that I wasn’t doing enough for my students. Guilt and anxiety about not utilizing my planning period to the fullest or working more on the weekends. I was indeed on the slippery slope, unable to establish my footing and feeling as if the rug was continually being pulled out from under me. Each time I approached a workable, repeatable structure/protocol for using laptops, a new article, blog post, or workshop would provide more things to consider and thus preventing my routine from settling. At one workshop I remember another teacher commenting something to the effect of, “keeping up with all this technology stresses me out.” The facilitator said she understood, and then suggested attending an upcoming workshop on apps for lesson/unit planning as a means to help with the stress (more technological acceleration, bringing us back to the start of the circle).
My described experience is, of course, unique to me. Each teacher in each context has a unique experience, but the kinds of technology and how they are introduced provide similar staging for my experience as they relate to other teachers. By removing the media or technology from the center of inquiry and treating human agency as a co-equal driver, social acceleration allows uncovering interactions between people and digital technology previously unexplored. This includes, in my example, the implications of imposing upon a teacher a new technology, with the onus on the teacher to figure out how to best use it. Current literature around increased teacher burnout rate attributes the problem to stressors such as discipline concerns, time constraints, low student motivation, and value dissonance (Skaalvik & Skaalvik, 2017). These stressors are certainly contributing factors to the teacher burnout problem, but by using a concept such as social acceleration allows a deeper understanding of how stressors are interrelated with the affordances of digital media and technology.

Making matters more difficult for teachers, K12 schools are not built to ‘keep up’ with the late-modern acceleration happening outside the walls of the classroom. Rosa (2015) states, “institutions … can no longer provide resistance because the forces of acceleration have developed so far that even the institutional structures that brought about and supported their unfolding can no longer keep up with them. Thus, they become hindrances to acceleration and braking forces at the threshold of another modernity” (p. 92). Social acceleration has led to a dramatic restructuring of the workplace. ‘Open concept’ offices, the ability to communicate instantly with a co-worker (during or outside of business hours), and incentive-based payment structures are characteristics of the late-modern work environment (Robertson, 2000). Because institutions of K12 education were created and stultified into society so long ago, they simply cannot keep up, and now they are, in a way, ‘out of sync’ with society.
School buildings are reused and repurposed far more frequently than built anew, making a practical, generalizable model for an “open concept” school challenging to envision. A teacher plans their lessons separate from students (and frequently separate from other teachers), making the ability to instantly contact co-workers for collaboration less transformative than in the office setting. And being bureaucratic institutions, the pay-scale in public schools is usually based solely on years of experience. Outside of pay bumps for earning advanced degrees, there is little to no economic incentive for teachers to dedicate time and effort to innovating their teaching practice. When I was stressing myself out about how to best use laptops in my classroom, it was difficult knowing that the teacher down the hall who has been teaching with the same methods and tools since the 1980s would always make more money than me as a teacher. No matter how hard I tried or self-sacrificed.

The asynchrony between acceleration capable within the institutions of K12 schools and the acceleration of late-modern society at large creates an unseen, undiscussed tension for teachers: how can they be expected to innovate when the structure of their institution doesn’t allow for innovation? Digital media and technology made it possible to fit ‘more’ into the school day, but fitting ‘more’ does not indicate a measurable benefit. I propose that given the structural limitations of school institutions, teachers should not adapt their teaching to digital media and technology, but rather should transform their overall pedagogy to incorporate the logic of media and technology responsibly. Paramount to this proposition is contextually respecting each teacher as an individual and each classroom as unique. Teachers must transform their pedagogy to account for the unprecedented impact of technological acceleration, but they should not be forced to go about this in a way which is not suited for their personal approach to teaching. Teachers do not need workshops or blogs to tell them the best way to utilize digital media and technology in instruction, they need support in how to go about uncovering their best way to integrate digital media and technology in their teaching.
Logic of The Information Age

In addition to speed and social acceleration, the global transition into what Manuel Castells terms “The Information Age” affords other social transformations. In his three-volume opus The Information Age: Economy, Society, and Culture, Manuel Castells (2010) claims information technology to be to the information revolution of the 20th Century as “what new sources of energy were to the successive Industrial Revolutions, from the steam engine to electricity, to fossil fuels, and even to nuclear power, since the generation and distribution of energy was the key element underlying the industrial society” (p. 31). The new information paradigm is characterized by information being its raw materials, the pervasiveness of effects of new technologies, the networking logic of any system or set of relationships using these new information technologies, being based on flexibility, and the growing convergences of specific technologies into a highly integrated system.

Castells (2010) states that, for the first time in history, the basic unit of social organization is the network, “made up of a variety of subjects and organizations, relentlessly modified as networks adapt to supportive environments and market structures” (p. 214). The contemporary raw material of information circulates through these networks which comprise some kind of social organization. This has contributed to a shift in the temporal and spatial awareness in humans. These shifts are described by Castells as the emerging logics of timeless time and space of flows. According to Castells, the networking logic of the information age has led to a desynchronization of social action from traditional linear time, creating the opportunity to utilize timeless time. For example, while the average workday may still last from 9am until 5pm, devices and apps relentlessly tether the employee to their work outside the confines of the typical workday. Because flexibility is a key characteristic of the Information Age, employees are able to manipulate and organize their labor in ways impossible before, demonstrated in activities such as working remotely or responding to work emails just before
bed on one’s phone. Linear conceptions of time are superseded by timeless time, allowing greater flexibility and manipulation for both individuals and organizations.

Castells (2010) purposefully clarifies that timeless time “is only the emerging, dominant form of social time in the network society” (p. 465). Linear time still exists and can come into conflict with timeless time. This dynamic has particular implications for the K12 teacher. For example, when I was teaching kindergarten, I wanted to spend the entire first week in November of 2012 teaching and helping students learn about the U.S. government as it coincided with the presidential election. I planned to cover all of the Tennessee state standards about civics and government through activities relating to the elections to seize the opportunity to make our democracy seem more ‘real’ to our students. My justification to my principal for spending a week of instructional time on civics/social studies standards was that I would use the extra time I would have later in the school year that I would have been teaching social studies to make up for any time lost on math or literacy instruction during election week; I was attempting to use timeless time to manipulate how I taught. My principal liked the idea but unfortunately had to reject it, telling me legally I had to use a certain amount of time every day on math and reading and my plan would breach this rule.

This is another example of the asynchrony between traditional school/classroom institutions and the rest of the society introduced in the previous section. In this case, my school and district’s structural adherence to linear time negated my efforts to utilize the emerging logic of timeless time. Important to note here, in this example the barrier to my plan was structural, not ideological. The feedback from my principal was not that it was pedagogically flawed or ineffective; it was merely not allowable due to the fundamental adherence to linear time within schools and classrooms.

In addition to timeless time, space of flows is another useful concept which Castell’s conceives as a characteristic of the network society. Castells (2010) writes:
Flows are not just one element of the social organization: they are the expression of processes dominating our economic, political, and symbolic life. If such is the case, the material support of the dominant processes in our societies will be the ensemble of elements supporting such flows and making materially possible their articulation in simultaneous time. Thus, I propose the idea that there is a new spatial form characteristic of social practices that dominate and shape the network society: the space of flows. The space of flows is the material organization of time-sharing social practices that work through flows (p. 442).

When operating in the space of flows, one can achieve simultaneity of activity without simultaneity of space, meaning one can enact social processes in real-time without being in the same time zone, or even continent, as the other actors in the network. Just like timeless time, space of flows does not supersede traditional, physical conceptions of space (what Castells calls ‘space of place’), but rather as a dominant characteristic of the network society.

The structural rigidity of schools again suppresses the contemporary inclination to utilize the space of flows. A 7th-grade student with a smartphone likely spends a large amount of his or her time outside of school in the space of flows: interacting with friends on Snapchat, playing video games online with people from around the world, or having a session online with a math tutor. Once a student enters the school building (a space or place), phones are prohibited, and he or she spends the 6-7 hour school day learning in similar spatial environments as students from previous generations. Of course, space of flows is not a generationally specific logic, as teachers exist and build efficacy in the space of flows in their personal lives. They, too, must readjust their transforming logics about space to create engaging lessons in a space of place. This incongruity, like with the example of timeless time, again demonstrates how institutions of K12 schooling are unable to keep up with modern sensibilities to their inflexible structural makeup.
The World is Different. Now what?

“…Different how?”

The preceding explication aimed to show ‘how’ society (in the broadest sense) is ‘different.’ The shift towards information and data being the salient raw material of our time has transformed traditionally held logics of time and space, affording an ascending level of social acceleration (driven through rational human use of accelerative technology). This acceleration has facilitated increased anxiety and despair for many people (with K12 being the focus of this discussion) as they struggle to find their footing on the perpetually transforming ‘slippery slope’ of sustained efficacy in their lives and careers. Additionally, traditional K12 education institutions are organized according to the ‘traditional logic’ of the pre-information age (e.g., linear time and space of place). This further puts the K12 teacher in a difficult position as structural limitations make the time and space needed for innovating one’s teaching practice to apply to a transforming social world limited or non-existent.

Returning the Stuart Hall’s concept of the conjuncture,4 in constructing the conjuncture of K12 teacher experience in the current age, social acceleration and the logic of the information age are particularly affective elements. K12 teachers have to reckon with adjusting to the affordances of rapid technological innovation in both their personal and professional lives. On its face this sounds like the same kind of reckoning many people in other sectors and industries face (which is true). What is particular to K12 teachers is their professional environment is increasingly incongruous with their personal lives due to the discussed structural conditions and logic.

4 See Introduction (p. 6).
I’ve always loved a good visual diagram (I am an elementary school teacher at heart, after all), so to reinforce the idea of a contemporary conjuncture of K12 teacher experience I will make just that. Social acceleration and the logic of the information age are socially encompassing, impacting all people in one way or another. On this visualization they will be the represented as the outer rims – broad in that they affect all people, yet specific because affect each individuals experience in contextually specific ways (Figure 4).

“So….what now?”

The question of “what now?” is, unsurprisingly, a complicated one. As noted, this project intends to approach a pragmatically-oriented framework for supporting teachers in utilizing and framing the logic of the socially accelerated world towards the development of engaged, democratic citizenry. In continuing to describe elements of the conjuncture of K12 teacher experience, the next two chapters will bridge the gap between the broader social theory of this chapter towards the theoretical posturing I take towards digital media/technology’s ‘role’ in the classroom and what working towards developing democratic citizens in the Deweyan sense would look like for a teacher. Chapter 3 provides a historical overview of teacher experience in the United States as a means of better understanding the current experience and why it is unique to eras prior. Then, in Chapter 4, a review of relevant academic literature from the fields of media studies and education to demonstrate the observed methodological and theoretical lapses, respectively, and how I intend to pull those fields in conversation with one another with this project.
Figure 4: First Addition to the Conjuncture of K12 Teacher Experience in the 21st Century
Chapter 3

Teacher Experience in the United States, Past and Present

It is critical for any pragmatic inquiry to be rooted in the lived realities of the social world. Hence, it is appropriate and necessary to place the current experience of teachers in the United States in a historical context. To do this, I have reviewed literature and historical accounts of education in the United States with a narrowed focus on the role teachers played in each era and how the experience of the teacher changed from one historical period to the next. The broad trends in teacher experience point to a historical pattern of asynchrony between how teachers are trained versus what the expected outcomes of their practice are.

Starting with the New England Grammar Schools of the 1600s, I will chronologically recount aspects of the emergence of public schooling in the United States as they relate to teachers. Upon entering the 20th Century in this history, the attention shifts to include information about education reform efforts and the policy debate over the federal funding of education. At the time of this writing, we are nearly a century removed from the progressive education movement; nearly 60 years removed from the first passing of the Elementary and Secondary Education Act (ESEA); and nearly 20 years removed from The No Child Left Behind Act (NCLB), ESEA’s most controversial reauthorization. This historical trajectory holds insights into the unprecedented influence of neoliberalism on education in the United States, specifically through the proliferation of the K12 educational technology industry since the passage of NCLB.

The encroachment of the K12 classroom space by neoliberal values is an important element of the conjuncture of experience of 21st Century K12 teachers, as it is closely linked with the rise of digital media and technology being presented and prescribed as indispensable instructional aids. Out of this increase in digital instructional technology, a major discourse around safety and citizenship in
online spaces arose, with teacher’s viewed as being in a logical position to address these. In light of this addition to the responsibilities in the current experience of the K12 teacher (and my ultimate aim of creating tools or strategies to support teachers promote 21st century democratic values), this chapter will close with appraisal and analyses of resources currently available to support teachers and schools in this area.

From Grammar Schools to Common Schools

In Colonial America (circa 17th-18th Centuries), formalized education began to first flourish in New England (namely Massachusetts) through the creation of local grammar schools. New England Grammar Schools were closely modeled after the tradition of Grammar Schools in Central and Western Europe, with the primary goal of teaching pupil’s Latin and the classics to prepare capable youth for academic pursuits (Dorn, 2003). Schools did begin to develop in other parts of the colonies; however, the New England Puritans emphasized schools more than most other colonists, with attempts to establish schools in the Southern part of the colonies failing due to a higher scattering of the population and lack of long-term local financial support (Vinovskis, 1987). These schools were not compulsory and required tuition (paid directly to the teacher), and instruction usually took place in the teacher’s home, sometimes in a schoolhouse if the desire for this kind of education was high enough in a given township.

Grammar school instructors were educated mostly at European universities and their pedagogy consisted of drills of memorization/recitation and curriculum was ill-defined; however, by the late 17th century most grammar schools defined their curriculum by the requirements of Harvard College (Dorn, 2003). The esoteric subject matter of the original grammar schools was seen as desirable and necessary by communities, and in 1677 a law was passed in the Massachusetts colony that any community consisting of 50 families or more must have a grammar school
established (Small, 1902). This indicates the inherent vested community interest in schooling; a theme of which will recur and strengthen through much of the 20th century.

Teachers at grammar schools were solely men and primarily tasked with preserving the past rather than looking towards the future which made the teacher's role and expertise unimpeachable as he usually was the only person in a community with the knowledge to carry out appropriate instruction. Gradually, subject matter started to expand to include more focus on reading, writing, and mathematics as evidenced by this 1772 and placed in the Virginia Gazette:

Wanted Immediately: A Sober, diligent Schoolmaster capable of teaching READING, WRITING, ARITHMETICK, and the Latin TONGUE... Any Person qualified as above, and well recommended, will be put into immediate Possession of the School, on applying to the Minister of Charles Parish, York County. -- The Virginia Gazette, August 20, 1772

Teachers’ responsibilities began to increase not solely because of the broadening of expected subject matter, but also, because a reduction in the educative role of the family unit coincided with the rise of the schooling in the United States (Bailyn, 1960). Traditionally, the majority of a child’s education was expected to be imparted within the home but as the colonies (and their economies) began to grow, what was once taught in the house was outsourced to the schoolhouse with an accompanying increase in pressure and expectations on the teacher to prepare pupils for high efficacy in society.

The experience of the teacher steadily transformed from the time of the grammar school from filling a role of luxury (with traditional grammar schools charging tuition and teachers holding a high social status) to a function of necessity. This assumedly was accompanied by an increase in stress and workload on the teacher, as expectations of output began to rise. Teachers were for the first time viewed as they would continue to be viewed by many: critical agents in the progression of society. There was (and still is) widespread belief that effective teaching and learning in childhood would lead to greater individual success (which would lead to greater success of society overall).
This newfound respect for the importance of education and teachers eventually contributed to a push for a new kind of schooling by education reformers such as James Carter, Horace Mann, Henry Barnard, and Catherine Beecher. Reformers grew tired of the narrow conception of education provided by the grammar school model (even though it had expanded some), with James Carter (1826) stating, “The grammar school teachers have rarely had any education beyond what they have acquired in the very schools where they have to teach. Their attainments, therefore, to say the least, are usually very moderate.”

Education reformers (Mann and Carter in particular) proposed a new kind of school termed the common school (considered to be the precursor to today’s traditional public school). The common school would necessarily be available to all children regardless of religion or social class and would be financially-backed by the local government. The ethos of the common school of the 19th century was primarily egalitarian, with all students being assigned the same tasks with the intent of all students developing the same knowledge and abilities (Bickel & Chang, 1985). Though state legislatures were hesitant to financially back such a radical restructuring of schooling in America, overwhelming public support led the establishment of common schools all over the United States. The success and popularity (as well as the observed benefits) of providing state-subsidized education led to states to begin to pass compulsory education laws, which required by law children under a certain age be enrolled in school (Massachusetts passed the first mandatory education law in 1852 with Mississippi being the last state to pass such a bill in 1918).

Additionally, the increase in the number of schools led to a high labor demand for teachers. This was a significant factor contributing to the entrance and quick domination of women in the teaching profession. The entrance of women en masse into the classroom was a critical step towards the blurring of school versus home responsibilities of education because, in effect, female teachers were continuing the primary societal maternal role of educating and rearing the young (Vinovskis,
The rapid proliferation of common schools, with their egalitarian focus, led to a need to further formalize teacher education a preparation toward uniformity in pedagogy and goals. This led to new transformations of the experience of teachers in the United States.

Creating a New Normal to Be Challenged: The Normal School and the Progressive Reaction

A key feature of the formalization of education for children in the 19th-century United States was an over-rationalization of how to make teaching as efficient and uniform as possible. For the first time, colleges were explicitly created for the training of teachers and were given the title ‘Normal Schools’ (also sometimes called ‘teacher colleges’ or ‘teacher-training colleges’). As the name infers, the underlying philosophy of such institutions was to train teachers to hone their practice towards a ‘norm’ in a aggregative sense; a standard of teacher efficacy that had been deemed to produce suitable student achievement outcomes. The first normal school opened in 1834 (at the urging of education scholar Horace Mann) under the tutelage of Cyrus Peirce.

Prevailing theories and conversations about education throughout most of the 19th-century believed learning was a passive activity. The teacher’s job was solely to ensure the correct content was conveyed to students. Teachers spent much of their time proctoring while students read textbooks, administering assessments, and lecturing (Cuban, 1993; Finkelstein, 1989). The preparation of teachers at normal schools privileged preparation and consistency over aims or outcomes. For example, at a normal school in Troy, New York, a rubric for evaluating the teachers-in-training listed the following categories: “Power to control,” “Power to interest,” “Skill in preparation of lesson,” “Skill in questioning,” Skill in illustrating and explaining,” “Judgment in assigning lessons,” “Voice,” “Manner in classroom,” and “Care of blackboard” (Ogren, 2005, p. 141). The philosophy of the normal school trained teachers with an instructional practice rooted in
the separation of the teacher and the student; the teacher created and controlled their learning environment according to a set of rules. Students’ presence in such a structured environment was considered the best way to teach and develop young minds.

By the end of the 19th-century, the normal school model for teacher preparation gradually declined, and the rapidly growing presence of colleges and universities subsumed many normal schools as well as their teacher-training functions (Forzani, 2014). The strongest facet of the normal school model was its practice-centered curriculum, with a considerable emphasis on actual classroom experience with students. The shift to teacher preparation at universities and colleges took the focus away from practice-based training and shifted importance to research and theory. Faculty members at the newly forming academic department were more concerned with academic research and building their graduate program than problems and questions of the school itself (Jencks & Riesman, 1968). This newfound attention on research as a way of professionalizing the education profession is symptomatic of the capitalist-rooted values of growth and notoriety which subsumed social action as described by Weber (1905/2013). The Commonwealth Teacher Training Study\(^1\) provides an excellent example of how these emerging values guided educational research.

**March Towards Progressivism**

While the normal school was far from perfect in its philosophy and practice, it did highlight the critical necessity of teachers-in-training spending ample time in a real classroom setting. University-centered teacher preparation moving away from this and towards research efforts to quantify ‘good teaching’ triggered a progressive movement that “arose during the 1890s as a many-sided protest against pedagogical narrowness” with its nature being “essentially pluralistic, often self-

\(^1\) See Charters & Waples (1929).
contradictory, and always related to broader currents of social and political progressivism” (Cremin, 1959, p. 160). The multivariate, speciously-defined progressive education movement did not gain enough momentum to change the philosophy of education guiding university-based teacher preparation purposefully; however, it did produce an abundant amount of literature problematizing the university’s approach toward education and teaching, imagining possible paths forward.

The most complete account of what progressive education could look like was John and Evenlyn Dewey’s Schools of To-Morrow (1915). The father-daughter teams of Dewey & Dewey observed a massive gap between how children are expected to engage in school versus how they engage in their personal lives. Dewey put an emphasis on “learning by doing” as a way to narrow this gap as he believed closeness to real-life is necessary “if the pupil is to understand the facts which the teacher wishes him [or her] to learn; if his [or her] knowledge is to be real, not verbal; if his [or her] education is to furnish standards of judgment and comparison” (Dewey & Dewey, 1915, p, 294). Though Dewey and the relevant work regarding this project were covered in Chapter 2, it is worth noting him in this historical overview to show how at the time of writing, Dewey’s works showed little effable impact on the ways teachers were prepared or schools were run.

Some teacher preparation programs (both university-based and the few remaining normal schools) attempted to be more progressively grounded in their pedagogy but eventually quiesced and continued to be more traditionally pedagogically focused, privileging content and standards as the driver for teaching practice rather than the student experience and connecting learning to real life (D’Amico, 2015). Arguably, had the imperfect normal school model not be derailed by the rise of university-based education the normal school could have been allowed to develop as an incubator for the development of progressive education and pedagogy.

Unfortunately, efficiency-minded universities wielded enough social/economic capital that at the time (outside of a few key examples) that progressive education could not find the space or
resources to purposefully and impactfully develop. This left the experience of teaching to be viewed as singular and generalizable without any emphasis on context or the individuality of students (or teachers). With progressive conceptions of education making some progress but failing to gain any real momentum in engendering lasting change, the experience of teachers remained broadly steady.\(^2\)

The university-based teacher preparation programs with their emphasis on content and efficiency remained mostly unchanged.

**Federal Policy Sets Up Heightened Accountability for Teachers**

By the 1960s, public schools in the United States needed revitalization. Concerns about high school graduation rates and student performance led the federal government under President Lyndon B. Johnson (who attended a teachers college and was the last U.S. President without a bachelor’s degree) to pass the Elementary and Secondary Education Act (ESEA). The act provided additional funds to state education agencies who could distribute those funds at their discretion to local education agencies in a given state. Additionally, there was an emphasis on the equity and the importance of every child having access to exceptional education and ESEA aimed to compensate for the educational shortcomings associated with children growing up in poverty (Carmichael, 1997). This bill for increased federal funding, passed by a Democratic-controlled House and Senate, hit at the heart of a debate deeply embedded in the two-party system of American politics: the role of the federal government in states’ affairs.

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\(^2\) I am aware of how vague the term ‘broadly steady’ is here – while I paid attention to aggregative trends in teacher experience, it would be irresponsible to present my aggregation as truth. Teacher experience is always undoubtedly multivariate across context, and due to scope this project I regrettably will not spend time critically appraising how things like class, race, or immigration impacted teacher experience. For work specifically looking at the experience of teaching through different critical lenses, see Gitomer & Bell (2016).
Though controversial due to its affording an unprecedented level of federal involvement in education (which had always been a state and local issue), ESEA represented a massive win for education equity\textsuperscript{3} activists who believed education should be debated and developed at both the state and federal level. ESEA impacted teacher experience in how the extra funds were spent. The legislation authorized funds dispersed to states from the federal government for professional development, instructional materials, educational program support, and promotion of parental involvement. Inherent to the mission of ESEA was the assumption that funds would be spent to improve teacher practice, and thus improve student achievement. For the first time, teachers were beholden not only to their students’ performances but also to demonstrate how the additional resources afforded by ESEA had a positive impact on student achievement.

After ESEA, teachers were no longer considered developed professionals, but rather as ‘somewhat’ professionals whom must put time and effort into the continual honing of their practice through professional development, using innovative instructional aids, and involving parents to bridge the gap between school and home. Expectations were higher for teachers and local school entities needed to purchase material to help teachers meet these heightened expectations. The need for innovative instructional tools and curricula for teachers (and newly bestowed funds to buy those tools and curricula) led to publishing companies (such as Houghton-Mifflin and McGraw-Hill) entering the educational space for the first time. There was a market created for teaching innovation, and this market would continue to grow as ESEA continued to be reauthorized every five years.

\textsuperscript{3} ‘Equity’ in the context of education reform refers to giving the appropriate tools to ensure success of all student, regardless of their contextual reality. This is frequently conflated with ‘equality,’ meaning treating everyone the same, regardless of context. For more information, see Grant (2018).
A Nation at Risk Ushers in the Accountability Regime

ESEA was reauthorized every five years by the federal government, most recently on December 10, 2015, as the Every Student Succeeds Act (ESSA) by President Barack Obama. With each successive reauthorization, there was debate and resulting language added to the act requiring state and local education agencies provide evidence of effective use of the funds to qualify for the next round of funds. The increase in accountability removed agency from the classroom teacher in that instruction had to be crafted towards meeting certain benchmarks. What and how teachers taught became more rigid and prescribed (hearkening back to the days of the normal school). Despite the Reagan Administration’s efforts to reduce regulation such as these as part of their ideological value of limiting the role of the federal government, the publishing of A Nation at Risk (‘U.S. National Commission,’ 1984) reinvigorated public investment in schools and education to the United States did not fall behind the rest of the world educationally or financially.

A Nation at Risk was a federally funded study, claiming that due to the poor state of U.S. education, the Nation’s historical preeminence in science, commerce, and technology innovation. Concerns about how to ensure American children were receiving the best education possible was increasingly present in public discourse. Throughout the 1980s, the issue of education gradually rose in the polls as the most salient concern for American voters (McGuinn, 2006). With the increased spotlight on the issue of education in politics (arguably culminating in 1988 with then-candidate George H.W. Bush branding himself “The Education President’), the conversation shifted from how much additional funds to distribute in high-need areas to developing tools for measuring student-achievement as a means of assessing the efficacy of the teacher. The progressive dreams of Dewey and others were long gone, the reaching of standards and achieving certain test score became the top priority for classroom teachers. Teachers began to feel rising amounts of pressure associated with being a critical part of saving the United States from the bleak possible future described in A
Nation at Risk. Almost 20 years after the publishing of A Nation at Risk, the increasing role of the federal government in education culminated with the passing of No Child Left Behind.

No Child Left Behind and the Welcoming of Neoliberalism into the Classroom

The No Child Left Behind Act (NCLB) was signed into law by President George W. Bush on January 8, 2002. The law provided federal guidelines around annual testing, academic improvement expectations, teacher certifications, report cards, and curriculum adoption. The following of these guidelines by states and school districts carried implications with regards to the amount of federal funding school systems would receive. Parkison (2009) argued, “the NCLB regime gained hegemony over the political space of public education, and the value of effectiveness of the educational process have become the subject to the fetishism of standardized test scores” (p. 44). This newfound hegemony continued with President Obama’s Race to the Top Act in 2009, which further incentivized test scores with the prospect of funding and served to “[reject] the redistributive liberalism that guided educational policy in the 1960s and 1970s” (Kantor, 2015, p. 1).

While NCLB was repealed in 2015, its lasting effects are still felt in terms of its perceived attack on democratic, sociocultural context-based schooling (Meens & Howe, 2015; Trujillo & Renée, 2015, Cuban, 2015) as it introduced “monopoly-finance capital into the public education system” (Foster, 2011, p.6). This neoliberal-capitalism logic continues with or without policy, and just as ESEA initially spurred private companies to enter the educational space, an entire industry has been created with financial interests in the American schooling systems. While NCLB is no longer in place, the 2015 reauthorization of ESEA signed by President Barack Obama as the Every 4

The eventual passage of sweeping federal spending by a Republican president highlights the complicated nature of education. Though the Republican is known for its staunch opposition of excessive social expenditures by the federal government, the issue and importance of education (after continued opposition from Republicans in the 1990s) transcended party lines. This led to centrist-Republicans (like Bush 41 and Bush 43) to see education as a moral issue relating to compassion and eschew protestations from the conservative wing of the party.
Student Succeeds Act (ESSA) maintains the accountability regime on teachers established by NCLB; growth/test scores/meeting standards as paramount in indicating effective teaching/learning with digital technology seen as an aid for teachers to efficiently meet those benchmarks.

**NCLB Heightens Tech’s Profile, Making It A Critical Part of the Conversation**

Federal policy battle defined the discussion of public education in the second half of the twentieth century through today. A too-often overlooked aspect of this development is the undue burden placed on the shoulders of classroom teachers. For example, a teacher who was trained and educated in a rigid/prescribed way (whether at a university or normal school) were expected to adjust their practice towards the increasing accountability placed on them in terms of student achievement. The moving target of what is ‘most important’ when considering public education efficacy and the teacher’s role within that has contributed to increased feelings of despair amongst teachers (Liston, 2002). Additionally, teacher attrition has consistently risen over the past 25 years, with it currently standing at about 8% as opposed to 5% in the 1990s (Carver-Thomas & Darling-Hammond, 2017).

So, what changed? And why is digital media and technology so critical to the conversation now? The history outlined above regarding teacher experience in the United States shows transformations in the experience of K12 teachers were gradual and frequently imperceptible to most before the 1960s. The involvement of the federal government greatly complicated the experience of the teacher, with standards and requirements being set by individuals who are not in the classroom day-in and day-out. Teachers became increasingly less in control of their own practice and to make matters worse, the proliferation and development of digital technology further complicate things.

Educational Technology (EdTech) companies sprung up quicker than ever before, offering digital tools for instruction and assessment and their influence on education steadily grew through
the accretion of economic capital. Indicative of this, total funding for EdTech companies grew from about $400 million in 2011 to over $1.5 billion in 2018 and companies like math-learning software DreamBox receiving upwards of $130 million in growth equity investments (Wan, 2019). Next, I will explore the experience of teachers since NCLB opened the proverbial doors to new neoliberal capitalist-driven values of efficiency and growth. Additionally, I will explore curricular supports available to teachers and how those supports unfairly ask teachers to devise instruction which both adheres to the contemporary imperative of efficiency (enforced through accountability with test scores) and the traditional societal duty of schools and teachers in developing engaged democratic citizens.

**Educational Technology Shifts from Luxury to Imperative**

As you may have noticed, the brief (and admittedly broad) history of teacher experience in the United States does not contain a reference to neither the entrance of media and technology into the K12 classroom nor that entrance’s implications for the teaching and learning prior to NCLB. This is not to imply media and technology had no place in the conversation about the always changing nature of the classroom and the experience of the teacher, but instead because the shift towards the accountability regime in federal policy (punctuated by NCLB) is when digital media and technology shifted from being a luxury for the teacher to an imperative. Rather than being viewed as a learning or teaching aid to be used at the teacher’s discretion, media and technology became essentialized to the experience of the teacher. Digital tools, such as interactive whiteboards or laptop carts, are sometimes mandated by school and district leaders as a support to ensure teachers are able to guide students to meet the necessary academic growth requirements (as determined by standardized assessments) for certain levels federal funding.
In his seminal work Democracy and Education, John Dewey (1916) explicitly states that critical to understanding teaching and learning is “the recognition of the part played in the joint activity by the use of things (p. 28). ‘Things,’ as described by Dewey, are any object which is used in conjunction with teaching and learning. From his perspective in 1916, he was likely speaking of ‘things’ such as chalkboards or physical items to teach counting. His conception of ‘things,’ if extended to contemporary society certainly would include media and technology in the classroom. I present this quote to show it is not a novel idea to say the role of a new thing/tool/technology in the educational space (from dry-erase boards to iPads) must be understood through teachers and students co-constructive use and experience with it.

Additionally, Dewey argued that democracy must be an inherent and central presence in public education (Dewey, 1916). If one accepts this conceit, along with Dewey’s assertion of the importance of recognizing the role of ‘things’ in the teaching/learning process, it is no longer adequate to frame media and technology as an external tool which simply affords higher test scores for a teacher or peace of mind for a principal whom wants her or his school’s test scores to meet federally/state set requirements. Media and technology are ‘things’ which afford a transformation. Just as our society has dramatically transformed in how citizens act and interact with one another (individually and in groups) through digital technology, the classroom space has changed as well. And this transformation is anything but uniform; every classroom is a unique context created by the overlapping transactional realities of the students and teachers. Those transactional realities are each individually shaped considerably through digital media, for both teachers and students.

In addition to the Deweyan explanation of how ‘things’ impact the classroom space, digital media and technology in the classroom must be viewed through a broader social lens. Everett Rogers (2003) understood innovation in communication (of all kinds) as necessarily going through a process of diffusion throughout a social system. This diffusion is not an automatic process and relies
on human interaction with the innovation to sustain use towards broader adoption. Everett (2003) distinguishes the engagement of human’s with a given innovation by “divid[ing] [people] into five adoption categories: (1) innovators, (2) early adopters, (3) early majority, (4) later majority, and (5) laggards” (p. 304). When considering the proliferation of digital media and technology in classroom, this heuristic describes the people actually creating the new digital media and technology for classrooms (the innovators) all the way to teachers who are recalcitrant to new innovation and will resist it as long as possible (the laggards). The posturing of teachers inside the classroom in relation to the people creating digital education tools outside of it creates an unavoidable tension.

Rodgers (2003) posits innovation in media and technology should be considered a social movement/transformation, rather than an object, the relationship between the innovators of classroom technology and the technologies’ actual practitioners tension in that the teacher is required to be an innovator, even if he or she in their personal lives falls under the laggard category. The innovators surely (or at least ideally) do all kinds of research with K12 teachers the development of digital tools; however, in the end the teacher will necessarily have to innovate their classroom instruction with the new technology. Given the previously described tensions brought about by social acceleration or the logic of the information age, this is a dynamic which needs to be rethought. As Rogers claims, technology is not an object. Unfortunately, innovators are placing new technology into classrooms assuming they are objects and not fully grasping the social movement required (even on the micro-scale of an individual classroom) for the adoption of innovation.

With NCLB and the ensuing ramping up of opportunities/requirements through technology, a teacher’s experience now includes the unenviable task of incorporating the rapidly changing sensibilities of student’s digital presence and activity towards creating pedagogically effective strategies which appeal to these sensibilities. The teacher is expected to do this regardless of the documented contextual reasons which discourage purposeful technology integration discussed as
will be considered in Chapter 4 (e.g. teacher’s comfort with technology, lack of sufficient training on using technology in teaching, lack of access to technology, absence of required broadband infrastructure to support heavy tech usage at a school) while still being held to historic levels of accountability with their students’ academic output. This leaves very little room for teachers to consider technology as anything but a tool for efficiency, meaning many teachers simply do not have the time or mental bandwidth to attend to the democratic transformations afforded by technology use in our society. The ultimate aim of this inquiry is to find ways to support teachers in attending to these democratic implications of technology in the current age, regardless of the contextual limitations. With this aim in mind, this chapter will close with an examination of current supports available to teachers to address this issue.

Overall, though clearly earnest in their desire to help teachers, their evident shortcomings further demonstrate the need for a new approach; an approach I am developing through this project.

What resources are available to all Teachers to support the 21st-Century classroom?
Ending a chapter on the development of teaching experience isn’t worth anything if it doesn’t address the current state of teacher experience. While the following discussion on current supports for teachers to balance their professional imperatives of teaching content and to prepare students for efficacious participation in 21st society is presented from an outside perspective (e.g., the analysis of these supports did not involve observing their specific use in the classroom), it serves to show that 1) there is an awareness of the difficult positions teachers are put in, thus requiring support and 2) those supports were not developed with actual pragmatic application in mind. The most logical place to start is to look at how the curricular building blocks of academic standards take the complications
media and technology afford in our democratic society. Academic standards, in theory, should be the first line of guidance for teachers to in balancing the imperatives of accountability and citizen development, but, as will be shown, fall short in supporting the development of citizens in the 21st century.

**Common Core Standards.** The Common Core Standards were created from a 2010 initiative sponsored by the National Governor’s Association and the Council of Chief State School Officers. The effort sought to establish a set of consistent academic standards across states aimed towards ensuring all students in the country are career or college ready by the end of high school. Since their creation, there has been a well-documented debate over their efficacy and constitutionality. I do not gloss over the broader debate over Common Core to minimize it, but regardless of the merits of either side’s argument, the fact is at the time of this writing, the Common Core Standards are fully implemented in public schools in 41 States, the District of Columbia, 4 U.S. Territories, and in the Department of Defense Education Activity.

While some states are in various stages of repealing, adjusting, and debating the standards, the current reality is the majority of students in the United States are currently taught through the guidance of the Common Core Standards. With this entire inquiry being focused on teacher experience, ideological debates are less important in this context than examining at the standards themselves to see what kinds of support an individual teacher could find for a 21st Century-democratically-minded integration of technology into the classroom. This discussion/critique of the Common Core was not formally systematic in the form of a content analysis or anything like that —

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5 For a comprehensive history of this debate, see Tampio, 2018.
what follows is a high-level appraisal of what, if anything, a teacher could get out of the standards to support their day-to-day instruction.

The Common Core Standards can be accessed online for free, and they are grouped into two broad areas: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects (ELA & Literacy) (Common Core Initiative, 2010a) and Mathematics (Common Core Initiative, 2010b). With a primary focus of their creation being about career and college readiness, both the ELA & Literacy and Mathematics standards call out how technology plays into this. The standards claim in order to achieve the appropriate level of preparedness, students must be “familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals” (2010a, p. 7) and “be able to use technological tools to explore and deepen their understanding of concepts” (2010b, p. 7). These broad statements indeed show there is an awareness of the critical role of technology in eventually societal efficacy. Unfortunately, in terms of actual tactics/strategies a teacher could glean from the standards themselves there is no practical support given; only reiteration of the importance of imbuing students with technology-based skills.

For example, in the College and Career Readiness Anchor Standards (high-level benchmark standards for clusters of grades) (CCRAS) for writing at both the K-5 and 6-12 grade clusters, the only mention of necessary technological skills is that students should be able to “[u]se technology, including the Internet, to produce and publish writing and to interact and collaborate with others” (National Governors Association, 2010a, pp. 18, 41). This is the identical language used in each grade-level specific set of writing standards, and there are no further standards at any grade level describing what it means to ‘publish’ of ‘collaborate with others’ using technology. Similarly, the CCRAS for Speaking and Listening for K-5 and 6-12 claim current students must “integrate and
evaluate information presented in diverse media and formats, including visually, quantitatively, and orally” (National Governors Association, 2010a, pp. 22, 48).

The two pages of the Common Core Standards explaining these particular anchor standards (one page for K-5 and another for 6-12) include a sidebar (not a part of the standards proper) further emphasizing the contemporary importance of media and technology: “New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. Digital texts confront students with the potential for continually updated content and dynamically changing combinations of words, graphics, images, hyperlinks, and embedded video and audio” and “New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication” (National Governors Association, 2010a/b, p. 22/p.46).

The Internet accelerated the speed at which connections between speaking, listening, reading, and writing can be made, requiring that students be ready to use these modalities nearly simultaneously. Technology itself is changing quickly, creating a new urgency for students to be adaptable in response to change” (p. 48). This sentiment is betrayed in that the grade level specific standards at both K-5 and 6-12 for speaking and listening contain no references to media and technology outside of prompting teachers to have students start expressing their ideas through multimedia platforms beginning in 3rd grade. This demonstrates the authors of the Common Core Standards clearly understood the imperative of students developing appropriate sensibilities around technology but were unable to integrate that imperative into the learning standards themselves cohesively.

This example of a lack of cohesive integration is characteristic of the rest of the standards, both ELA & Literacy and Math. This is not surprising as the Common Core Standards are
purposefully written broadly to allow for contextual specificities of classrooms to guide curriculum development and instruction. The sidebar paragraphs emphasize the importance of technology in the intellectual and social development of students (which are also present in the Mathematics standards) and strongly advocates for schools and the teachers to emphasize technology’s ability to transform how one participates in society. Unfortunately, it punts on the question of how to effectively to do this so it can maintain broad posturing in its guidance, leaving the nitty-gritty of how to be determined at the local level. The Common Core Standards present an affirmation of and advocacy for technology being an essential part of instruction but not much past that.

**Non-profits contribute their own supports for teachers.** As shown in the previous section, there is a robust public notion of the importance of technology in developing successful citizens in our contemporary society baked into academic standards (Common Core or otherwise). Just as academic standards require adoption or creation of a curriculum (usually determined at the school or school district level) to guide teachers, the importance of purposefully developing what is commonly called ‘digital citizenship’ requires some kind of tool to guide teachers as well. Popular content-curriculums (such as English or Math curriculums created by companies like Pearson, Houghton-Mifflin, and National Geographic) generally do not do much to incorporate technology past advocating for its general use in instruction, leading to several non-profit entities have stepped in an attempt to provide that support for developing digital citizenship.

Common Sense, a 501(c)(3) non-profit organization, bills itself as the “the leading independent nonprofit organization dedicated to helping kids thrive in a world of media and technology… empower[ing] parents, teachers, and policymakers by providing unbiased information, trusted advice, and innovative tools to help them harness the power of media and technology as a positive force in all kids’ lives” (“Our Mission,” n.d., para. 1). As part of their efforts, Common
Sense developed a digital citizenship curriculum (with developmentally appropriate versions for grade clusters K-2, 3-5, 6-8, and 9-12) available to all teachers for free download at the website. Common Sense’s digital citizenship curriculum provides structured lessons around eight core categories: self-image and identity, relationships & communications, digital footprint & reputation, cyber-bullying & digital drama, information literacy, Internet safety, privacy & security, and creative credit & copyright. Provided comprehensive materials (including information about Common Core Standard alignment, full lesson plans with materials, and planning tools) help teachers adopt the curriculum with minimal extra labor. This is undoubtedly a reasonable tactic as a teacher’s lack of time for innovation of new teaching skills frequently inhibits them from transforming their practice.6

Without going too deep into the curriculum, I find the content of the lessons overall to be appropriate. This is not to say an in-depth analysis and critique would not uncover any issues in terms of content or rigor, but in the context of this discussion, I am not concerned with content as much as I am concerned with the practicality of the curriculum, meaning how easily a teacher could make use of the standards. For a teacher to work through the entire curriculum, she or he would have to dedicate 675 minutes of instructional time (almost twelve hours). Because schools are structures which do not inherently afford the contemporary logic of timeless time or space of flow,7 this would be 675 minutes which would need to be taken away from other parts of the school day. The Common Sense Digital Citizenship lessons do have alignment with Common Core standards which means they could be incorporated as part instructional time for a particular subject area, but the onus would be on the teacher to figure out how to effectively weave the Common Sense set of citizenship standards with the academic standards of Common Core. A tall order, and frankly, an

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6 As discussed in relation to social acceleration the logic of the information age in Chapter 2.
7 See Chapter 2.
unfair one to ask of teachers as they are not necessarily (nor do they need to be) trained curriculum-integration experts.

Similarly, the International Society for Technology in Education (ISTE) developed its own set of standards to promote digital citizenship, seeing it as a “new lens focus[ing] on empowering learners to be in community with others in online spaces and showing them that digital citizenship goes beyond conversations about personal responsibility” (“Digital Citizenship in Education,” n.d., para. 3). These standards and accompanying curricular tools (e.g., sample lessons, printable materials for activities) are also available for free download. Additionally, ISTE certifies other free digital citizenship curricula available to teachers, such as Google’s “Be Awesome,” 8 Binary Academy’s “Digital Kids/Digital Teens,” and Funecole’s “Creative Learning.” Though obviously not identical to Common Sense, these curricula (among others) similarly aim to provide teachers with easy opportunities to develop digital citizenship in their classrooms, and the content is organized around categories similar to those in the Common Sense curriculum.

I am of two minds about these resources. On the one hand, the content is current and applicable to all children — there is no doubt in my mind a kindergarten lesson on what it means to responsibly expand one’s digital footprint or a high school lesson on reflecting one’s own core beliefs and values online is a good thing! On the other hand, I have a hard time fully endorsing them because they are introducing yet another curriculum into the already crowded classroom space. Unfortunately, my latter point dramatically diminishes the potential progress afforded by the former. With adequate support from their district and principal as well as a committed buy-in by fellow teachers at a school, I have no doubt a digital citizenship curriculum could be purposefully and

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8 While very similar in scope, content, and my criticisms to Common Sense and ISTE digital citizenship curricula, the Google ‘Be Awesome’ curriculum is worth noting as a paragon example of the intrusion of private industry into the K12 classroom.
effectively implemented by a teacher. But that level of support cannot be assumed to be a possibility for many teachers. An individual teacher could work tirelessly to incorporate a curriculum on their own (or even create their own curriculum), but the incentive for that level of labor is very low. Teachers are solely assessed on their teaching practice as it relates to students meeting academic benchmarks, meaning the adjustment of teaching practice is generally oriented towards students achieving academic standards-based outcomes, leaving questions of citizenship to fall by the wayside.

In summation, the digital citizenship curricula available to teachers are suitable in intent and content but lack attention to the actual job of the teacher. Curriculum adoption for math, science, English, or any other traditional subject is a months-long, rigorous processes which involve thoughtful roll-out and training for teachers. Adopting digital citizenship curriculum is on the teacher implement or not. It is on the teacher to figure out how to customize it to fit the context of their classroom. It is on the teacher to advocate for digital citizenship development being tantamount in importance to math, reading, or technical computer skills. This, again, is just too much to expect of teachers.

As shown, the reality of the situation is the academic standards such as Common Core of which curricula are based make clear the importance of digital skills and citizenship but leave room for contextual interpretation. Curricula which promote digital citizenship are built to mirror curricula in traditional subjects (i.e., structured as lessons within units which are designed to inculcate a particular set of standards). This, I contend, is an attempt to use the logic of schools (e.g., lesson plans, standards, curricular alignment) to address the contemporary, ever-evolving question of citizenship in the 21st Century. The inherent social asynchrony between the classroom and the rest of society described in Chapter 2 makes this tactic not only ineffective but potentially creates undue stress on teachers (associated with the ‘slippery slope’). Some teachers may feel they should be doing
more with digital citizenship but are overwhelmed when they look online to find the amount of
time, effort, and support needed to do it purposefully through a research-backed curriculum.

The Neoliberal Intrusion’s Place in the Conjuncture
Returning to the idea of the conjuncture of K12 teacher experience in the 21st Century, the historical
march towards NCLB’s facilitation of products and tools inscribed with neoliberal values into the
K12 classroom is slightly different from the elements of the conjuncture described in Chapter 2.
Social acceleration and the logic of the information age were thought of as outer rims of the
conjuncture, broadly applicable to the experience of many people in society but still affective on
teacher experience in a unique way. The increasingly neoliberal-oriented values for innovation in
education developed throughout the 20th Century, with the period after the passage of NCLB
marking an intrusion of sudden intensity. Neoliberalism, like social acceleration and the logic of the
information age, impacts all members of society in one way or another, in the context of the
experience of teachers, there is a particular irrationality regarding its place in the classroom. If social
acceleration and the logic of the information age are the outer rims of the conjuncture, neoliberal
logic and values regarding teacher experience is a smaller ring being purposefully pushed towards the
teacher, their classroom, and their instruction(Figure 5).
Figure 5: Second Addition to the Conjuncture of K12 Teacher Experience in the 21st Century
Chapter 4

Literature Review

Due to the interdisciplinary nature of this project, a review of relevant literature must necessarily explore scholarly research around digital media and technology in the K12 classroom from both media studies and education perspectives. The purpose of this review is to show how current scholarship thinks about the relationship between digital technology and the experience of teachers in the classroom. This review additionally aims to elucidate a critical gap which I’ve observed between research from the media studies and education fields in terms of their effort to support K12 teachers and educators. The media studies field is positioned to have the superior grasp on how to conceptualize the complicated and subtle way digital media and technology change how we must think about pedagogy, but its critical methodological tradition is not appropriate for approaching understanding of the lived experience of teachers in their classrooms. On the other hand, research from the field of education¹ is replete with empirical research involving real teachers; however, its conception of media is generally framed from a positivist, effects-driven perspective, which severely limits purposeful findings in terms of the current study.

The purpose of highlighting this gap is to both advocate to the imperative of interdisciplinary collaboration at Universities and establish the function this inquiry aims to fill: a synthesis of what I consider to be best-practices from both fields which potentially can uncover new understandings. After explaining the parameters for inclusion of literature, this review will explore two distinct field of research which investigate and discuss how teachers should reckon with and

¹ When I use the term ‘field of Education,’ I am specifically referring to research from areas within the broader field of Education which address teacher practice, such as Curriculum and Instruction or Learning Sciences. The ‘field of Education’ also includes many other non-teacher-facing areas of research such as Education Policy and Research & Evaluation, but I use the term for brevity’s sake.
utilize the ever-increasing proliferation of digital technology in the classroom and society. First, perspectives from the media studies (including its sometimes-overlapping field of Communication) will be reviewed followed by literature from the field of education. This chapter will conclude with a brief look at how Deweyan scholarship views digital media and technology as well as how the scholarly output of the academy fits into the conjuncture of 21st Century teacher experience.

**Search Parameters**

To collect relevant literature for review that examines how and why teachers utilize educational technology in their instruction in the United States, research databases and library collections at the University of Colorado, Boulder were systematically searched using the following parameters:

- **Databases Searched**
  - Communication and Mass Media Complete
  - Social Sciences Full Text
  - Humanities Full Text
  - Education Full Text
  - ERIC Institute of Education Sciences
  - University of Colorado, Boulder ebook/library collection

- **Search Terms**
  - “K-12 OR elementary OR middle school OR high school OR secondary”
    “educational technology OR instructional technology OR ed tech”
  - “United States”
  - “teachers OR educators”

- **Date Ranges**
  - Media studies field
    - For journal articles: Since 2010
    - For books and/or edited volumes: Since 2000
  - Education field
    - For journal articles: Since 2010
    - For books and/or edited volumes: Since 2010

These databases represent the resources available to me at the time of writing. The search terms provided a sufficient narrowing of literature, and I was able to go through each piece one by
one to determine if it was relevant to this research. The date ranges were decided because of the rapidly changing nature of digital media, particularly when it comes to the class. Contemporaneity is vital due to the quickly developing nature of educational technology; however, while technology develops with increasing alacrity, there is still value in looking slightly beyond just the past few years, so articles published in the last ten years were used. Because this severely limited the number of more substantial works on the relevant topic from media studies, books from as far back as 2000 were considered.

There were additionally several exclusionary thresholds from the retrieved literature. Most salient, only research which explicitly involved teachers and their instruction was included. A teacher could be involved either explicitly (e.g., qualitative interviews with teachers, surveys of teachers) or implicitly (e.g., examinations of schools or classrooms and the teachers within them which did not use empirical methods). Research taking place in ‘virtual’ or ‘distance’ learning were excluded as the current inquiry is solely interested in teaching in the traditional classroom setting. Also, research taking place in school settings with one-to-one technology integration was excluded as this is not representative of the experience of a vast majority of teachers in the United States. Finally, research using experimental design was omitted for reasons which will be explored in the section covering contributions from the field of education.

**Media Studies Field**

Scholarship from the field of media studies (including Communication research explicitly examining digital technology in the K12 classroom is unfortunately sparse and, from my point, shows no signs of increasing. I experienced this first hand at the 2018 National Communication

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2One-to-One technology integration: one piece of technology dedicated to each individual student in a school.
Association Annual Conference, where I presented research as part of the Elementary and Secondary education Section. Despite what the name of the section may indicate, I was one of only three presentations involving empirical research in actual K12 classrooms. I later learned that the Elementary and Secondary education Section was in danger of being disbanded due to low membership. Similarly, some of the largest national conferences which focus of media and technology (such as the Association of Educators of Journalism and Mass Communication and the Society for Cinema and Media Studies) have no divisions focused on K12 education.

In exploring media studies and related fields, two scholars have created a sizable amount of scholarship looking at media and technology in school spaces: David Buckingham and Henry Jenkins. Following description and appraisal of their work about media and technology in the classroom and precisely how it relates to teachers, I will speak on the single journal article from a media studies perspective I was able to find about teachers and how media and technology related to their instructional practice. The work of Buckingham, Jenkins, and the journal article contain some excellent insights into the distinct complications digital media bring into the classroom, but generally, lack operationalizable findings that would be of use to an actual classroom teacher.

**David Buckingham.** David Buckingham has made his career focusing on children’s interactions with electronic media. In particular, how to adequately educate children about the inherent complications digital media and technology bring to our society. Recently, his work has explored macro-societal concerns such as media industry regulatory reform to support effective media education in schools (Buckingham, 2018). Additionally, much of his work looks at learning in digital spaces outside of the context of the traditional classroom environment (Buckingham, 2009). While these areas of Buckingham’s work are sizable in their merit and contribution, they will not be explored in-depth for the current review as they do not specifically pertain to teachers day-to-day experience of practice in the K12 classroom. Since 2000, his most direct address of how the issues

In Media Education (2003), Buckingham’s justification for increased advocacy what he terms ‘media education’ is rooted in the increasing centrality media plays in the lives of children. He states, “The media are embedded in the textures and routines of everyday life, and they provide many of the ‘symbolic resources’ we use to conduct and interpret our relationships and to define our identities” (p. 5). Additionally, he posits previous and existing efforts for media education take an unproductively defensive posturing, “seek[ing] in different ways to inoculate or protect students against what are assumed to be the negative effects of media” (p. 10). Buckingham advocates for an approach which accepts the relationship between media and children as it is and then works on solutions within that context.

Buckingham extends his justifications for the pressing need for media education in Beyond Technology (2013) by discussing the incursion of market forces into the classroom space. He does not claim teachers and students will necessarily be bowled over by neoliberal logics; however, Buckingham (2013) does see that “teachers have become individual consumers, and can no longer rely on the bargaining power - and, to some extent, the expertise - of local education authorities. Meanwhile, the school has become an increasingly important means for commercial companies to target young people - a market that is traditionally seen as volatile and difficult to reach” (p. 33). Because of this changing dynamic of schools being open to transformations through free-market logic, Buckingham argues effective media education for youth is more important than ever because students need to be capable of distinguishing between public and private interests.

Buckingham’s reasons for needing more effective media education in the classroom are hugely prevalent to the current inquiry. These grounding principles, in my opinion, effectively
approach how media should be understood in instruction as well as the implications of not attending to this. As will be explored later in this chapter, this sociological approach to digital media and technology is something I find to be lacking in research from the field of education. While Buckingham’s framing of the problem provided excellent guidance on how to approach my inquiry, his suggestions for actual tactics for teachers and where classroom spaces will go from here are insufficient and decidedly not pragmatic.

Chapter 5 of Media Education (2003) provides classroom strategies for implementing effective media education. Developing his strategies from previously published curricular materials, Buckingham writes, “This is by no means an exhaustive selection of teaching techniques, but it gives a fair idea of the range of approaches that might be involved in any media education course” (p. 70). Aside from the glaring inadequacy of developing these strategies without talking to any teachers (more on that later), the word ‘might’ in that quote is extremely troubling to me. As a former teacher, I can say there are few things more frustrating that someone who has never been in your classroom giving you advice on how to do your job. Buckingham’s speculation without even advocating for empirical research in the classroom to make his strategies more applicable to actual teacher’s experience is symptomatic of the media studies field’s disconnect from experience in schools.

Additionally, in Chapter 9 of Beyond Technology (2013), Buckingham theorizes how we might rethink the role of schools in our digital culture. He argues increasing emphasis in the classroom towards students creating their own media will most effectively inculcate students with the knowledge and skills to succeed in our digital society. Media making as a tool for media education is indeed an idea with many research-backed successes; however, Buckingham avoids talking about the core structural limitations of teachers implementing media creation activities in the class. These limitations include budgetary constraints, teacher technical knowledge, and a finite,
already crowded, amount of instructional hours. Buckingham’s rationale and theoretical approach toward digital media and technology in the K12 classroom is useful and sophisticated, but is gapingly insufficient in relating that theory to practice.

**Henry Jenkins.** Henry Jenkins is a contemporary media scholar who has been highly influential in theorizing about the implications of the new kinds of emerging media in the digital age. His work on the emerging participatory nature of culture in addition to his concepts of convergence and spreadable media (Jenkins 2006; Jenkins, 2013) have positioned him as an authority on how digital media complicates and facilitates the transformation of social spaces. Based on his high profile in this arena, Jenkins received funding from the MacArthur Foundation to contribute to their research on learning through digital media. The resulting white paper explores what media-related skills Jenkins believes schools, teachers, and parents must foster to develop efficacious students in our participatory culture.

In Confronting the Challenges of Participatory Culture: Media Education for the 21st Century, Jenkins (2009) discusses how the emerging participatory nature of culture “functions as a new form of the hidden curriculum, shaping which youth will succeed and which will be left behind as they enter school and the workplace” (p. 3). He presents concerns about children acquiring the essential skills necessary for full utilization of participatory culture as well as new literacies which must be fostered. He identifies three main gaps which prevent students from acquiring the required skills needed to flourish in the 21st Century (Jenkins, 2009, p. 3):

- **The Participation Gap** — the unequal access to the opportunities, experiences, skills, and knowledge that will prepare youth for full participation in the world of tomorrow.
- **The Transparency Problem** — The challenges young people face in learning to see clearly the ways that media shape perceptions of the world.
- **The Ethics Challenge** — The breakdown of traditional forms of professional training and socialization that might prepare young people for their increasingly public roles as media makers and community participants.
Based on these observed gaps, he presents a list of eleven new ‘skills’ which should be fostered in schools to better prepare students for life in participatory culture (Jenkins, 2009, p. 4):

- **Play** — the capacity to experiment with one’s surroundings as a form of problem-solving
- **Performance** — the ability to adopt alternative identities for the purpose of improvisation and discovery
- **Simulation** — the ability to interpret and construct dynamic models of real-world processes
- ** Appropriation** — the ability to meaningfully sample and remix media content
- **Multitasking** — the ability to scan one’s environment and shift focus as needed to salient details.
- **Distributed Cognition** — the ability to interact meaningfully with tools that expand mental capacities
- **Collective Intelligence** — the ability to pool knowledge and compare notes with others toward a common goal
- **Judgment** — the ability to evaluate the reliability and credibility of different information sources
- **Transmedia Navigation** — the ability to follow the flow of stories and information across multiple modalities
- **Networking** — the ability to search for, synthesize, and disseminate information
- **Negotiation** — the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.

These skills are inarguably relevant in one way or another, but when he presents ways each new literacy should be developed, it is clear his goal was not to give classroom teachers actionable, pragmatic ideas. For example, for teaching the literacy of appropriation, “the ability to meaningfully sample and remix media content” (Jenkins, 2009, p. 32), Jenkins points to projects of independently (and lavishly) funded groups, such as the MIT Media Lab and the University of Southern California Institute for Media Literacy. No examples of teaching (across any of the literacies) are from a K-12 public school classroom. This, in my opinion, severely limits the utility of the findings because according to the National Center for Education Statistics (2018), in the fall of 2018 close to 90% of all K12 students in the United States attended state-funded public schools (charter and traditional).

Examples of teaching contemporary literacies needed in the 21st Century which cannot be easily and readily implemented in a K12 public school classroom are not worth valorizing. They are
not worth anything, really, if the goal of the research and inquiry is actually to facilitate change through teaching practice. Additionally, Jenkins pays no service to the political economy implications of the proliferation of media and technology of the classroom, completely ignoring them as if the content and devices a student interacts with are void of any capitalistic logic. This is likely in part a manifestation of the debate between cultural studies and political economy theorists in the 1990s (Grossberg, 1995) - an counterproductive dynamic in the media studies field which unfortunately is still sometimes visible to this day.

These harsh words are not to say I find Jenkins’ theories completely worthless — far from it! I believe the three gaps identified by Jenkins contribute greatly to the conversation around establishing the role new media and technology play in learning. The participation gap solidifies the urgency of the discussion this research contributes too; without access, students cannot learn necessary skills. The transparency problem highlights the complicated, subtle nature of the socially transforming capabilities of digital media use. And the ethics gap very reasonably points out the training/education which has been done in the past is inadequate due to the unprecedented presentational opportunities contemporary media and technology afford. The skills Jenkins describes are undeniably usefully progressive and current; however, as will be discussed at the end of this section, the lack of qualitative empirical research examines the needs for teachers implementing these new skills limits my enthusiasm towards them.

**One Lonely Journal Article.** Aside from the outputs mentioned above of Henry Jenkins and David Buckingham, there has been disappointingly minimal recent scholarship stemming from the media studies and Communication fields examining how digital media and technology relates to the experience of teachers and their instructional practice. There is only one example since 2010 coming from the media studies field I was able to find. While the methodology is indeed in the
empirical direction this kind of research needs to take, the impact of its findings is limited for a few reasons.

The sole recent empirical research I found which fits the parameters of what I am examining is a journal article by O’Neal, et al. (2017). The study grounds itself in the belief that “teachers are now expected to equip students with 21st-century skills better, making it important to understand teachers’ beliefs about the role of technology in teaching and learning and the skills their students need to be successful” (p. 192). In exploring teachers’ beliefs about the role of technology, the study conducted focus groups with 4th and 5th grades teachers at an urban, traditional public school after participating in a 5-year pilot program (funded by the National Science Foundation) exploring effective technology integration in K12 instruction. Findings indicated that “while teachers in this study saw the importance of incorporating technology into teaching and learning, barriers such as lack of functioning equipment, little technology support, lack of training, and time impacted their ability to do so” (p. 204).

Methodologically, this study, in my opinion, is the best example of the kind of empirical, qualitative research of which more needs to be done from media studies to understand the media in the K-12 classroom space: Talking to real teachers about their practical experience. What’s lacking is the actual observation of instruction, which severely limits the findings. The main results (quoted above) served to validate what was already postulated in previous studies from the education field (as will be discussed in the next section). Teachers are busy and entered the profession not expecting to need a high level of technology skills, let alone using them to teach students newly emerging 21st Century skills deemed critical for success and efficacy in our society. The addition of instructional observations of the teachers would provide an opportunity for teaching to be viewed through a contemporary media studies lens, with the potential of uncovering unthought of insights associated with teaching through digital technology.
What does Media Studies have to offer? Before a discussion of literature and research from the education field, it is necessary to reflect on what media studies has to offer. I am sure it is no surprise to anyone (based on the previous few sections) that I am incredibly disappointed with the field with which I most closely identify with. I’m not disappointed because I believe the reviewed scholarship is meaningless or without merit; I am disappointed because of the tremendous unmet potential the media studies field holds regarding my area of interest. To be clear, Henry Jenkins or David Buckingham not employing empirical methodology with teachers is not the reason for my disappointment, it is that scholars have not worked from these strong theoretical foundations towards purposefully connecting them to practice.

The discussed journal article comes closer to the mark of the kind of research I think needs to come out of media studies, but it’s still missing a crucial element: interdisciplinary research. media studies scholars must cross departmental lines as much as possible test theoretical findings against the body research in another field looking at media and technology. This is a guiding principle for this inquiry, which is why this scholarly literature review will now shift to looking at contributions from the field of education to begin to uncover new possibilities for approaching questions of media and technology and the K12 classroom.

Education Field

The academic field of education is vast and plural in its focus of analysis. The following review of the literature does not focus on a particular sub-field within education but instead aims to identify the kinds of conversations emanating from the education field regarding media and technology’s presence in the K12 classroom and how that presence relates to teacher’s practice and experience. All authors in the referenced literature are located within schools/departments/colleges of education in the United States and were found through the search criteria as mentioned earlier. Qualitative and quantitative inquiry will be explored separately followed by an explanation and
conversation about studies utilizing the Technological Pedagogical Content Knowledge (TPACK). TPACK is a research-based approach developed by education scholars to drive effective technology integration into instruction; it has been used in a sizable amount of scholarship. As will be argued, the field of education had made substantial contributions to the current conversation, mainly due to an abundance of empirical, teacher-centric research; however, overall suffers from what I see as a weak theoretical base in that is treats media and technology as a deterministic force in the classroom.

**Qualitative.** From the qualitative research traditions, there are multiple recent examples of what I find to be appropriate and effective methodologically; however, the contextual specificity of these studies without discussion of broader implications severely throttles the applicability and impact of findings. Ifenthaler & Schweinbenz (2013) accurately identified that research has shown the integration of digital technology to be a promising way to facilitate learning in the process, but limited research had been conducted looking at technology integration from the teachers perspective. The study sought to uncover antecedents of technological acceptance beyond the widely used Unified Theory of Acceptance and Use of Technology (UTAUT; Venkatesh et al., 2003). Using in-depth, semi-structured interviews with current teachers, the inquiry found there is a vast diversity in attitudes of teachers toward integrating technology in their instruction, with performance expectancy and facilitating conditions (e.g., amount of training on how to use the technology) being the most common antecedents to technology adoption or avoidance according to the interviewed teachers.

Similarly, Walsh & Farren (2018) examined barriers for teachers effectively implementing iPads into instruction using interviews with teachers as well as teacher diaries. In their analysis,

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3 The UTAUT aims to explain user intentions to use an information technology and subsequent usage behavior. The theory holds that there are four key construct which are antecedents for utilizations: 1) performance expectancy, 2) effort expectancy, 3) social influence and 4) facilitating conditions.
technical issues (e.g., lack of WIFI consistency), lack of professional development, and cost (both in time and money) were identified as the most salient barriers to the integration of iPads by teachers. Quotes from the interviews and diary entries effectively highlight the experience of the teachers who are part of the study, yet the findings of the inquiry only serve to reinforce previously established findings. None of the barriers uncovered through the interviews and diaries were novel, as evidenced by each discovery having at least one pre-existing piece of research it was reinforcing. While the reinforcement of previous findings is undoubtedly necessary for the expansion of knowledge around a particular area, the little substantive difference in findings between Ifenthaler & Schweinbenz (2013) and Walsh & Farren (2018) indicate a possible stultification of the field where theoretical and methodological progress is needed to advance the impact of findings.

Another way of framing the necessity for the theoretical and methodological process in approaching these kinds of questions is that there needs to be some kind of pragmatically useful result or tool for real teachers to actually use! The field of education does an excellent job identifying why and how teachers approach and view digital technology, but lacks an operationalizable what to do in terms of actual ways a teacher can adjust their practice.

For example, Herold (2017) examines the shift in discourse towards a focus on perspective of teacher knowledge about technology rather than the traditional question of access to technology. The study uses participant observation and interviews to solidify an argument for more education about the use of technology in teacher preparation programs. The methodology affords a high level of understanding about the participant teachers’ experiences, but again lacks any proposition of what this should look like.

Another theoretical shortcoming observed in research from the field of education it the lack of attempts to translate contextually-specific findings for broader use. I am not claiming that every study must aim to be fully generalizable across all education contexts (this would be ridiculous). But
if an original mission of academic inquiry is to gain understandings of the world towards some kind of progress, then inquiry without even an attempt to discuss the broader implications are inadequate. For example, Schmier (2014) conducted an rigorous 18-month study observing a public middle school classroom utilizing digital technology and popular culture to build contemporarily necessary skills such as media creation, critical analysis, and understanding the digitally-located facets of one’s identity.

While findings are substantive in demonstrating how effective digital technology integration can foster contemporarily appropriate critical thinking, the entire study took place in a special classroom which received state-funding to operate as a stand-alone “Digital Media and Journalism” class. Regardless of the merits regarding methodology, detail of experience and findings, the context of this study makes it inherently limited. A single paragraph at the end of the survey posited how these findings might be utilized in non-specialty classrooms but ignored the well-documented barriers to digital technology integration as discussed previously in this section (Ifenthaler & Schweinbenz, 2013; Walsh & Farren, 2018).

**Quantitative.** In addition to an inquiry using a qualitative methodology, there are also many recent examples from the field of education that utilize quantitative approaches, specifically survey design and data mining. Findings from these sorts of studies can provide attractive areas for discussion and points of departure for future inquiry, yet due to the positivist conception of media and technology inherent in using quantitative methodology, results are arguably meaningless in terms of impact within the developing field of inquiry looking at effective digital technology uses from the perspective of the experience of the teacher. By positivist conception, I am referring to the frequently challenged ‘media effects’ approach to research involving media. This approach postures media and technology as external instruments which exert influence on how people act and interact.
within society. This tradition still persists somewhat in the media studies field but is particularly prevalent in the field of education.

Livingstone (1996) states media effects research views media and technology as a “challenge to individual respect and autonomy, as if a pro-effects view presumes the public to be a gullible mass, cultural dopes, vulnerable to an ideological hypodermic needle, and as if television was being proposed as the sole cause of a range of social behaviours” (p. 305). In adhering to this view of media and technology, research examining digital technology integration from a teacher’s perspective inherently strips agency from the subjects (i.e., teachers) and postures the media itself as the primary transformational agent. For example, Sugar & Tryon (2014) uses a survey design to assess what kinds of services teachers would want a hypothetical “Virtual Technology Coach” to provide in a school setting. Potential resources posed to the teachers in the survey include “‘How to integrate a particular technology into instructional planning,’ ‘Become proficient in a particular software program’ and ‘Share digital resource.’” (p. 57).

The survey was developed without consulting teachers, which to me indicates the purpose of the study is to aid teachers in ‘reckoning’ with the technology within their classroom rather than in purposeful exploration of how digital technology would effectively fit into pedagogy. This embodies the previously described media effects/positivist slant in that it positions the technology as a powerfully affecting force with which a teacher must adjust their practice around, rather than a co-constitutive entity which teachers can develop their instructional practice through.

Liu et al. (2017) deployed a large-scale survey to K-12 teachers (N=1235) and proposed a sophisticated multi-level model for analysis all to learn that access to technology, support in learning about technology, and technical support in the day-to-day use of technology are the most reliable indicators of whether or not teachers effectively integrate digital technology into instructions (these findings, I will remind you, were also found in the discussed qualitative inquiry which was identified
to primarily reinforce previous research rather than finding novel findings). Again, digital technology is framed in this study as a pathologized presence in the classroom which teachers must harness and master; yet, contextual limitations frequently prevent the teacher from having the agency effectively integrate digital technology. Other studies suffer from the same kinds of theoretical and methodological shortcomings (Kimmons & Veletsianos, 2018, Kimmons & Royce, 2016; Reinhart et al., 2011).

Quantitative research is sometimes criticized because “the positivist view of facts leaves no place for participants as agents, and that many constructs do not exist except in the social world, and so cannot be investigated outside of social interactions” (Garwood, 2006, n.p.). While I do not wholly discount quantitative approaches, I do firmly believe they are of most utility when a given area of analysis (in this case, digital technology integration form the teacher’s perspective) has progressed to a point where quantitative results can uncover new and different outcomes concerning the existing qualitative inquiry. As described, examples of quantitative inquiry have not yielded results starkly unique from their qualitative counterparts meaning at this point in time qualitative methods are most appropriate for topic.

**TPACK.** A final category of research coming from the field of education is the development and application of Technological Pedagogical Content Knowledge (TPACK). The approach sees effective instruction as at the intersection of three different kinds of knowledge a teacher possesses: technological (how to apply technology), pedagogical (how to teach), and content (what to teach) (Figure 6).

The model, developed by Punya Mishra and Matthew Koehler (2006), consolidated existing theoretical approaches which were working towards similar goals. It sought to remedy an observed

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4 Figure 6 is reproduced by permission of the publisher, © 2012 by tpack.org.
concern of educational research on digital technology which relies on “case studies, examples of best practices, or implementations of new pedagogical tools” (p. 1018). This concern echoes/reinforces my previously stated concerns about this area of educational research. Mishra & Koehler (2006) view existing scholarship in this area as “the first steps toward the development of unified theoretical and conceptual frameworks that would allow us to develop and identify themes and constructs that would apply across diverse cases and examples of practice” (p. 1018). Multiple recent inquiries utilize the TPACK framework to explore the K12 classroom specifically (Roig-Vila, et al., 2015; Pugh et al., 2018; Chung-Yuan et al., 2018), thus justifying a closer look at its tenets.

Koehler & Mishra (2009) acknowledges “that teaching is a complex, ill-structured domain…[and] Underlying this complexity…are three key components of teacher knowledge: understanding of content, understanding of teaching, and understanding of technology” (p. 67). They also believe that a broader framework such as TPACK serves a heuristic function with questions of teaching involving technology because “effective technology integration for pedagogy...
around specific subject matter requires developing sensitivity to the dynamic, transactional relationship between these components of knowledge situated in unique contexts” (Koehler, 2012, n.p.). I agree entirely with the need for the utmost sensitivity to the contextual nature of the K12 class; every classroom is its own unique environment thus essentializing a broad ‘best practice’ is both unnecessary and irresponsible. I also very much like putting the focus on what the overlap between components of teacher knowledge as a means to uncover new ways of approaching pedagogy (involving technology or otherwise).

The mission of TPACK is undoubtedly heading in the right direction; however, similar to other examples from the education field, the way media and technology are postured in relation to the teacher is too simplistic given the complex, co-constitutive role media and technology play in our society. While the overlap between technical, content and pedagogical knowledge is an appropriate area to look, TPACK treats media and technology as addendums to instruction rather an integral part of them. For example, the kind of technical knowledge that this approach is speaking of is skill-based competency of using a particular device or software (such as Microsoft Word or MacOS) and that a technological pedagogical content knowledge would utilize those skills to enhance instructions (Koehler & Mishra, 2009). As I will argue in Chapter 5, media and technology’s role in our lives is far more complex than merely being affording of enhancement. While TPACK describes its approach as being sensitive to the transactional reality of each context, it is not sensitive to the current unique moment in history. Digital media and technology are not ‘added on top of’ the transactional realities we create, but rather are co-constitutive parts of that reality whose impact is understood through how they are used socially by humans.
Deweyan Scholarship

Because of the overarching influence of John Dewey’s works across this project, it is worth visiting a few contemporary examples of scholars aiming to incorporate the complications of digital media and technology into the Deweyan intellectual tradition. Similar to the education field, these lack an strong theoretical conception of the role digital media and technology play in our lives. Hickman (2009) attempts this by formalizing Dewey’s few writings on technology into a broad Deweyan definition, with technology being seen as “the invention, development, and cognitive deployment of tools and other artifacts, brought to bear on ray materials and intermediate stock parts, with a view to the resolution of perceived problems” (p. 44). This functional taxonomy views technology through a decidedly Deweyan instrumental lens, in which technology is defined as any tool in the process of inquiry.

While I do not dispute technology are indeed tools for inquiry in the Deweyan sense, by defining technology solely as tools for active inquiry (in the context of the classroom, inquiry towards effective teaching and learning) it does not sufficiently address the affordances of contemporary digital media and technology which may impact the process of inquiry. I interpret Hickman’s extension of Dewey regarding technology erring towards a positivist sensibility, in which technology is an independent variable and when introduced to an environment it just ‘does’ or ‘does not’ achieve dependent variable X, Y, or Z. This definition does not fully embrace the distinct and novel sociological role digital media and technology play in the current age (as will be explored in Chapter 5).

Cunningham (2009) also attempts to frame contemporary technology through a Deweyan lens, particularly regarding how they potentially augment Dewey’s experiential and participatory model of teaching and learning. He claims when Dewey (1976) wrote “The only way in which adults consciously control the kind of education which the immature get is by controlling the environment
in which they act, and hence think and feel” (p. 23) that “it applies to virtual environments as well as real ones” (Cunningham, 2009, p. 53). He goes on to describe effective uses of massively multiplayer online role-playing games (MMORPGs) in the K12 classroom context and defends Dewey’s theorization as directly applicable to virtual spaces, and teachers can apply the same logic as when co-creating physical educative spaces (e.g., classrooms).

This attempt at defending Deweyan theory’s applicability in the digital age is, in my opinion, insufficient as it ascribes to the fallacy of digital duality, in which one’s digital ‘self’ is understood as separate, distinct, and unaltered from one’s ‘real world self.’ Cunningham does not address how the affordances of learning in a virtual space may inform a transformation in a student’s inquiry towards learning in a physical space (or how teachers must adjust their instructional practice through inquiry in light of those transformations).

The Academy’s Place in the Conjuncture

With regards to conjuncture of 21st Century teacher experience I have been constructing throughout the past few chapters, the academic output from institutions of higher learning attempting to learn more about the increasingly complex nature of teaching and learning in the K12 classroom are a presence of no consequence. As I’ve said repeatedly, it is not that scholarly contribution have no value. The reason the literature is no consequence to the experience of K12 teachers is because scholars have not effectively brought research towards theory and research towards practice in conversation with one another.

This separation between the academy and K12 teachers would make it easy to simply say teachers should not ever look to academic research for help with innovating their teaching practice. Though I would never recommend a teacher simply pick up a dense media studies or education tome, I do think there transformative insights for teachers laying within the pages of academic
research. The problem is the labor required for a teacher to not only read academic research but also to effectively operationalize newfound insights into practice is too much of an ask. So how to we fix this?

There is no ‘fix,’ but there is one easy way I see to empower K12 teachers with the powerful theoretical insights created within the academy: invite the teachers in. If a department if having a roundtable about the neoliberalism in the Trump era, invite local teachers to come. Perhaps a speaker is giving a speech on identity formation in the information age? Then invite local teachers to come. Many K12 teachers are voraciously curious when it comes to their classrooms, and in my experience can be very good at seeing how discussions seemingly unrelated to their classrooms actually has implications for their students and their respective futures. I am not suggesting rountables, conferences, or any other academic staple to be rethought. I am suggesting the academy spend a small amount of extra effort bringing teachers in. Some teachers may get a lot, some teachers may not; however, in the end I believe when given to opportunity to learn more about our social world and how contemporary academic discourse impacts them and their students that many teachers will show.

The academic discourse is taking place around the experience of K12 teachers, the siloed-off of academic disciplines has kept research from uncovering actionable solutions. This is the structure of the academy, and I know there are plenty of reasons separation amongst disciplines has historically been necessary, but I believe those days are over. Bringing ideas from multiple disciplines into conversation with one another is how I believe the gap between theory and practice can be closed. This is the direction I hope scholarship will head, but for now in our visualization of the conjuncture of 21st Century teacher experience, academic scholarship from media studies and education are orbiting elements, present and aware of the goings on in K12 classroom, but not able to stage an affecting entrance into the classroom on the scale of neoliberal values. However, the
disciplines are in orbit in close proximity to the school, and thus inviting teachers in to hear about academic research which relates to them and their students becomes an easy first step. (Figure 7).

*Figure 7: Third Addition to the Conjuncture of 21st Century Teacher Experience*
Chapter 5

A Final Conjuncture Element and How to Approach Challenging it Through Practice

In Chapter 2, I defended the claim of media and technology being co-constitutive elements, along with rational human action, which afford transformations of our social world. Using the theoretical frames of social acceleration and the logic of the information age, I described how the ascending speed and transforming nature of the social world is particularly impactful for teachers because the stultified institutions of public schools do not afford suitable structures for purposeful time/space dedicated for teachers to innovate their pedagogy – the pace of the traditional school is out of sync with the progress outside of it. Then, in Chapter 3, I argued the academic fields of media studies and education need to be pulled into a closer conversation with one another to address the described asynchrony adequately. The practical applicability of media studies’ critical push to ‘de-center’ media and technology from social research and re-emphasize human agency is undermined by an observed methodological aversion towards empirical research involving teachers and classrooms. Areas of the field of education, on the other hand, methodologically excel at incorporating empirical research involving teachers and classrooms, but have a stunted, ‘media effects’ view of how the effects of media and technology manifest in the classroom. With the previous chapter, I sought to (broadly) historicize teacher experience to demonstrate why the experience of teachers today is unique due to the welcoming of the winds of neoliberal values through an increased presence of media and technology, as facilitated by the passage of No Child Left Behind.

From what I’ve described, I’m sure it seems like a very big mess that teachers face. But, in the spirit of the pragmatists of the 19th and 20th centuries, I believe approaching understanding and
attempting to describe the ‘mess’ is a critical first step in exploring how to move past it. We, as humans, should not aim to create methods to sweep the mess up and start anew; this mess isn’t going anywhere. It is inscribed in the experiential reality of classroom teachers. Thus far, I used Stuart Hall’s concept of the conjecture to attempt a description of the unique current moment for teachers. But rather than solely describing the dangers of a historical moment, “the conjuncture was both a moment of danger and one of opportunity; it was something to intervene in, a configuration whose components were to be rearranged through practice. It was a call to action—intellectual, social, cultural, political” (Bennett, 2016, n.p.).

With this chapter, I will place another element into the conjuncture of 21st century K12 teacher experience. First, I will describe the hypermediation lens of Carlos Scolari and how it frames this research and how it contributes to teacher experience. I will then describe the necessary deliberative approach to democracy in this project. The chapter will close with how these two elements fit with the final element I will add to this conjuncture followed by how the conjuncture informs my field research which aims to find out how to foster a discursive educational space with an accompanying pedagogy of interruption.

Complicating How ‘Media and Technology’ are Approached in Inquiry
Virilio (2009) states, “As the rational universe goes, so goes the effect of the real. Looking sideways, always sideways, rejecting fixity of attention, drifting from the object to the context, escaping from the source of habit, from the customary seems to have become impossible” (p. 56). Though I reject Virilio’s pessimistic claim of ‘escaping from the source of habit’ becoming impossible, I do believe this quote provides an excellent mantra for how an inquiry about digital media and technology in social settings should be approached:
“Looking sideways, always sideways…."

To ‘look sideways’ when attempting inquiry of this sort (in the classroom or otherwise), I believe one must adhere to two grounding principals: fully rejecting linear, positivist conceptions of media and technology in favor of more contemporarily appropriate conceptions and looking for answers outside of traditionally-favored objects of analysis. I will address these using Carlos Scolari’s hypermediation lens, which both vindicates the active role of the user of technology and gives up focusing on the technology itself. This is to understand the unique social processes which are enacted “by a broad spectrum of social actors, from Hollywood majors to radical movements, each of them implementing their own domination strategy and resistance tactic” (Scolari, 2015, p. 1100).

In contemporary society, digital media and technology affordances have contributed to a dramatic shift in social logic. In particular, the ubiquity and pervasivity of digital devices have allowed shifting conceptions of time and space. This shift is consequential both in the lived lives of humans, but also how curious parties explore the impact of those digital devices. Rather than framing digital media and technology as something external to our social life which enters and exits it, it must be viewed as a co-constitutive part of our social lives, leading to social transformations through their use. As I will argue, I believe hypermediation to be an appropriate lens to understand the subtle roots of these transformations.

Scolari (2015) uses the assemblage perspective as well as draws from original conceptions from the media studies field to propose his theory of hypermediation. He used Jesus Martín-Barbero’s influential concept of mediation as a starting point:

Mediation entails looking at how culture is negotiated and becomes an object of transactions in a variety of contexts. Mediations could be considered as a social interface, a place from

1 See Chapter 2, p. 25.
which it is possible to perceive and understand the interactions between the space of production and the space of reception (Scolari, 2015, p. 1098).

The concept of mediation complicated the role media played in society when it was first published in 1987 and provoked a new kind of conversation. Scolari is reverent to Martin-Barbero’s ideas, but believes media has progressed to a place beyond Martin-Barbero could have envisioned, necessitating an update of the concept to consider for new forms of media.

For Scolari, new media (such as social media or content streaming platforms) contain new and unique affordances for previous interactivity media did not provide. According to Scolari (2015), “the new media ecosystem has reconfigured the traditional symbolic exchange processes in many ways, a fact that, obviously, affects the ways they can be tackled from a theoretical point of view” (p. 1099). Just as Martin-Barbero posited a turn from the object (the media) to the social process (the mediation), Scolari (2015) presents “hypermediations [as implying] the loss of the fascination with the object (the new media) and the retrieval of the new social processes” (p. 1100).

To retrieve and describe these new social processes, researchers must take “a non-media-centric vision of the contemporary media ecology based on the new processes that characterize this socio-technical environment” (Scolari, 2015, p. 1109). By de-centering media and examining the impacted social processes occurring around the media (or amongst the media’s assemblage), researchers can come to a better understanding of the co-constitutive nature of media, the individual, and society.

Scolari’s hypermediation perspective, I believe, holds critical potential for pushing the stunted conversation about teacher practice and digital media and technology forward. Unfortunately, as discussed in Chapter 4, when education research addresses digital media and technology there is a tendency to adhere to the technological determinist slant of the traditional media effects paradigm. To explore the classroom space through a hypermediated lens, one must choose an element or dynamic to be at the center of the inquiry (or instead, the center of the
assemblage) to retrieve the social processes present. This ‘center’ of inquiry is not meant to represent a finite object of analysis which all inquiry into the classroom should use. There is a myriad of possibilities of subjects, to begin with: for example, one could begin with a teacher using a smartboard while another researcher could begin with how students use a bank of desktop computers founds in the back of the classroom. For this project, a K12 teacher’s practice in their classroom as it relates to social logic developed through digital media and technology use serves as the object of inquiry, with a logic/values of democracy being the aim as well as avoiding consumer-driven logic/values.

The possible questions one could ask with this center of inquiry vary in both scope and discipline. A gender studies scholar may want to learn and understand how the digital presence in the classroom may impact identity formation with regards to gender roles. An ethnic studies scholar could seek to parse out how and if teacher practice through digital media and technology relates to implicit bias or the re-enforcement of stereotypes. I am interested in how K12 teachers can foster engaged democratic citizenry for the 21st century. This is the thread of the hypermediation I am tugging on with this project, and where I intend to attempt of fusion of theory and practice.

Hypermediation in the Conjuncture

Hypermediation becomes my final addition to the conjuncture of 21st century K12 teacher experience. I say ‘my’ final addition because what I have laid out holistic to teacher experience, but solely the elements of teacher experience which I see as key factors to an aim of supporting teachers promote democratic values through their instructional practice. If a researcher used the process I did but aimed to support teachers in promoting something socially more specific than democracy, like climate change awareness or the threat of white nationalism, then there would surely be relevant
elements of the conjuncture which are not present in mine, and vice versa. This is because the conjuncture is meant as both a description of danger and a point of opportunity for progress.

Returning to the elements of the conjuncture I’ve been examining, the new techno-social processes to be uncovered through a hypermediation perspective are a key link between the teacher’s experience within their classroom and experience in their personal life. The new ways we socially interact afforded through digital media and technology has transformed innumerable areas of our lives in a myriad of ways, and a teacher brings that new social logic with them into the classroom. Though there is a new social logic, the traditional school’s structural features have made it so teacher’s must adapt this new social logic in a space which was constructed according to an outdated social logic.

To complete the diagram of the conjuncture of 21st century K12 teacher experience relating to this project, hypermediation is an interconnected assemblage, covering the teacher’s life both inside and outside the classroom (Figure 8). To close this chapter and transition into the field work portion of this project, I will further describe what I mean by pulling the democratic thread of the K12 classroom hypermediation.

**Pulling on the Thread of Democracy**

Democracy and democratic life have always been core to Dewey’s investigation of the educational experience. For Dewey (1938), a democratically constituted society involved “not only more numerous and more varied points of shared common interest, but greater reliance upon the recognition of mutual interests as a factor in social control” as well as “not only free interaction between social groups ... but change in social habit – its continuous readjustment through meeting the new situations produced by varied intercourse” (pp. 86-87). This is grounded in the question of how experience in society (including that of education) meet the demands of a democratic society.
In pulling on the thread of democracy in the hypermediation of a teacher’s practice concerning digital media and technology.

A major complicating factor for teachers, as discussed in Chapter 5, is the unprecedented presence of neoliberal logic present in the schooling environment as facilitated by The No Child Left Behind Act. This neoliberal logic, when rationalized to the point of informing one’s actions, is an inherent threat to the democratic development of students, as neoliberalism has long been framed as a threat to democratic life\(^3\) frequently. One aspect of my investigation of the democracy thread of the hypermediation is understanding how these logics manifest in the classroom. Another element is learning through conversations with teachers and educators what they think democratic

\(^3\) For examples, see Chomsky (2009); Giroux (2018); Saltman (2000).
citizenry in the 21st century looks like and what skills should be prioritized. Finally, I hope to uncover what an approach or guiding framework for teaching towards these democratic aims might look like. This would necessarily follow a deliberative model, as opposed to the aggregative model, of democratic inquiry.

According to Biesta (2010b), the aggregative model “sees democracy as a process of aggregating the preferences of individuals” (p. 98). If using the aggregative model, one would assume the preferences of individuals can be collected, and democratic values can be determined based on the aggregation of those preferences. The aggregative model assumed “that ends and values [of democracy] are subjective, nonrational and exogenous to the political process and that democratic politics is basically a competition between private interests and preferences” (Young, 2000, p. 22). Theorists have argued recently that understandings of democracy cannot be confined to a simple aggregation of preferences but must involve a deliberative transformation of those preferences.

The importance of honoring contextually in education would indicate that there cannot be a ‘one-size-fits-all’ approach to fostering democratic citizenry. According to Biesta (2010b), “[u]nder this [deliberative] model, democratic decision making is seen as a process that involves ... the argument about both the means and the aims of collective action” (p. 98). Questions about media and technology in the classroom cannot only probe the ‘best practices’ for using media and technology as an instructional aid but certainly must probe how and why teachers come to develop and understand those ‘best practices.’ Additionally, in speaking to many different teachers from various contexts, I intend to honor the deliberative democratic spirit by seeking broad, easily customizable ‘means’ towards ‘aims’ of instilling the importance of collective, democratic action.

It is in through this deliberative lens I intend to attempt applying the social and media theory expounded in throughout these first five chapters directly towards practice. Though having
indispensable theoretical depth, as I argued in Chapter 4, the theory I am familiar with from my training in a media studies department has, without exception, left me disappointed when it comes to suggestions for practical application for theory outside of developing more theory off of it. I do not perceive this ambivalence towards practical application of theory to be purposefully negligent, but related structural features of the university.\textsuperscript{4} Regardless of the reason, the deliberative lens is how I will attempt to contextualize theory towards actionable suggestions for teachers.

For my field research, the teachers I interacted with are not a statistically representative sample by any means, but each teacher’s perspective towards digital technology and its democratic implications is additional information to help me deliberate what about a theory would be useful to the teacher: Would it be useful for the teacher to learn terminology like ‘social acceleration’ or ‘hypermediation?’ At what point of depth into explaining timeless time or space of flows does the information become superfluous for a teacher? Are teacher’s even aware of what a theoretical researcher does?\textsuperscript{5} The more teachers I talk to or observe, the more information I can bring into my deliberations for how to incorporate theory into strategies for supporting the innovation of teacher practice towards the promotion of 21\textsuperscript{st} century democratic values.

Where do I Begin Conceiving of Tools or Strategies?
A contemporary pragmatism exploring dynamics between digital media/technology, teaching practice, and democratic citizenry development must seek practical strategies for real teachers. But can this be done? It is not a question of talking to or surveying as many teachers as possible to find

\begin{itemize}
  \item \textsuperscript{4} Examples of these structural features include journal articles rather than long term projects being the currency for promotion, paradigmatic orthodoxy, the physical size of campus’s hindering interdisciplinary collaboration, or the amount of time spent on logistics of empirical research methods (among many others).
  \item \textsuperscript{5} I can honestly say that I did not know what a theoretical researcher did in their day-to-day job until I pursued my Ph.D.
\end{itemize}
statistically significant trends which point to some kind of knowable ‘truth’ – this would reflect the described aggregative approach to democracy. It is a matter of pursuing an understanding of the contextual, transactional realities of different classrooms and envisioning an approach and supports to enable teachers to reflect and update their pedagogy practically. This must include privileging institutional barriers to pedagogical innovation (e.g., limited training for new technology, lack of time in a teachers schedule for purposeful innovation, top-priority frequently being content knowledge acquisition towards assessment-based growth) as unyielding and thus required to be considered in the discussion of any idea.

This is a tricky affair, to put it mildly, but I do not think it’s impossible. With all of my exhortations about the primacy of honoring context (in all senses of the word) in researching the classroom, it may surprise you that I do believe there one feature which can, and must, be vaulted as a universalizing agent across all classrooms: every classroom in the United States has at least one teacher, and at least one student. Different classrooms always have a myriad of contextual differences (e.g., socioeconomic makeup, racial makeup, class size, funding, parental support, etc.) but the teacher and the student is always present. Teachers need to convey the new logic of society as facilitated by digital media and technology regardless of if or how much access to technology is available in their classroom. In the always evolving, never finished relentless pursuit of democracy and the ‘Great Community,’ all teachers must be able to purposefully model for students how digital media and technology have fundamentally transformed social life, that it will continue to change in an unknown way, and how to be mindful of the directions these transformations are headed: Are they towards the pursuit of democracy? Or do they rationalize consumer-driven, neoliberal values?

Like I said, tricky … but not impossible. I am attempting to delineate a realistic path forward for teachers through bringing into conversation the education and media studies fields. This means utilizing a necessarily complex view of digital media and technology to approach empirical,
classroom-based methods towards new understandings as a means to possibly operationalize those understandings into a practical strategy any teacher could use. Fortunately, two already existing concepts give an excellent framing of the direction I am aiming this inquiry towards: a **discursive approach to education** and **pedagogy of interruption**. Before moving onto explaining my methodology, I close the critical/theoretical portion of this project with an explanation of what these terms mean and why my inquiry is aimed in that direction.

**A Discursive Approach to Education.** Teachers need support but ‘one-size-fits-all’ solutions are not plausible. All teachers would benefit from guidance regarding teaching contemporary citizenship, but the exact way each teacher should approach it is contingent on the context of that teacher’s classroom. Drawing from the work of Christina Erneling (2010), I am orienting this inquiry towards **discursive education**, which claims learning “extends natural beings beyond their biological limitations so that they become cultural and social beings, beings who learn from, criticize, and change their shared framework and also create lasting expressions of it…” (p. 164).

In her book, Erneling (2010) problematizes ‘natural learning’ approaches to childhood development, like the works of Piaget, Gopnick, and Meltzoff, for focusing solely on biological development and not giving “the specifically socio-cultural and symbolic nature of all learning its due” (p. 157). K12 education should not and cannot be approached as a totality, but as a discursive assemblage of sometimes similar but never identical contexts. They are related to one another but not interdependent. They may react to one another but never dictate a ‘right’ way. There will never be a magic piece of technology or software which employs a unified theory of everything to make every classroom great. There are only teachers who know their classrooms better than anyone else.

In approaching my inquiry with the idea of discursive education in mind, I am setting myself up for a complicated process because, according to Erneling (2010), “the teacher has to do many
other things besides teaching, like keeping order, getting the students’ attention, etc. Instead of looking for simple, [generalizable] solutions … it is more illuminating to confine oneself to specific discourses of teaching at particular times and places” (p. 175). This is the approach I took to my fieldwork and this inquiry overall: learning about and understanding specific contexts of teaching as a facilitator towards thinking about possible broader strategies.

**Working Towards a Pedagogy of Interruption.** I entered the field with the ultimate aim of gaining insight into what possible strategies could be created to support teachers. But what does an approach like this practically look like? As discussed in Chapter 3, separate sets of standards or curriculum purporting to build ‘digital citizenship’ are decidedly impractical as it adds another separate activity teachers or schools are somehow supposed to find time for during the already packed school day. Additionally, the idea of instilling citizenship (presently or at any time in history) through a dedicated set of standards or curriculum always seems fallacious. Citizenship is embodied in all aspects of our lives – teaching about it in a once weekly, 45-minute block primarily disconnected from other school work (as it was taught to me growing up) does not create momentum in the development of citizenry. I envision discussion of citizenry being omnipresent throughout the school day, capitalizing on connections between academic and questions of what it means to be a citizen. I envision teachers slightly shifting how they approach instruction towards finding opportunities to leverage moments in their classrooms towards developing democratic citizens capable of dissent and precipitating responsible social change in the 21st century. I envision something like a pedagogy of interruption.

Biesta (2010) states, “[e]ducation becomes uneducational if it only focuses on socialization – i.e., on the insertion of ‘newcomers’ into existing sociocultural and political orders – and has no interest in the ways in which newcomers can, in some way, gain independence from such orders as well” (p. 75). As shown in Chapter 3, NCLB and the precipitous rise of the educational technology
in the 2000s largely contributed to welcoming of neoliberal logic and values of privatized industry into the classroom. Digital media and technology afforded large scale social transformations predicated on pervasive and ubiquitous devices with commercial goals. Private industry now holds central posturing in all many aspects of a person’s life – personal, professional, and family. Biesta believes teachers must both facilitate socialization and interrupt subjectification of their students into rationalizing neoliberalism into their ideology. This is done through striving for what he terms a pedagogy of interruption.

Teachers need to guide students towards the democratic possibilities afforded by the transformed social world and interrupt strong currents pulling students towards neoliberal values. Neoliberal ideology presents, in my opinion, the most substantial threat to democratic development in the classroom and teachers have the strongest posturing to interrupt that threat. While Biesta (2010) unfortunately does not explicate what a pedagogy of interruption would actually look like, he is specific about its aim being developing democratically minded, unique individuals rather than homogenous neoliberal subjects. He goes on to state, “But although uniqueness cannot be produced, it is rather easy to make sure that uniqueness will not appear, will have no chance at appearing” (p. 90). A teacher’s practice should as much orient students towards democratic ideals as much as it should orient them away from neoliberal ones.

In this inquiry, I am seeking what a the concept of pedagogy of interruption might look like in practice. I do not see this as a separate pedagogical practice for the teacher, but rather a lens that adapts their already developed teaching practice. A lens which can help all teachers channel their unique transactional reality towards an overarching pedagogy of interruption, manifesting in in plural ways throughout the school day. Biesta (2010) states, “A pedagogy of interruption is not a “strong” pedagogy; it is not a pedagogy that can in any sense guarantee its “outcomes.” It rather is a pedagogy that acknowledges the fundamental weakness of education vis-à-vis the question of
subjectification” (p. 91). By acknowledging and understanding this weakness, teachers can find ways to interrupt potential subjectification through what they already teach (and, importantly, how they already teach it – e.g., with or without a presence of digital media and technology in the classroom).
Chapter 6

Methods for Pragmatic Inquiry

Make no mistake, I am aware that the ‘methods’ chapter of works such as this tends to be the frontrunners for ‘chapter most likely to be skimmed’ by readers. This is understandable, as it is difficult to write an engaging, unique explication of one’s methods while still placing it appropriately within the methodological and theoretical tradition of a paradigm. In my experience, I’ve found methods sections to be flow-interrupters: sudden shifts from the insightful setting up of an argument or approach to a series of segments assuring the reader that the investigator drew from and/or followed established traditions to explore questions of human society in particular contexts. The issue is not about consulting or following intellectual traditions of research methodology (I believe this to be an important step), but the tendency for method descriptions to feel like a bulleted list, with the writer clearly stating they checked off every item, rather than as part of the argumentative arc of the whole work.

I am not claiming the proceeding chapter has ‘cracked the code’ for describing the methodological approach, but I purposefully aimed to improve on frequently observed shortcomings of this part of the process. This chapter describes my methods in how they were conducted but also, more critically, how and why they were appropriate in the context of the inquiry through the pragmatic inquiry as a research paradigm. As will be discussed in the next section, this approach seeks to find a space for innovative, practical action between realism and idealism, which is frequently not the top priority in academic research. First, the choice for using this research paradigm will be articulated, and then descriptions of my methods will be explicitly connected to arguments from previous chapters. As I said, I cannot say for sure this approach will make my
methods any less ‘skim-worthy,’ but I at least hope it conveys a greater sense of purpose in writing a methods section.

**Pragmatic Inquiry as a Research Paradigm**

Pragmatism has been (crudely) summarized as merely asking questions of “what works” but has recently been argued that through Dewey’s concepts of experience and inquiry, pragmatism can be considered a research paradigm along with the likes of constructivism or postpositivism (Morgan, 2014). For Dewey, experience is rooted in two key questions: Where do our beliefs come from? And, what are the meanings and significance of our actions? According to Morgan (2014), “The answers to these two questions are linked in a cycle, in which the origins of our beliefs arise from our prior actions, and the outcomes of our actions are found in our beliefs. Experiences create meaning by bringing beliefs and actions in contact with each other” (p. 1046). Traditionally, research paradigms have been primarily defined by their ontological and epistemological grounding. For example, the constructivist paradigm ontologically accepts that multiple realities are constructed in the social world and epistemologically views knowledge as a human construction. Alternatively, the postpositivist paradigm ontologically ascribes to the idea that the world and reality exist separately from our understandings of it (never being able to be fully comprehended) and epistemologically believes knowledge as an approximation of that unknowable reality.

Dewey’s philosophy “sought to break down the dualism between realism and idealism” (Morgan, 2014, p. 1048), and this contrast is close to the differences mentioned above between constructivism and post-positivism. Dewey (1929) saw both sides of this difference as equally important claims regarding human experience. Our experiences (and knowledge gained from those experiences) are both constrained by the nature of the world (postpositivist) as well as our own interpretation of the reality created through social life (constructivism). According to Morgan (2014), “[w]ithin Dewey’s pragmatism and its emphasis on experience, ontological arguments about either
the nature of the outside world or the world of our conceptions are just discussions about two sides
of the same coin” (p. 1048).

Though Dewey rejected arguments about the nature of reality, he did not deny the
differences in paradigms such as post-positivism and constructivism as approaches to research.
Morgan (2007) interprets Kuhn’s (1996) concept of paradigms in terms of the importance of
“shared beliefs within a community of researchers who share a consensus about which questions are
most meaningful and which methods are most appropriate for answering those questions” (2007, p.
53). If this interpretation of Kuhn is accepted, a pragmatist would not categorize paradigms by pre-
existing ontological and epistemological tenets, but rather “would focus on their characteristic
approaches to inquiry. Each of them creates its own world of research – different contexts with
different feelings about and different standards for the nature of inquiry” (Morgan, 2014, p. 1049).

Using pragmatism as a research paradigm is admittedly risky due to its flexibility and lack of
tradition. Though pragmatism as a concept has been present for over a century, its application as a
research paradigm is not firmly established. Pragmatism as paradigm, after all, radically departs from
the age-old philosophical arguments about the nature of reality and the possibilities of truths and
knowledge. In my opinion, this is what is most appealing to using pragmatism as a research
paradigm and why its features are best suited for the current project. Ontologically, on the one hand,
I treat the reality of each K12 classroom both as a contextually-influenced reality co-constructed and
negotiated by teachers and students (with the nature of that negotiation informed by the affordances
of digital media and technology) and a space which teachers and student must reckon with
immutable features of their lived reality (e.g., neoliberalism, social acceleration, timeless time, space
of flows) that are unknowable in terms of precisely or exactly how their influence manifests. This
flexibility allowed me the opportunity to consider the implications of the broader, theoretical
categories within described elements of contemporary conjuncture of teacher experience and seek
strategies for teachers to reckon with those implications (with this study mainly looking at the impact on developing democratic citizenry) in a way which makes practical sense for their classroom (i.e., does not force the teacher to upend their existing pedagogical approach completely).

According to Morgan (2014), “Pragmatism not only replaces arguments about the nature of reality as the essential criterion for differentiating approaches to research, it also recognizes the value of those different approaches as research communities that guide choices about how to conduct inquiry” (p. 1049). This is the direction, in my opinion, academic research broadly needs to head: breaking down the traditional barriers of research paradigms and methodologies while still valuing the approaches different paradigms provide to generate new knowledge and modes of understanding. This project attempts to be a step in that direction.

**Pragmatic Pacing of Inquiry: Two Rounds of Field Work**

As described in Chapter 2, inquiry in the Deweyan sense is a purposeful process of decision-making requiring thoughtful reflection of experience though it is not meant to be understood as a formal, rational protocol of logical reasoning. Morgan (2014) uses a quote from William James to highlight the importance of this distinction: “Our feelings color every aspect of the inquiry-process,” or, as William James puts it, “The trail of the human serpent is thus over everything” [as cited in Morgan, 2014](p. 1048). My feelings, emotions, and intuitive disposition (i.e., beliefs) while conducting inquiry must be actively reflected on throughout and inform proceeding actions. It is understandable to be skeptical of how an outside researcher’s beliefs are useful to K12 teachers because the researcher’s day-to-day experience occupies co-constructed reality vastly different from that of a K12 classroom. I believe that my experience as a kindergarten and 1st grade teacher uniquely positions me for efficacy in this sort of endeavor. My previous classroom experience, of course, does not elevate me from any kind of criticism but it does, I believe, afford me an extra layer
of experiential expertise to reflect on through the process of inquiry and further supports the use of pragmatic inquiry as a research paradigm for this project.

My research design aims to reflect flexibility in the direction the inquiry goes based on experiential reflection during data collection but also structured to accommodate my relative inexperience and to utilize established research traditions effectively. To do this, I have designed my research on what I’m calling pragmatic pacing of inquiry. This involved two stages of field works which start with the experience I, as the investigator, possess (e.g., teaching experience, critical/theoretical training) and ends inherently open-ended in terms where it can continue (the direction I intend to take this inquiry past the current project will be explored in Chapter 8). In between this beginning and end are two rounds of investigation, involving interviews, participant observations, reflection, and analysis. See Figure 9 for a high-level model of these two rounds and how they relate to one another.
General Considerations

As with most forms of research, there are a few considerations for this design of which I will address up front. The first consideration relates to the locations of participant observations for this inquiry, in particular, the difficulty I had to secure a place to do these observations, my reflection on why this difficulty occurred, and why the eventual locations of inquiry, though not my first choice, shaped my approach and led me in productive, previously unthought of directions. The second consideration regards how I am using ‘guiding questions’ and how they relate my overall aims.

Locations of Inquiry. When I began conceiving of this inquiry over the past year, the original intention was to conduct data collection in traditional public elementary school, preferably with a Title I designation.¹ This plan made the most sense to me as my teaching experience occurred in a traditional public elementary school with a Title I classification and thus, a similar space would be most productive for me, personally. My pursuit of this setting for my inquiry took some unexpected turns, and my two sites for classroom participant observations ended up being in local, private schools.

I submitted detailed applications for research to two local school public-school districts (one urban and one suburban). In the case of the urban school district, I had difficulty securing a principal or central office staff member to serve as the sponsor for my research. Introductory emails were greeted with polite declines or no response at all. In hindsight, I realize I had not spent sufficient time/energy building social capital within the school district. This isn’t surprising, because while I attempted to do just that through attending district events open to the public and finding

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¹ Title 1 is the largest federal aid program for public schools in the United States. High-need schools (determined by percentage of students who qualify for federally subsidized free/reduced lunch) participate in a particular funding structure related to their needs and achievement.
volunteer opportunities in the district, the interdisciplinary approach of this inquiry was not established enough to assume inherent interest (mainly because the discipline other than education is media studies, rather than traditional overlapping fields like psychology). Additionally, in the time since I have actively reflected on and developed the way I describe the kinds of questions I’m asking, how I go about exploring those questions, and what I am hoping to accomplish, making it very possible I did not have the vocabulary at that point to accurate explain my intentions on the page.

A distinct but thematically related experience occurred with the suburban school district, who told me the central research proposal review board had approved it, but once it was sent to the appropriate department to consider sponsorship, it was rejected. I learned the information technology department was who received my approved proposal for consideration, and, looking back, it is not surprising they declined to become involved. Because my inquiry is exploring questions involving how digital media and technology impact teaching practice, it was assumed the Information Technology department would be the appropriate place for it. As mentioned in Chapter 4, education research involving technology in the classroom tends to use an instrumentalist, effects-driven view of technology as opposed to the necessarily nuanced view I explicated. I can only imagine how my sociological, agency-balancing, experience-privileging, theoretically-driven empirical research on digital media and technology in the classroom was reacted to at the moment – probably with reasonable dismissiveness.

Those declined proposals would look starkly different were I able to call do-over, but unfortunately, that option is not a real thing, so I proceeded to find other schools. Without the backing of a district, private schools became my best option. I was not thrilled about this as it felt depressingly far from my original intention of traditional public schools with Title I designations. But, in the spirit of pragmatism, I accepted the reality of the current situation, took the lemons, and
made, what turned out to be, the lemonade of my life. By this I mean, the private schools in which I conducted my inquiry provided me with experience and insights I could have never have envisioned prior. The nature and the specific reasons for these unique experiences and ideas, involved the contextual affordances of the private school environment and their posturing of being spaces which actively provide the resources for teachers to innovate their instruction.

Eventually finding my way to two alternative sites, I ended up learning more than I ever imagined. These misgivings were rooted in both sites being private schools requiring high tuition for attendance and neither representing the socioeconomic diversity of a Title I school I was seeking. I was (naïvely) worried that observing teachers in settings which are fortunate to have contextual luxuries like small class sizes, teacher aids, and curricular flexibility would make my data highly susceptible to criticism. After speaking with administrators, I realized whatever unconscious bias I had against private schools was obscuring what could be learned from these educational contexts.

The contexts within which these schools operate simply required that I take them into account in developing my guiding questions, collecting/analyzing data, and how I utilize that data in synthesizing strategies. The prevailing contextual feature which impacted my approach was that both schools run master’s degree programs for teaching certification in conjunction with a local university. Classrooms had one lead teacher with apprentice teachers (current graduate students) always present able to apply and reflect on what they have been learning in their course work.

Though the two masters programs are not identical, the fact that they are largely housed within the schools and afford consistent practical application of what the apprentice teachers have been learning. I personally applaud this approach to training teachers because while either school has purposefully developed their respective mission, vision, and theoretical approach to education, the

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2 This bias is probably somewhat related to my experience attending K-8 Catholic School as a child.
master's programs show an inherent part of that mission is to ‘teach teachers’ with a particular approach towards education and then send them forth to different educational contexts to apply the skills they have developed. This quasi-lab school environment where experimentation in instruction, reflection, and collaboration are held at a premium made me realize what these contexts afford me: these schools prioritizing innovation of teaching practice as part of their school values through taking into account the whole of a child’s self, not solely assigned knowledge ‘needs’ the child has as prescribed by academic standards.

Both schools encourage and provide outlets for innovating teaching practice consistently, a feature which is not generally possible with many traditional public school. This importance on teacher's self-discovery as it relates to their practice means these schools will have contextual features which are not applicable or possible across all contexts; however, this also means the instruction I observe entails an additional layer of innovation not possible across all contexts. With this extra layer of innovation, I will get to see features of instruction or purposeful classroom decor which I may not have seen before in other schools. Rather than dismissing what I observe as only possible because of the contextual features of the schools, I will look for what elements of the activity could possibly be adapted for general use.

**Emerging Guiding Questions.** The second consideration for this research design is the nature of the questions which guide the inquiry. According to Hatch (2002), “Identifying research questions is a critical step in the research design because questions give direction to the study, limit the scope of the investigation, and provide a device for evaluating progress and satisfactory completion” (p. 41). In keeping with the flexibility of pragmatic inquiry as a research paradigm, I have reframed research questions as being ‘guiding questions.’ This is to highlight the role reflection on experience has in inquiry and differentiate these questions from traditional ‘research questions.’
After each stage of data collection, I purposefully reflected on and rationalized the experience and used that to inform new questions to guide my approach in the next phase of data collection.

While these guiding questions emerged during the research process, the following aims of field research broadly oriented the general direction emerging guiding questions were heading:

- Investigate and uncover possible new understandings about teacher's overall relationship with digital media and technology in their instruction

- Relating to the concept of a ‘pedagogy of interruption,’ what would it mean/look like for a teacher to ‘interrupt’ their instruction for the sake of building democratic values?

- Apply collected insights towards creating prototypes for strategies to support teachers leveraging their regular instruction towards interrupting students from rationalizing consumer-driven logic and re-orient towards a critically democratic mindset

**Recruitment and Procedures for Interviews**

While there were two stages of inquiry, the methodological approach was consistent regarding utilizing in-depth interviews and participant observations. While the guiding questions transformed with each new round of data collection, thus transforming my conceptual approach, the recruitment of participants, procedure, and methods of analysis stayed consistent across the two stages. What follows are brief descriptions of those consistent areas of the methodology, with the data dependent aspects of the design (e.g., how each round of data collection/analysis informed the guiding questions in the following ones) being saved for the next chapter.

Spradley (1979) gives a poetic summary of the relationship between an interviewer and interviewee in qualitative social research:

> By word and by actions, in subtle ways and indirect statements, [researchers] say, ‘I want to understand the world from your point of view. I want to know what you know in the way you know it. I want to understand the meaning of your experience, to walk in your shows, to feel things as you feel them, to explain things as you would explain them. Will you become my teacher and help me understand? (p. 34).
Table 1: Interviewees

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<th>Pseudonym</th>
<th>Current Position</th>
<th>Previous Teaching Experience</th>
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<tr>
<td></td>
<td>Daisy</td>
<td>English as a Second Language Specialist – 3rd/4th Grade</td>
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<tr>
<td></td>
<td>Isaac</td>
<td>2nd Grade</td>
<td></td>
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<tr>
<td></td>
<td>Mark</td>
<td>K-5 Special Education Teacher</td>
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<th>Stage 1 – Experts</th>
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<th>Previous Teaching Experience</th>
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<tr>
<td>Katie</td>
<td>Assistant professor in an education department within a University</td>
<td>Previously 3rd and 4th Grade Teacher and Elementary School Principal</td>
<td></td>
</tr>
<tr>
<td>Lee</td>
<td>Literacy Teacher Development Specialist at a elementary school</td>
<td>Previously taught multiple grades at the elementary level</td>
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<td>Tony</td>
<td>Elementary school art teacher</td>
<td>Previous experience teaching elementary and middle school</td>
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<td>Mia</td>
<td>3rd Grade teacher</td>
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<tr>
<th>Stage 2 - Experts</th>
<th>Pseudonym</th>
<th>Current Position</th>
<th>Previous Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carter</td>
<td>School leader at Site 1</td>
<td>Previous experience teaching elementary school</td>
<td></td>
</tr>
<tr>
<td>Cassandra</td>
<td>School Leader at Site 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am admittedly already at an advantage as the people I would interview are already teachers themselves, and my experience as a teacher afforded me a frame of reference and comparable experience to the interviewees, reducing perceived distance between us. As I exclaimed in Chapter 4, research or inquiry looking to understand the impact of digital media and technology on teaching practice will never produce practical strategies without actually speaking with real, live educators.
**Recruitment/Description of Interviewees.** Interview participants were recruited utilizing a snowball approach (Goodman, 1961). This included recruiting in-person, via email, and through social media platforms. The criteria for participation in interviews was 1) currently working as a lead classroom teacher in an elementary school (Teacher Interviews) or 2) previously worked as a lead classroom teacher in an elementary school AND whose current role involved supporting current teachers (Expert Interviews). Table 1 gives the pseudonym used to refer to each interview participant, their current position, and for the experts, their previous teaching experience.

**Procedure.** After a recruited participant confirmed they were willing to be interviewed, they were sent the following information: an introduction of myself, a broad overview about the project, a link to review and sign an informed consent form, and instructions for scheduling a 75-minute block with me for the interview to take place. The interviews were scheduled based on the participants’ availability and took place both in-person and via video chat. I met the participant at the agreed upon time at a place of their choosing, asked if there were any more questions, ensured they were aware I was recording the conversation and began the interviews. In addition to recording the interview, I had a notebook to write quick notes of initial impressions/thoughts. All interviews lasted between 60-90 minutes, concluding with me giving the participant my contact information should there be any questions which arise later.

**Recruitment and Procedures for Participant Observations**
In-depth interviews are unquestionably critical for learning about the lived experience of teachers as it gives the teacher a reflective posturing, possibly affording them unthought of understandings about their teaching practice; however, participant observations are crucial for this inquiry as they allow me to attempt understanding of the described aspects of the conjuncture of teacher experience from the perspective of a teacher. My previous experience as a teacher positions me as
uniquely qualified to approximate a teacher’s perspective (concerning my guiding questions), thus making participant observation (and any insights uncovered) a particularly necessary and potentially unique aspect of this project.

With participant observations, it is essential to consider the level of involvement of the observer. This is particularly true in educational settings as “researchers who take on the role of teacher, teacher assistant, or student in school-based studies will influence the way that life plays out in those settings more than the observer who ate as a fly on the wall” (Hatch, 2002, p. 73). At both Site 1 and Site 2, my approach for participant observations was to maintain a moderate level of involvement throughout. This meant sometimes being more of a fly on a wall when appropriate (such as during direct instruction so I could fully observe the teacher’s practice) or, when appropriate, being an active participant, including contributing to class activities and discussions when invited, working with small groups of students when asked, and supervising rooms if the teacher needed to step out for any reason.

<table>
<thead>
<tr>
<th>Stage 1 – Observed Teachers</th>
<th>Grade’s and Subjects Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pseudonym</strong></td>
<td><strong>3rd and 4th Grade Math</strong></td>
</tr>
<tr>
<td>Eve</td>
<td>3rd and 4th Grade Math</td>
</tr>
<tr>
<td>Ana</td>
<td>3rd and 4th Grade Literacy</td>
</tr>
<tr>
<td>Vanessa</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2 - Observed Teachers</th>
<th>Grade’s and Subjects Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pseudonym</strong></td>
<td><strong>Pre-Kindergarten</strong></td>
</tr>
<tr>
<td>Midge</td>
<td>Pre-Kindergarten</td>
</tr>
<tr>
<td>Richard</td>
<td>Pre-Kindergarten</td>
</tr>
<tr>
<td>Elena</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Observed Teachers

Personally, shifting back and forth between my “researcher brain” (looking to observe/understand) and my “teacher brain” (looking to collaborate with other educators to actively help students yielded excellent results) was extremely useful. It allowed me to use my elementary
school teacher sensibilities/logics for the first time in conjunction with the theoretical grounding and methods I have learned in my doctoral program. This facilitated ideas and connections I was not expecting and overall made the inquiry move in unthought of (but very productive) directions. See Table 2 for the pseudonym and grade levels for each observed teacher.

Recruitment/Description of Site 1. After my research proposals were declined by the two local school districts, I reached out into my personal network and eventually connected with the school leader at Site 1 through a common acquaintance. After reading over my proposal for research, the school leader granted me permission to conduct observations in the school and assisted in recruiting teachers. Three teachers (one 4th grade and two 5th grade) volunteered to allow me to observe their teaching practice at Site 1, and a week of observations was scheduled at the convenience of the teachers.

Site 1 is a private school in an affluent area in a western state. It offers grades Pre-K through 5th, with one class per grade level. Each classroom has one lead teacher as well as an apprentice teacher who is a graduate student in the affiliated master’s degree program offered by Site 1. The lead teacher is present with the students for the entire day (save for related arts classes such as art and physical education), and the apprentice teachers are absent at various parts of each week for activities related to their degree program. Site 1 built its curriculum with social and emotional learning as its grounding tenets, advocating for the importance of students participating in the construction of their classroom and culture (both physically and emotionally). The teachers at Site 1 have an incredibly warm and collaborative culture of learning and it their commitment to their work is always apparent.

Procedure for Stage 1 Participant Observations.. The participant observations at Site 1 occurred throughout one week in October 2019. I arrived at the school each morning around 7:30 AM and left at dismissal around 3:00 PM. After signing in at the front office, I started each day in
the 5th grade classroom. Due to the small size of the school (and the collaborative nature of the staff), I fluidly moved amongst the 4th and 5th grade classrooms throughout the day. I took contemporaneous, hand-written notes of the observed teaching practice and any other ideas as they came to me. When appropriate and unobtrusive, I asked the teacher clarifying questions about what they were doing.

In addition to observing the instructional practice of the three teachers, I also conducted follow-up interviews with two out of three teachers (one was unavailable). The procedure for these interviews was the same as the pre-observation interviews, with the focus being on things I saw in that classroom. Interviews were recorded and made into transcripts to be used for analysis before Stage 2 of the inquiry. At the end of each day, I voice-recorded 20-30 minutes of myself immediately reflecting on the experience of the day so I could refer to my initial perspective/reactions at a later time.

**Recruitment/Description of Site 2.** While planning my observations at Site 1, the school leader offered to refer me to another school in the area, Site 2. After an initial email to the school leader of Site 2, I was referred to an administrator at the school who coordinates community outreach, and we set up a meeting. At our initial meeting, I pitched my project and asked if any teachers would be willing to allow me to observe their instruction. After a few follow-up conversations/communications, the administrator graciously set me up with 6-days of observation.

Site 2 is an early childhood private school in an affluent area in a western state. They have classrooms with children as young as infancy up through Pre-Kindergarten (which is where my observations took place). Each classroom has one mentor teachers with one or two apprentice teachers present at all time who, similar to Site 1, are students in the master's program offered through the school. Site 2's philosophy is grounded in the respect and dignity of the child being paramount in their educational experience.. Their philosophy, speaking in broad terms, puts an
emphasis on not just the importance of the child’s role in co-constructing the classroom space with their teachers, and grounding that emphasis in honoring the inherent right to participate in school/society. Some traditional educational/pedagogical approaches are considered to be stifling of this right to participate due to excessive generalizing about students wants and needs, and Site 2’s philosophy seeks to find ways to innovate instruction towards further promoting this right.

**Procedure for Stage 2 Participant Observations.** The participant observations at Site 2 were held over 6-days in January 2019. Two instructional days were spent in each of Site 2’s three Pre-Kindergarten classrooms. I arrived each morning around 7:00 AM and stayed through lunch time (usually around 12:30 PM or 1:00 PM). I followed the class to all of their activities throughout the day and floated between groups when the class was split up and participating in separate activities. As I had at Site 1, I took contemporaneous, hand-written notes of the observed teaching practice and any other ideas as they came to me. When appropriate, I asked the teacher clarifying questions about what they were doing. I also conducted follow-up interviews with the observed teachers the week after the observations had concluded. Like at Site 1, I used this time to specifically ask teachers about things I observed in their classroom as well as their thoughts on some of the ideas which had emerged throughout this inquiry. Also, at the end of each day, I voice-recorded 20-30 minutes of myself immediately reflecting on the experience of the day so I could refer to my first perspective at a later time.

**Method of Analysis**

While pragmatic pacing of this data collection affords a high level of flexibility, it was important to me to balance that flexibility with a grounding method for analyzing data. This is because 1) my inexperience as a researcher in the field necessarily necessitates a certain level of structure and 2) there is a long history of scholarship developing analytical methods which would be
irresponsible and hubristic for me to ignore. In trying to operationalize data from these interviews and observations into future practical strategies for teachers to transform their mindset/approach for developing democratic citizenship in students requires inductive thinking: proceeding from the specific to the general. For my eventual claims/strategies to be taken seriously by academics and teachers alike, a structured approach and explanation of that inductive thinking is necessary.

While of course not claiming to be ‘the’ process for analyzing qualitative data inductively, Hatch (2002) presents a broad outline for this process which afforded me the necessary structure for my analysis:

1. Read the data and identify frames of analysis
2. Create domains based on semantic relationships discovered within frames of analysis
3. Identify Salient domains, assign them a code, and put others aside
4. Reread data, refining salient domains and keeping a record of where relationships are found in the data
5. Decide if your domains are supported by the data and search data for examples that do not fit with or run counter to the relationship in your domains
6. Complete an analysis within domains
7. Search for themes across domains
8. Create a master outline expressing relationships within and among domains
9. Select data excerpts to support the elements of your outline (p. 162).

To analyze the interview data, I created transcripts of each interview to read (and reread) in creating and refining salient domains. Domains were constructed. Domains can be represented by identifying “included terms” and “cover terms” that are linked by a semantic relationship (Spradley, 1979). Included terms name the members of the category derived from the data and a cover term names the proposed category into which all the included terms fit. See the Table III for an example domain.

Observations were interpreted similarly. First, I went through my observation notes after listening to my end-of-day reflections, adding any additional insights from those spoken reflections which were not addressed in the contemporaneous notes. After conducting steps one through five
of the inductive analysis process, when necessary, I referred to transcripts from the follow-up interviews with the teachers and matched transcript excerpts thematically to the uncovered frames of analysis and domains. This method of analysis was particularly useful with the pragmatic pacing of this inquiry because after each round of data collection ALL available data was read and reread (not only the data collected in that particular stage). This means, for example, themes emerging from analyzed domains in Stage 2 will then be recursively applied to all previous rounds of data collection.

Table 3: Example Domain

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ham</td>
<td>is a kind of sandwich meat people like.</td>
<td></td>
</tr>
<tr>
<td>Chicken</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The critical moment occurs in step 6, which is where I attempt to connect the identified domains to the elements of the conjecture of teacher experience. This is critical because it contextualizes the data in my overarching theoretical argument and, more critically, it is the moment where attempt to connect theory and practice begins. It is the moment where ideals connect with the real world. It is the moment where media studies theory meets education methodology. It is the moment from which I can create strategies for developing democratic citizenry which accounts for
how digital media and technology have transformed the social world AND the lived experience of a teacher. Chapter 7 will walk through the collection and analysis of data and this work will close with Chapter 8 where I will present prototypes for created tools or strategies and describe how I intend to continue this pragmatic inquiry.
Chapter 7

Data and Analysis

As a reminder, below are my aims which broadly guided these two stages of data collection and analysis:

• Investigate and uncover possible new understandings about teacher’s overall relationship with digital media and technology in their instruction
• Relating to the concept of a ‘pedagogy of interruption,’ what would it mean/look like for a teacher to ‘interrupt’ their instruction for the sake of building democratic values?
• Apply collected insights towards creating prototypes for strategies to support teachers leveraging their regular instruction towards interrupting students from rationalizing consumer-driven logic and re-orient towards a critically democratic mindset

Of these aims, throughout this analysis I will refer to the third one listed as my ‘ultimate aim.’ I call it this because the information gathered relating to the first two aims will be channeled into the creation of strategies or tools to support teachers. The synthesis of actual strategies from data is where I attempt to channel the arguments from Chapters 1-5 into a useful resources and strategies for teachers. This is where theory meets practice.

Stage 1 Interviews and Analysis

Through reflection on my experience as a teacher and my knowledge from academically exploring the nature of how digital media and technology has facilitated transformations in social logic, I formed the following guiding questions to use in the Stage 1 interviews. These questions are listed below with brief additional descriptions:

• How does the ‘slippery slope’ manifest concerning the integration of digital media and technology into instructional practice?
  ○ The feeling of being on the slippery slope (e.g., anxiety and stress due to feeling one ‘can never keep up’ or ‘can’t establish firm footing’ as facilitated by social acceleration) has been established as a contributing factor to increased rates of
teacher burnout and despair. I am specifically wondering how teachers perceive digital media and technology contribute to this in their instruction.

- **How do teachers cope with the required integration of digital media and technology into their instruction?**
  
  - Since an ultimate aim is to uncover strategies to address the complications of increased encouragements and mandates for using digital media and technology in instruction, it would naturally behoove me to understand how teacher already goes about this. What strategies do they always use? Thinking pragmatically, starting with what teacher already does will hopefully create a path of least resistance towards progress.

- **What ‘difference’ (defined broadly) do teachers notice in their classroom since the rapid proliferation of technology?**
  
  - This is explored explicitly with interviewed teachers whose teaching careers extend to before the passage of The No Child Left Behind Act (having been established as a critical accelerator of putting more technology in classrooms). I am curious about what qualitative ‘differences’ teachers’ observed (e.g., in the curriculum, students, parents, etc.) since NCLB and how have those ‘differences’ impacted their classrooms.

To reiterate, the purpose of these guiding questions is not to serve as any sort of script in each interview: I don’t believe I asked any of these questions verbatim in any of the discussions. I began each conversation by asking the interviewee to tell me about their personal history in education, and then we segued into talking about issues of technology in education. These guiding questions informed my lines of follow-up questioning. When we approached topics related to the guiding questions, I asked follow-ups delving deeper into their statements. Finding an ‘answer’ to these guiding questions is unimportant. They are like my version of the North Star; something to be followed, not arrived at.

Because at the time I was still developing how I understood the importance of promoting democratic values, I sparingly broached the topic of democracy. To begin my fieldwork, I wanted to take a step back and focus first on how these teachers think about the role of technology in the classroom. This more literal approach to discussing digital technology and its impact on the classroom intends as a means to inform my guiding questions for Stage 1’s participant observations.
This round of data collection consisted of five interviews of 60-90 minutes in length. Of these three interviews, three were with current elementary school teachers and two were with ‘teaching practice experts’ (currently works in a role supporting teacher practice and has previous experience as a classroom teacher). Table 4 contains relevant information for each interviewee.

Table 4: Stage 1 Interviewees

<table>
<thead>
<tr>
<th>Stage 1 – Teachers</th>
<th>Current Position</th>
<th>Previous Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daisy</td>
<td>English as a Second Language Specialist – 3rd/4th Grade</td>
<td>Previously taught multiple grades at the elementary level</td>
</tr>
<tr>
<td>Isaac</td>
<td>2nd Grade</td>
<td></td>
</tr>
<tr>
<td>Mark</td>
<td>K-5 Special Education Teacher</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 1 – Experts</th>
<th>Current Position</th>
<th>Previous Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katie</td>
<td>Assistant professor in an education department within a University</td>
<td>Previously 3rd and 4th Grade Teacher and Elementary School Principal</td>
</tr>
<tr>
<td>Lee</td>
<td>Literacy Teacher Development Specialist at an elementary school</td>
<td></td>
</tr>
</tbody>
</table>

**Domains.** After completing these interviews, creating transcripts, and reviewing those transcripts multiple times, the following domains emerged:

- Stress and Tension from Instructional Technology
- Inefficacy of Prescribed Instructional Technology Use
- Need for Student Familiarity with Technology

**Stress and Tension from Instructional Technology.** In my conversations with these teachers, stress and tension around the actual use of instructional technology (such as iPads, laptops, SmartBoards, and SmartTables) emerged as a common topic. This domain of analysis is not about
the teacher’s sensibilities/attitudes towards technology, but rather regards observed dynamics by the teacher when they (or a co-worker) has utilized some kind of digital technology in their instructional practice. In this domain, there is a cause/effect semantic relationship between the included terms and the cover term.

Table 5: Stress and Tension from Instructional Technology

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics with technology</td>
<td>The sudden introduction of technology is a cause of stress and tension for teachers in their practice</td>
<td></td>
</tr>
<tr>
<td>Lower levels of conversation and critical thinking due to technology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Logistics with technology is a cause of stress and tension for teachers in their practice. As discussed in Chapter 4, attitudes contributing to a teacher using or not using technology in their instruction have been well covered by academic research; however, the stress and tension which arises during the actual use of the technology has not. All of the teachers I spoke with in this round presented themselves as having a high level of comfort with instructional technology, but they don’t use it as frequently as they could because of logistical difficulties.

One aspect of this is infrastructural challenges regarding digital media and technology, particularly in terms of digital bandwidth capabilities. For example, Daisy explained how at her
school the decision to put Apple TVs in every room seemed very exciting, but ended up causing more problems than the devices’ instructional worth:

Daisy: Whoever designed our school decided to put an Apple TV in every room. I think they thought would be a great idea and give us all iPads, but it’s actually the biggest pain in the ass…it’s a pain because if the internet goes out or doesn’t connect or goes to sleep and the TV’s not super big and like kids can always see it. And so that is annoying because that’s what we have in place of an overhead projector.

This sentiment was reiterated by Katie, who previously had been a teacher and principal in schools with both low and high access to digital technology for instruction, stating the digital infrastructure of the school and support for that infrastructure a lot of times becomes the arbiter of whether technology can be integrated effectively:

Katie: In the end, if your school’s infrastructure is not set up to handle that much traffic there’s a good chance [the use of technology] is not going to go well, no matter how much you plan. It’s a matter of what you have in the classroom and knowing the chance that maybe it won’t work.

There were other infrastructural concerns like the ones presented from Daisy and Katie, but Isaac brought up another logistical matter which resonated with me in light of my experience in the classroom. Isaac mentioned the procedural piece (i.e., taking the time to establish rules and procedures for students using the technology purposefully) as being a frequent contributor to teacher’s stress and tension while using technology in instruction:

Isaac: I think that’s the big thing that I noticed talking with teachers is like I think most teachers recognize that tech is a valuable tool in the classroom and they want to do things but some of the procedural pieces of how do you manage that technology is not something that’s easy or that you get a lot of support on.

In my experience, this is undoubtedly true. Instructional technology affords a high level of engagement; however, with that high level of engagement often comes excitement which young people frequently can have difficulty regulating. It takes times and effort to make students react to an interactive piece of technology with the same nonchalance they would have in response to pencil
and paper. This procedural piece makes sense as a cause of stress and tension when teacher’s use digital technology in their instruction.

The sudden introduction of technology is a cause of stress and tension for teachers. Aside from logistical concerns of digital technology causing stress and tension during a teacher’s instruction, the frequent turnover of instructional technology similarly brings difficulties. For example, Isaac related to me about when there was a big push for SmartBoards, but their quick introduction led to compatibility issues with other technology in the room:

Isaac: Actually, they had a big push for Smart Boards, right? Which is really exciting because they can do a lot but I know … It’s actually kind of embarrassing to admit, but I never used mine as a smart board because my teacher computer was so old it wasn’t compatible with the software that needed to go with the board.

Additionally, interviewees vocalized the awkward position it puts a teacher in when a new piece of technology suddenly shows up in their room to be used when the teachers already have an established system of how they teach certain things:

Katie: I completely understand why the reaction of ‘I’ve always done this lesson this way now. Here’s this box my room with this weird device’. And they just think, ‘why should I use that?’

Lee: We have like a couple [teachers at our school] like this. They’re just like, I know how to teach and I would rather not mess with it.

Another area where this stress and tension around the sudden introduction of technology happens is at schools with high levels of teacher turnover. If a school has specific digital technology which is expected to be used, each new teacher who comes to that school has to reckon with incorporating it to their instruction suddenly. Mark talked about his school and how new teachers are expected to utilize the Promethean boards (an interactive whiteboard similar to SmartBoards) found in each classroom:

Mark: You have some who take the time to learn how to purposefully, but a lot of our teachers don’t and so the teachers will [follow the students lead] because maybe they had a teacher the year
before who knew how to use it really well, but even then they generally just end up really only using it as like an electronic whiteboard and not exploring its higher level capabilities.

Rather than sitting in the stress and tension that can be caused by the sudden incorporation of some kind of new digital technology, teachers would instead use it with their previous practice, rather than as a tool for innovation.

Lower levels of conversation and critical thinking while students use technology is a cause of stress and tension for teachers. The last area of this domain involves interviewees talking about what they have seen ‘to be lost’ when there is a heavy amount of technology usage. These are not observations/insights which made the interviewee holistically question all efficacy of digital technology in instruction, but gave them pause in that they have observed that something was ‘missing.’ For instance, Lee spoke about a previous school which was extremely rich in technology:

*Lee: So I saw some beautiful things happening with like third and fourth graders at [the previous school I worked at], but I also saw like … kind of a deterioration of like classroom conversation. You know like kids were like engaged in doing that work. But I mean, they just weren’t talking very much, and teachers were having like awesome [small group] guided reading lessons, and it’s awesome you’re getting that time, but I just kind of felt like it was … I don’t know … it was like the rigor [for the skills they were working on with the technology] was there, but they just weren’t talking as much.*

Lee returned to this thought later in the interview, and remembered comments by people who would walk through classrooms to observe the technology usage at the school:

*Lee: So we had a couple walkthroughs with different people, and they would be like, oh wow [the technology use is] great. This is amazing. But one person in the group would always be like ‘… so when do they talk to each other?’*

Daisy also acknowledged that in her experience, teachers generally don’t use digital technology to push critical thinking. Daisy did not find this to be an inherently wrong thing, but thought it could become problematic if low-level recall activities on digital technology (e.g., using software which has
students practice vocabulary words in an arcade game-style activity) are used too much and take away from activities which push critical thinking:

Daisy: I mean obviously critical thinking is not like the only first thing you need to teach a kid. They need to have some foundational skills. Reflex: ([an arcade game for practicing math facts]) is one we use for that — kids love Reflex. There’s not critical thinking in that which is why I’m sure some people don’t like it, and others are wary of using it too much.

There was also voiced concern not only about the level of conversation and critical thinking but also about how difficult it is to critically discuss the nature of digital technology in and of itself. Isaac feels tension in the difficulty of having these kinds of meaningful conversations:

Isaac: I’ve been trying to have those conversations about just internet usage being such a part of their lives, but it’s hard to know the right direction to take them in. I tried to tell them YouTube did not exist when I was their age, and they sort of looked like, ‘what? … umm ….’

**Inefficacy of Prescribed Instructional Technology Use.** The second domain uncovered in this round of interviews involved the prescribed use of instructional technology. Unlike the previous domain which examined stress and tension experienced by a teacher in the use of digital technology in instruction, this domain is referring to the contributing factors of why, at the school or district level, prescribing (and sometimes mandating) specific digital technology to be used in instruction is highly ineffective. By ‘prescribe,’ I mean any direct guidance or direction from the school or district level regarding what digital technology to use, how long to use a particular digital technology, and the frequency of using appropriate digital technology. There is an attribution semantic relationship between the included terms and the cover term in this domain.
A plurality of teacher sensibilities towards changing their practice. While the idea of every teacher being in most ways (but not all) a unique individual in his or her practice does not seem like a terribly progressive idea on its surface, the frequently prescribed use of particular digital technology and software belies that seeming non-controversy. I don’t believe that any teacher’s instructional practice is inherently incompatible with any digital technology use in instruction, but rather the most effective way in which the digital technology is introduced and utilized varies greatly from teacher to teacher due to their unique, contextually-based sensibilities as instructors.

Interviewees noted that there are individual teachers who, for whatever reason, seem almost naturally adept at incorporating new tools to their instruction. Mark spoke on a former co-worker who embodies this idea:

Mark: A person I taught with for seven years both in 5th grade and then also in 4th grade … and for her [using technology] is an incredibly thoughtful process. Like I know that we’re going to have
On the other hand, interviewees identified certain teachers whose identities either approach the prescription of a new digital technology apathetically and sometimes with suspicion:

Lee: Some teachers think of [prescribed technology use] as … I just need to make sure every kid gets to use some technology at least once a week for 30 minutes. No more thought put into it than that.

Lee: I’d say we have a couple of like, I think the word is luddite. They are just like, ‘I don’t think this is good for my kids. I don’t want them to use it.’

All interviewees pointed to commonly observed factors such as age and comfort with technology as antecedent factors for effectively integrating digital technology into instruction; however, this sensibility difference across teachers was also thought in other ways. Katie thought back to formative experiences with video games as a reason her exploratory sensibility towards incorporating digital technology into instruction:

Katie: As a kid, I grew up on Mario Brothers, Duck Hunt, You know … Contra! And so when I got a game I never read a manual for the game … just never read it. I’ll just plug it in and just go … . I look at my character, press a button to see what it makes my character do, and learn as I went. This is just how I learned to use technology.

A plurality of pedagogical practice. In addition to differences in teachers’ sensibilities towards changing their instructional practice being an attribute to the prescription of technology use being ineffective, a plurality of pedagogical practices is also an attribute of this inefficacy. Some teachers’ pedagogy involves a lot of work with small groups, meaning a lot of thought needs to be put into what the other students will be doing while the teacher is working with a small group. This pedagogical practice favors the use of digital technology like laptops as a ‘second teacher,’ to ensure students are learning even if the teacher is not physically next to them:
Daisy: All students have access to Chromebooks in every space of our school, and the way that we frame it. That it’s like having another teacher … and the real teacher can do more in-depth work in small groups or 1-on-1.

Mark: It’s almost like having an extra teacher we can put them over there on the computers, and they’ll be learning. [Once they learn to use the laptops], it doesn’t require prepping something else or physically being present to explain and monitor their work.

 Others teachers’ pedagogies involves a lot of incentivizing. Due to the highly engaging nature of digital technology, they become a natural incentive as a fun instructional alternative to be earned:

Mark: So some of our newer teachers maybe are less effective utilizing technology in their academic instruction. [They’ll use the] Chromebooks as an almost like an incentive. Students earn time on the compute.

Lee: [I’ve seen teachers have technology] be like a reward for kids like that was a big reward at [a previous school I worked at] like, you know, if you keep it together and don’t throw something for 10 minutes you have like 10 minutes of iPad or computer tomorrow.

Finally, interviewees also indicated some teachers strive to be as thoughtful and purposeful with the integration of digital technology throughout their direct, whole group instruction:

Isaac: But I think that the best use of it is the technology plus the teacher and when you take the teacher out of the equation, it just who knows [how much learning is happening].

Katie: For me, the purpose of technology [in instruction] is to enhance already strong quality instruction in the classroom and not have it replace anything. If a teacher is not instructionally and culturally responsive to their students in a positive way … to not have that root then no technology will fix that, but it could enhance how they do about it.

A plurality of supports needed. Finally, with these different personal and pedagogical sensibilities, another issue emerging from prescribed usage of instructional technology is a plurality of kinds of supports and resources needed. For a teacher who is generally recalcitrant to changing their pedagogy, they may need support for dealing with the logistical concerns of using more technology in their instruction:

Isaac: You hear a lot of ‘I’m comfortable with technology, but my kids can’t handle it,’ and I think like most things in teaching. If you don’t expose your kids to it. If you don’t give them an
opportunity to try, they’re not gonna handle it. Those teachers need help with how to go about that exposure.

The area in which a teacher needs support with the prescribed use of instructional technology can sometimes be a ‘how-to-use’ sort of support:

Lee: Sometimes I see a huge hurdle with like something as simple as you know, how do I take something in an email and project it on the screen. Or if I asked [teachers] to bring their laptop [to a meeting], [their struggle is] how to do that. They won’t bring their laptops because they’re hooked into their projector. That’s a huge hurdle.

Adding even more to the complicated question of how to support such a plurality of needs regarding instructional technology, humans are rarely singular in their support needs. Frequently, the support a teacher needs is a combination of multiple issues:

Katie: I a lot of times see some combination of not being willing or being afraid to try something new not … and also just not being familiar with how to use it.

**Need for Student Familiarity with Technology.** The final domain uncovered in this round of interviews involves how teachers talk about the ‘worth’ or the ‘purpose’ of having students regularly interact with technology in their learning. The interviewees framed this ‘worth’ or ‘purpose’ as preparing their students for participation in 21st century society. This includes acquiring and developing a general level of competency and comfort with using technology as well as specific tech-based skills (like coding). For this domain there is a means-ends semantic relationship between the included term and the cover terms.
Allowing independent exploration with technology is a way to ensure students are capable of full technological participation in our society. The interviewees saw independent exploration for new pieces of information through technology was a meaningful way to prepare students for life in the 21st century. There was an overall consensus that the world is transforming through technology and will continue to modify, so children need to be prepared:

*Katie:* One of the purposes of technology, in my opinion, is to enhance the classroom experience. Different ways of accessing the information and producing what they know about that knowledge. In a way that prepares them for 21st-century skills at your career and college later on in life.

*Daisy:* We live in such a tech-based world, it can’t be just about asking students, ‘What’s the character’s motivation?’ or like ‘repeat after me,’ but also about students knowing how can you find the answers to things if you don’t know? What kind of toolbox can I give you? How can I set you up to be successful later in life?

Having students present their knowledge through technology is a way to ensure students are capable of full technological participation in our society. The interviewees also indicated
having students present their knowledge through technology as an essential function of using technology in the classroom. Lee spoke of a typical use of laptops amongst teachers: using Microsoft Office Suite to have students ‘publish’ their work:

Lee: I see teachers approach tech like, ‘We have a project to do. And so we’re gonna get the laptop cart, and we’re all going to make a PowerPoint on our [topic] or you know, we are publishing a piece of writing using Word and then printing it out.

Additionally, interviewees indicated that teaching ‘how to use’ technology is no longer vital due to the increasing adeptness and comfort students have utilized technology, as well as the constant innovation with technology. Mark sees this dynamic, but says teachers need to push the purpose of using technology from ‘comfort’ to ‘creation’:

Mark: You know a lot of them don’t know how to make anything from [technology], and I think computers, as they exist now, are not going to be around forever. It’s not like our kids need to learn how to use and manipulate and maneuver with the computer system as it currently exists since it will change soon, but I think they need to be able to know how to adapt and how to be able to manipulate something and make something of their own.

There was a sentiment of presenting knowledge through technology having a preparatory social function for students. Katie saw students presenting knowledge through technology to be a fundamental way to promote students having the skills to be effective in our technologically saturated society:

Katie: We can use technology to teach higher level, contemporary critical thinking through technology … with where we [as a society] are now [regarding technology] and where we’re going you want students to have a high level of comfort using these [technical] skills along with the things I’m learning. To bring it into the context of our lives. That creates space for using technology to [have students] show what they know and show that they know how to use these skills in context.

Finally, leading into the next domain, Daisy saw students presenting knowledge through technology to be a highly valuable skill as it will have implications for their future:

Daisy: I think that we push ‘College College College,’ but we’re not building skills with fidelity for students to translate once they’re in college and they’re independent. That’s a problem.
Introducing skills for college/career readiness is a way to ensure students are capable of full technological participation in our society. Outside of general, vaguely defined tools and skills for participation in society, the other area of urgency regarding the need for student familiarity with technology was explicitly related to imparting particular skills for college and career readiness. For instance, learning principles of computer coding is an activity multiple interviewees mentioned as an emerging initiative in their schools or previous school they’ve worked at:

Isaac: [Students in our computer labs] now do computer coding type of stuff which I think is really exciting.

Katie: [Districts are] outfitting a classroom or school with all these tools for teaching coding skills. And to me that that speaks to the flash of like getting kids ready for like a to use it in their lives and like, you know, your career.

Daisy touted using online tools like Google Drive with her students as a way to model how people commonly work and communicate in their professions:

Daisy: I’ve stopped doing a lot of work by hand because in terms of like sharing purposes I try to do everything online – we live off of Google Drive … I think just showing kids a lot of times and seeing it in practice and how we use it in the real world. I think it is important.

For some of the interviewees, the stakes for pushing these skillsets was having access to as many career options as possible as well as being prepared for how to use technology in professional spaces:

Mark: I think if we don’t expose kids to [tech-industry skills like coding] on the front end, either they won’t have the skill set necessary to be able to be competitive in a technology-driven field or they won’t have the interest to even know it was a possibility.

Isaac: I think it’s important that the kids have access to technology. Because that’s the way the world is moving and they need practice with it and especially with the typing an email and knowing professional etiquette … things like that are real skills.

Themes and Analysis. After developing the domains for analysis for this round of interviews, I read through the data within each domain, looking for common themes across them. I aim to see
how the insights across the three domains of analysis fit together; I am asking how these pieces are related towards the whole of my ultimate aim of creating practical strategies for teachers to address the unique challenges of 21st century citizenship. These themes with accompanying analysis represent the first steps forward towards this ultimate aim.

**Innumerable varieties of needs arising from technology mean strategies for promoting democratic values must have adaptability as a core characteristic.** I entered these interviews with the core value of every teacher’s classroom existing as a contextually co-constructed space, with its own unique strengths and needs; however, I was still taken aback by the data revealing SO MANY examples of how multiple teachers’ needs are due to the social transformations afforded by our use of digital media and technology. The data indicate that the day-to-day experience of these teachers with regards to technology is a confluence of overlapping needs which arise from that teacher’s attitudes, beliefs, and values towards technology’s role in their teaching practice. While one teacher at a school may be committed to purposefully incorporating technology into instruction but needs to build confidence in his or her logistics-related skills, another teacher may be committed pushing their already positive relationship with instructional technology even further. These two teachers require starkly different kinds of support, which makes creating useful tools, strategies, or pieces of training for both of them difficult.

I interpret this not to indicate such tools or strategies are impossible to conceive of, but instead that they must attend to the question of adaptability first and foremost. Just as the data showed a prescribed ‘use’ of instructional technology to be ineffective due to issues of adaptability and the myriad of ways instructional technology can cause stress and tension during instruction, considering strategies for incorporating democratic values throughout instruction must be approached foundationally. By this, I mean tools or strategies must aim to create a foundational rationalization of promoting democratic values into one’s teaching practice. It cannot be a boxed
curriculum or list of achievement standards, it has to be tools for building a sensibility – a sensibility which naturally grows and embodies according to a teacher’s personal instincts in his or her teaching practice.

*Computer Lab time is a place where preparing students for success in the real world happen frequently.* Computer labs are a relatively common staple in most schools in the United States. It makes sense, considering when computers first entered schools in the 1960s and 1970s, the technology was so physically large required a separate room for use. Additionally, in the 1980s, 1990s, and 2000s (before the boost to the educational tech industry propelled by The No Child Left Behind Act), it was not yet cost-effective to have more than a single full-class set of computers, so having classes use a shared computing space on a rotating basis made logical sense. Though more and more digital technology made its way into individual classrooms in the past decade or so, the computer lab still remains, symptomatic of the temporal and spatial asynchrony between institutions of K12 learning and private industry described in Chapter 2.

This logic of the necessity of a separate computer lab is still embedded in every school I’ve seen in recent memory. This despite the steady decline in cost and physical size of technology with similar capabilities to desktop computers. In honoring my pragmatic approach to this fieldwork, I have to accept a separate computer lab, used by different classes on a rotating basis, will remain in a high percentage of educational settings. Mobile carts with class sets of laptops were frequently mentioned as an alternative to the computer lab. Though the integration of technology into a student’s primary learning space (i.e., their classroom) I believe to be a good thing, the underlying logic of taking time out of the class’s regular schedule so students can have one-on-one time with a computer still remains. When the interviewees spoke of using technology in terms of real-world application, like skills for career readiness or just general participation in society, the described activities were done either in a computer lab or on a class set of laptops.
This led me to consider where the computer lab — so many schools’ havens for exposing students to technology — fits within my ultimate aim. As much as the idealist in me would want all technology usage all the time be drenched in discussions of democratic values, the pragmatist in me considers the most base level ways to bring discussions of democracy into instructional practice unobtrusively. Thinking within that context, the role of the computer lab in all this became clear surprisingly quickly: a space for developing students efficacy in instrumental uses of technology, like career-related skills such as coding or general professional etiquette for technology-based communication (like e-mail, Google Suite, or Microsoft Office Suite). Being broadly ‘prepared’ for living in an increasingly tech-based society came up in every interview, inclining me to believe this is at least a somewhat familiar value amongst teachers. If this is true, then the computer lab is an excellent space for developing skills a teacher, principal, or district deems essential.

Thinking back to Biesta’s idea of a ‘pedagogy of interruption’ (see Chapter 5) there is indeed implications to this proposed focus of computer lab time. I think of the concerns over students rationalizing of neoliberal values¹ through developing the instrumentally-defined² skills relating to technology. Mr. Ackerman, the rosy-eyed kindergarten teacher, would assuredly want to entirely steer away from anything which even remotely appeared to prime his students somehow to rationalize neoliberal values rather than democratic ones. But hopefully-soon-to-be Dr. Ackerman, having viewed his past experience as a kindergarten teacher through a newly developed critical lens,

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¹ When I say ‘neoliberal values,’ I am referring the ways in which the logic of neoliberalism’s economic aim of promoting a robust, free-market system can be applied to an individual’s underlying values in decision making. This includes an emphasis on work ethic, self-determination, and perseverance as guiding principles while eschewing the reality of systemic structural barriers for individuals striving for success through those values such as those related to differences based in gender identity, sexual orientation, race, ethnic group, physical ability, religion, class, and geographic location (just to name a few).

² By ‘instrumental,’ I mean uses of technology which relate to a specific end which can be attained through used of the technology as an instrument. For example, using a website to search for options for where to go to college would be an instrumental use of technology.
knows purposeful ignorance to the dominant neoliberal values which guide much of private industry would be more of a detriment to his students than anything else.

We are all active participants in a co-constructed society, so ignoring capitalist implications of teaching a sixth grader how to write front-end code in JavaScript would be irresponsible, but it would also be irresponsible to ignore tech-related skills being one of the driving forces of the world today in so many regards. This is where the sensibility I mentioned in the last section comes into play. If a tool or strategy could help a teacher establish a foundational sensibility of promoting democratic values, computer lab time could be rife with opportunities to briefly ‘interrupt’ students and prompt them to consider the kinds of democratic questions which come along with the instrumental uses of technology. And if they choose to continue to develop and utilize these instrumental skills, how can they do so while grounded in values of democratic life.

**Neoliberal implications of preparing students for technology use in the ‘real world.’**

A third theme which provoked a considerable amount of thought sprung out of the issues discussed at the end of the previous section: within the frame of the interviewed educators all mentioning contemporary skills relating to digital and emerging technology in one way or another, what does the teacher look for to ‘interrupt’ neoliberal values? What during a computer-led typing-skills lesson in the computer lab could a teacher leverage towards brief interactions relating to democratic values? And of equal importance, where can democratic values be embodied during non-computer lab use of instructional technology (such as using a SmartBoard or similar device for whole group instruction)?

This insight helped me conceive of the kinds of things relating to neoliberal values I would be looking for when I entered the classroom observation phase of Stage 1. To put it briefly, I looked for anything which struck me as grounded in or related to neoliberal values. I was still unclear where this was to be observed — possibly in the teacher’s language? In how the room is decorated? How
‘technology’ or ‘democracy’ is discussed? This uncertainty prompted me to enter the observations with a flexible, ‘Yes! And…’ state of mind. I knew this would mean it would take time to calibrate for exactly ‘what’ I was looking for in terms of the presence of neoliberal values. Establishing this state of mind helped me realistically and flexibly set my expectation for my future classroom observations.

**New Guiding Questions.** After completing the analysis of the first round of interview data described above, I created the following guiding questions for the participant observations in Stage 1:

- How do teachers combat their personal concerns about various aspects of technology use in their instruction? What strategies do they employ? Do they seek support? If so, where?
- How is ‘computer lab’ time framed in relation to other subjects? What sorts of things is computer lab time used for? What kinds of interactions does the teacher have with the student when technology is present?
- Are neoliberal logics observable in the elementary classroom? How do they manifest? Are there even enough examples present to warrant creating strategies for an ‘interruption’?

**Stage 1 Participant Observations with Follow-up Interviews and Analysis**

Armed with new guiding questions as my lodestar, I embarked on a week’s worth of participant observation at Site 1. As discussed in the previous chapter, Site 1 is a private school with particular contextual advantages such as small class sizes and low student-to-teacher ratio. Because of this, I reviewed the data from the first round of interviews once more and spent time reflecting on my own experience teaching through the lens of my new guiding questions. Though Site 1 may have certain contextual advantages, it still has the same kind of dedicated teachers I interviewed in the first round of data collection.

I strived to adjust my point-of-view in the observations to critically consider elements of the observed teachers at Site 1’s classrooms and instructional practice with regards to adaptability. If at
Site 1 I observe a fantastic activity that may not be feasible in many other classroom contexts, it would be unproductive to label the activity as only possible because of contextual advantages at Site 1. I would aim to consider the activity in terms of its commensurate parts (e.g., structure, scope, relation to academic standards, underlying opportunities for critical thinking, etc.), and how/if those parts could be decontextualized for adaptability in any classroom context.

This round of data collection consisted of five days of classroom observations (approx. 6-7 hours per day). As discussed with the three participant teachers, I floated between their classrooms during the day. Because the 4th and 5th grade students at Site 1 share these three teachers, I was able to observe a variety of subjects as well as different lessons within those subjects depending on the grade being taught. Additionally, two of the three teachers sat down for a follow-up interview after the observations. The following table contains relevant information for each observed teacher.

Table 8: Stage 1 Observed Teachers

<table>
<thead>
<tr>
<th>Stage 1 Observed Teachers</th>
<th>Grade’s and Subjects Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pseudonym</td>
<td></td>
</tr>
<tr>
<td>Eve</td>
<td>3rd and 4th Grade Math</td>
</tr>
<tr>
<td>Ana</td>
<td>3rd and 4th Grade Math</td>
</tr>
<tr>
<td>Vanessa</td>
<td>3rd and 4th Grade Literacy</td>
</tr>
</tbody>
</table>

Domains. After completing these participant observations and follow-up interviews, reviewing observation notes, and transcripts of the follow-up interview and my personal end-of-day initial reflections, the following domains were uncovered:

- Embedded Neoliberal Language/Logic
- Affordances of Digital Media and Technology
In addition to these domains, the low level of instructional technology used by all the observed teachers provoked some interesting thoughts. I found many of the observed instructional strategies at Site 1 to be adaptable towards addressing the social complexities afforded by digital media and technology. It’s quite interesting all of these strategies were employed without the use of any kind of digital technology, nothing more high-tech than markers, pencils, paper, and math manipulatives (i.e., blocks used for practicing two-digit addition and subtraction). Though this did not fit within a particular domain, a further discussion of this observation will follow the description of the domains.

**Embedded Neoliberal Language/Logic.** After about a day and a half of being amongst the 4th and 5th grade classrooms at Site 1, I felt settled in. I knew the names of all of the students (quickly learning a lot of names has always been a strength of mine), the teachers were asking me for quick favors like working with a small group on a shared assignment, and my presence was less notable than on Day 1. In reviewing my notes and transcripts of my end of day reflections, it was at this point in my observation I began conceiving how some of the neoliberal values referenced in the Stage 1 interview analysis subtly manifest. A poster in Eve’s classroom is what triggered the development of a concept I am calling embedded neoliberal language/logic. For brevity sake, only the first included term (‘growth mindset’) will be explored in-depth because it will consist of my rationale and thought process for seeing neoliberal values as embedded. There is a strict-inclusion semantic relationship between the included terms and cover term in this domain.
‘Growth mindset’ is a kind of embedded neoliberal language/logic. As I looked for the presence of any kind of neoliberal values in the instruction or classroom environments of the observed teachers, unsurprisingly there was absolutely nothing which screamed, “PROBLEMATIC!” After all, these are thoughtful, mindful teachers with sensibilities similar to myself and other teachers I have known regarding democratic values. In their instruction, they are not outright using language like ‘democratic citizenry’ or explicitly pointing out the complexities of our increasingly neoliberal economic system, but they were generally oriented away from an intense focus on individual achievement in favor of emphasizing problem-solving as most effective when it’s a communal activity.

Despite having a great time getting pretend to be “Mr. Ackerman, elementary school teacher” again while I was interacting in these classrooms, I relied on the critical lens of hopefully-soon-to-be “Dr. Ackerman” to look and consider neoliberal logic or values in the classroom. One of the first notes I made through this critical lens was concerning language. In Eve’s classroom, I saw a
handmade poster on the wall about building a ‘growth mindset’ in math. Growth mindset is a term I remember always being tossed around when I was a teacher. Additionally, Katie from the Stage 1 interviews twice used the term growth mindset in reference to the attitude of teachers who effectively integrate technology into their instruction. Despite my familiarity with the term and broadly understanding it to mean ‘being committed to the idea that intelligence can be developed through hard work and persistence,’ I was not familiar with where the term came from.

Upon further research, I learned the term ‘growth mindset’ was coined by Dr. Carol Dweck based on the research-based model published in Psychological Review (Dweck & Leggett, 1988). Since then, Dr. Dweck created a successful business around the idea of growth mindset. According to the company’s website,3 “The company’s mission is to enable a world in which people seek and are fulfilled by ongoing learning and growth” (About us, n.p.). I have no qualms with the idea of fulfillment from ongoing learning, but fulfillment from ongoing growth? That thought gave me pause.

‘Growth for growth’s sake’ is a foundational value when I think of living according to the logic of neoliberalism. Unchecked and unregulated growth of the private industry is an indissoluble contributing piece to the increasing wealth disparity in the United States and around the world. Even Dr. Seuss deemed it a fact of which children should be privy to.4 Applying a ‘growth mindset’

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3 https://www.mindsetworks.com/
4 “I meant no harm. I most truly did not. But I had to grow bigger. So bigger I got. I biggered my factory. I biggered my roads. I biggered my wagons. I biggered the loads of the Thneeds I shipped out. I was shipping them forth to the South! To the East! To the West! To the North! I went right on biggering... selling more Thneeds. And I biggered my money, which everyone needs. Then again he came back! I was fixing some pipes when that old-nuisance Lorax came back with more gripes. ‘I am the Lorax,’ he coughed and he whiffed. He sneezed and he sniffled. He snarggled. He sniffed. ‘Once-ler!’ he cried with a cruffulous croak. ‘Once-ler! You’re making such smogulous smoke! My poor Swomee-Swans... why, they can’t sing a note! No one can sing who has smog in his throat. ‘And so,’ said the Lorax, ‘-please pardon my cough, they cannot live here. So I’m sending them off. Where will they go?... I don’t hopefully know. They may have to fly for a month... or a year... To escape from the smog you’ve smogged up around here’” (Seuss, 1971).
towards learning is benign, or even beneficial — I don’t worry that teachers or parents utilizing Dr. Dweck’s concept of ‘growth mindset’ are somehow indoctrinating children towards neoliberal subjectification. My observation is the underlying values in both the ideas of ‘growth mindset’ and ‘unrestrained growth of private industry’ are parallel.

The values are parallel because they both are premised on an intrinsic ‘value’ of a decontextualized concept of ‘growth.’ As I see it, growth is only as valuable as the aims that it pursues. Additionally, growth, whether related to business or learning, becomes responsible and purposeful through intermittent, thoughtful reflection on previous experience to inform future actions. I was curious to see if I would find either scholarly or popular press complicating the concept of growth mindset’ in the same way Dr. Angela Duckworth’s idea of ‘grit’ was criticized.\(^5\) While I do not consider growth mindset to be as problematic as the lack of attention to systemic biases like race and class in the use of ‘grit,’ I was surprised to find no critical conversation, scholarly or otherwise, about the possible neoliberal implications of establishing a growth mindset towards learning.

This puts growth mindset into a different category. As demonstrated above, there is a possible argument to be made about how instilling a growth mindset towards learning may inadvertently contribute to students rationalizing the value of ‘growth’ into their actions for the rest of their lives. I am not interested in making that full argument (at least not in the already crowded confines of this dissertation), but simply in the idea that the argument could be reasonably made. The term growth mindset floats around educational spaces, like on the poster I saw in Eve’s classroom, but Eve or any other teacher, as I mentioned, are not complicit in any kind of neoliberal

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\(^5\) Angela Duckworth’s concept of ‘grit’ (e.g., perseverance no matter the obstacles) as a driving characteristic of successful students has been criticized for decontextualizing students from the socio-structural barriers relating to aspects of one’s identity which ‘grit’ alone cannot overcome.
subjectification — it’s a useful term! A clear way to have students values wanting to find new things to learn. I don’t think teachers should get rid of any words which could be argued as parallel to neoliberal values, but I think they should be aware of them.

I am categorizing terms/practices I have observed/experienced frequently in classrooms which could reasonably be construed at related or parallel to neoliberal values as embedded neoliberal language/logic. The table presents and describes two other examples of embedded neoliberal language/logic I observed while at Site 1.

<table>
<thead>
<tr>
<th>Observation</th>
<th>Possible neoliberal implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Vanessa’s students spent time working on individual pieces of writing, it was call ‘Writer’s Workshop.’ This is extremely common term – I called my writing time ‘Writer’s Workshop’ and the concept, developed by Lucy Calkins at Columbia University, spurned numerous curricular supports which are used to teacher professional development worldwide.</td>
<td>The term ‘workshop’ clearly indicates ‘work’ is expected to be done. ‘Work’ tends to be associated as a productive activity one is required to do due to their career or social standing (e.g., as a student), thus associating writing with being ‘required’ for personal success at school. The word ‘Workshop’ intimates an emphasis on the ‘end’ of a piece of writing, rather than the enjoyment of the writing process in of itself.</td>
</tr>
<tr>
<td>All observed teachers utilized unstructured time in their instruction, meaning students were able to pick what they would like work on academically for a period of time. Some students may work to get ahead on homework, while others engaged in reading, both for school assignments and enjoyment.</td>
<td>Effectively utilizing unstructured time is an modern sensibility rooted in the concepts of timeless time and space of flows in Chapter 2. Flexibility drives the concentrated, unyielding economic growth around the world. Schools and classrooms traditionally tends to be highly structures, so using unstructured time could be an opportunity to bridge this gap in temporal and spatial sensibilities.</td>
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**Affordances of Digital Media and Technology.** While observing at Site 1, one thing I began to notice which did not fall under the purview of any of my guiding questions were some of the excellent strategies the teachers employed in their instructional practice. Upon reflection, I realized these activities could serve a dual purpose instruction. Also, as the ‘growth mindset’ poster sparked so many ideas in the last section, some of the decorations in the classrooms similarly registered an unexpected reaction. The observed strategies, instructional and environmental, were utilized for various activities in different subjects. After reflection, I interpreted them thematically to uncover possible ways they may be used to address the social complexities afforded by digital media and technology in the 21st century. There is a means-end semantic relationship between the included terms and the cover term.

Table 11: Affordances of digital media and technology

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchor charts</td>
<td></td>
<td>address the social complexities afforded by digital media and technology in the 21st century</td>
</tr>
<tr>
<td>Guided creative expression</td>
<td>is a way to</td>
<td></td>
</tr>
<tr>
<td>A culture-setting/social-emotional activity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Anchor charts are a way to address the social complexities afforded by digital media and technology in the 21st century. Starting with the room decorations I mentioned, the observed teachers at Site 1
utilized anchor charts, a conventional strategy where teachers use a large poster or chart to reinforce content or a concept. Though there are anchor charts for a variety of topics available for purchase, teachers commonly will create their own with chart paper and markers. The purpose of an anchor chart is to be a visual reference for essential content, available for the child to see and use throughout the day. For example, in Eve’s classroom (in addition to the ‘growth mindset’ anchor chart previously discussed) there were multiple other handmade anchor charts. One titled ‘Multiplication Strategies’ was referenced at the beginning of a math lesson. It had visual instructions for different strategies students can use for multiplying numbers with more than one digit. Eve referenced it to the class as an anchor chart the class had made together the previous week. She told students these strategies were helpful because they break down the steps of multiplication, and “it’s important to understand the parts of things and how they work together.” She also stressed how there are multiple strategies to solve every problem, and some people’s brains are better at solving problems one way over another.

Another notable anchor chart I saw was in Vanessa’s classroom. This one was titled ‘Inclusivity’ and was the result of a previous class activity where they thought of ways they could be more inclusive in their actions, including inclusive words to use in their writing. Vanessa, being the writing teacher for all 4th and 5th graders at Site 1, incorporated a contemporary value into her classroom decor, giving her students a constantly accessible visual reminder of the importance of inclusivity. With the list of ‘inclusive words,’ Vanessa provided a tool for reminding students of that value. This, along with Eve’s math anchor chart, made me realize these formats would be an excellent option for addressing the social complexities afforded by digital media and technology.

Anchor charts are an incredibly low-cost option to customize a classroom. If anchor charts can be used to promote different ways of thinking about math problems or using inclusive language, it would seem plausible that one could be made about the affordances of digital media and
technology. Something which could be referenced by the teacher throughout the year to reinforce how it relates to the math or language arts content they are discussing in a given lesson. This prompts me to consider what kind of information would be included on these anchor charts (which will be explored later).

Guided creative expression is a way to address the social complexities afforded by digital media and technology in the 21st century. The creative use of anchor charts sparked another interesting interpretation of an instructional strategy. I observed Ana give a math lesson to a group of 5th graders. The lesson was on the same multiplication strategies I observed Eve cover with her group. Like Eve, Ana had a large anchor chart she referenced at the start of the lesson. The main activity for the lesson was not about employing the different multiplication strategies (as had been the case with Eve’s group), but instead involved the students creating their own, miniature version of the multiplication strategies anchor chart which they could take home and have for reference when they do homework.

Ana stressed she wanted the students to have specific information on their charts (e.g., all the strategies, accurate visual representations of the strategies), but more importantly she wanted them to personalize it. She wanted students to be creative with colors they used, encouraging them perhaps to assign each place value a different color (blue = one’s place, red = ten’s place, etc.) or maybe arrange the strategies according to their personal preference; ‘most preferred’ to ‘least preferred.’ She also stressed that while she valued creativity, the meaning of their anchor charts (and their purposeful use of color) should be apparent without requiring additional explanation.

This sort of guided creative expression made me think of the negotiated nature of reality. If a person believes in or ascribes to any kind of belief, such as ‘the neoliberal economic system is a threat to democracy,’ that does not mean that person is not a participant in the neoliberal economic
system. We are all humans with agency operating within the limits of social systems which are beyond our control. Ana’s instructional strategy presented a microcosm of how creative expression usually must work within the limits of a throttling set of contextual truths.

I also saw guided creative expression employed by Vanessa in how she ran her writing lessons: as much freedom for creative expression as possible, but with enough structure to guide the students’ writing in a particular direction. I certainly practiced this in my time as a teacher with every creative project I facilitated. These examples I believe, present an opportunity to address not only how digital media and technology enable specific experiences, but also how they may impede others.

A culture-setting/social-emotional activity is a way to address the social complexities afforded by digital media and technology in the 21st Century. Culture-setting and social-emotional oriented activities were a third area I observed to be possible ways to address the social complexities of the 21st Century. I am using the terms ‘culture-setting,’⁷ and ‘social-emotional’⁸ in an expansive way. Because ‘culture-setting’⁷ and ‘social-emotional’⁸ are terms used in specific ways in other contexts, here is a brief definition of how I am using these terms:

• **Culture-Setting Activity**: Any planned lesson or part of a lesson where the central aim is setting some kind of cultural norm for the class (e.g., how people in the class are expected to act and interact). This could include creating a list of class rules together, practicing how to give positive feedback to someone, practicing how to give criticism, or a discussion about why keeping the classroom clean is important.

• **Social-Emotional Activity**: Any planned lesson or part of a lesson where the central aim is for students to discuss and gain understanding of their emotions,

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⁷ See Fisher et al. (2012).
⁸ See ‘What is SEL?’ (n.d.).
including how their emotions interact with other people’s emotions or how to identify and name the emotion a student is feeling.

I saw multiple examples of these kinds of activities at Site 1 as they are a common feature of how a teacher establishes and maintains their classroom culture. One example of a culture-setting activity was observed in Ana’s instruction. She had been struggling with behavior management and investment with one of the math groups she works with, so she decided to take a time to step away from practicing math and re-establish the values and norms for the group. She took her time explaining why they were revisiting values and norms because she felt they had recently strayed away from the values and norms they had to establish.

After guiding discussions about the values and norms which would be appropriate for their math class, the students decided on the following being the most important:

- Respectful Use of Materials
- Actively Listen when Anyone is Talking
- Always Try and Use New Tools for Learning
- No ‘Mighty Mights’

Though it wasn’t a particularly long lesson (maybe 20-30 minutes), the observed process by which Ana negotiated the various ideas and guided them towards deciding on a list of four central values and norm struck me as analogous to the reasons why it’s difficult for digital spaces to have agreed upon norms and values. In the classroom, the teacher is an active presence guiding (but not directing) the conversation towards negotiating a set of values and norms. While not entirely unheard of, digital spaces like social media and comment boards don’t usually have a vigilant facilitator. It was difficult at times for Ana (as it is for many teachers) to negotiate the plethora of ideas called out by the students (some useful ideas, and some less useful). That negotiation pales in

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9 ‘Mighty mights’ was on the list created by the teacher’s and students – everyone in the class seemed to know what it meant. I forgot to follow-up with Ana to ask its meaning, but for now it’s still a mystery.
comparison the many values, norms, beliefs, attitudes, etc., flying around the Internet at all times, which are sometimes thoughtfully negotiated with other perspectives, but frequently are flung about completely unchecked. Negotiating one’s own ideas with others is a critical skill for successful democratic engagement, and digital media and technology make that skill complicated. Activities like Ana’s, I believe, could be maximized to incorporate discussion on how negotiating norms are different and more complicated on digital spaces.

A social-emotional activity I observed was in Vanessa’s classroom. Each week, Vanessa holds what she called ‘Spy Club.’ On Monday, students are secretly given the name of another student in the class. During the week, they are instructed to ‘spy’ on their person, writing down in a small notebook every positive thing they observe the student do. At the end of the week, students write commendatory letters to their classmates, and each student ends the week with positive reinforcement from one of their classmates. The whole activity is premised on the importance of helping your friends feel positive emotions, with complimenting them on proper behavior being one way to do that.

While observing this social-emotional strategy, I thought about anonymity and digital media and technology. It’s no secret that one of the most damaging affordances of internet-enabled technology is the ability to speak to an audience anonymously\(^\text{10}\). As studies on comment-culture show, this affordance of anonymity is a breeding group for hate. The students anonymously taking notes on and sending a letter to a classmate is harmless, but to me is presented an opportunity to talk about anonymity in a contemporary context. I don’t think Vanessa should change the activity in any way, but maybe extend it to include this kind of contemporarily-minded discussion.

\(^{10}\) See Merrin (2019); White (2019); Jordan (2019)
Is the actual use of digital technology needed to acknowledge it's complex affordances? As I mentioned, the final area I identified for discussions coming from this round of participant observations breaks from the inductive analysis used thus far (and will be continued to be used in Stage 2). In the Stage 1 interview round, the conversation mainly revolved around teachers’ approaches and thoughts on integrating digital technology into their instructional practice; essentially, I was looking to instructional practice involving digital technology to understand how it impacted the day-to-day experience. By happenstance, the three teachers I observed at Site 1 do not use high amounts of digital technology in their direct instruction. I had an initial worry that this would make it difficult to find examples of how digital technology fits into a teacher’s practice.

Once I was in the classrooms at Site 1, this initial worry ended up transforming an important question: if my ultimate aim is to create strategies and supports for teachers for attending to democratic values in the 21st century (with the urgency for this stemming complex social transformation afforded through digital media and technology), is the actual use of digital technology in instruction a necessity for this? I initially assumed the three teachers’ low level of digital technology use in their instruction was due to perhaps a school-wide decision not to invest in typical classroom instructional technology – like iPads, Smartboards, or laptops. In my follow-up interview with Eve, she spoke about how what the students actually need to know when it comes to digital technology is a complicated question, prompting me making me question some of the assumptions I had been working from:

Eve: I don’t know if I told you this, but we have 10 iPads over there behind all that stuff … and [Vanessa] also has a cart small computers. I think 10 laptops. So we shared devices between 4th and 5th grades, and I would say we don’t really use them a ton in math. [In math,] It’s mostly hands-on manipulatives and drawings and like journal work.

Though I did not get a chance to follow up about this with Vanessa and Ana, I did not see them use digital technology in their direct instruction. This is not to say they never do (I was only observing
for a week, after all), Eve gave me an example using Google Drive on iPads to facilitated writing instruction the previous year; however, it’s fair to say these teachers personal practice and pedagogy prefers not viewing digital technology as a necessary, consistent presence. Not that digital technology has NO place in instruction, but that its best used sparingly, and only when its thoughtfully and purposefully integrated.

Having thought about this throughout the observations, when I spoke with Ana for follow-up, she said something insightful which helped me view my ultimate aim in a different light:

Ana: It is interesting because [some colleagues and I] had a whole conversation about this recently that that being able to be literate with technology is knowing not only what’s out there but how to responsibly interact with it. We got into this whole conversation about is the ‘knowing what’s out there’ part as important as ‘knowing how to interact with it’ or ‘what the background skills that you would need to interact with it.

We were talking about how it is said all the time, ‘What we have now in front of us isn’t what’s going to be there in 10 years, maybe not even five years …. The outcome that you want is the collaboration piece rather than a student learning a skill …. And so [some colleagues and I] had this whole conversation about ‘Is it about bringing the technology in?’ ‘Is it about telling them this is how you act on the Internet?’ or ‘Is it about teaching them how to be kind to one another in their day-to-day life?’

Our group landed that all of the skills taught through technology can also be taught without technology. Is it essential to have and use the latest and greatest technology? Or to make sure the crucial underlying skills are pushed?

Ana was talking with regards to a computer coding lesson which included a fun closing activity where the students ‘danced out’ the computer code they had written — the dancing is the kind of ‘collaboration piece’ Ana was looking for. Ana echoed the concern of teachers from the first round of interviews regarding ‘the world changing through technology, so students must be prepared,’ reaffirming these as at least somewhat common value held by teachers. But Ana saw the ‘skills’ as not just technical (e.g., learning to code, etc.), but also human in nature; how we interact with technology impacts how we interact with another.
The words I bolded from Ana’s quote above really had me thinking. ‘Technology can also be taught without technology.’ Just because a teacher does not use digital technology regularly in their instruction does not mean that issues related to digital technology cannot be covered by that teacher. In the next section, I will explain how this idea that ‘Technology can also be taught without technology,’ impacts my approach towards my ultimate aim of creating strategies and tools which all teachers can use.

**Themes and analysis.** Just like with the Stage 1 Interview, my aim in my analysis of collected data from participant observations is to see how the all the insights across the domains of analysis coalesce; how may contribute to my ultimate aim of creating pragmatic strategies for teachers to address the unique challenges of 21st century citizenship. These themes with accompanying analysis represent further refining of the approach towards that ultimate aim.

**Need for establishing urgency for promoting democratic values.** In the analysis of Stage 1 interviews and the analysis of Stage 1 participant observations, I was able to pull out a lot of ‘what’ when it comes to threats to democratic values in the classroom: embedded neoliberal language, the tension between preparing students with technical skills related to their professional futures as opposed to related to their social futures. I’ve also considered a bit of ‘how’ when it comes to addressing complex social questions: Anchor charts, strategic use of computer lab times, guided self-expression, culture-setting activities. As discussed in Chapter 2, I see the asynchrony in temporal and spatial realities between K12 schooling institutions (largely adhering to logic of linear time and spaces of place) and other parts of society (relying increasingly on timeless time and space of flows) as a threat to the efficacy of developing democratic values in K12 classrooms. Now that I’ve pulled out what I see to be a sufficient amount of ‘what’ the threat to democracy looks like and the beginnings of ‘how’ to address it, I realize I must put more effort into developing exactly ‘why’ it’s critical for teachers to address it.
To do this, I intend to broach the topic of democracy more directly in Stage 2. In Stage 1 new insights arose regarding unobtrusive ways for teachers to add new things to their instruction. But as would be expected, even if the ‘what’ can be addressed and the ‘how’ is easy to implement, without a strong urgency attached to ‘why’ this is important, anything I create would be susceptible to getting lost in the endless barrage of concerns relating to digital media and technology.

Teachers have a lot of suggestions for their instructional practice presented to them regularly from a variety of sources, including parents, administrators, and other teachers. No matter how well defined the problem is or how well designed the tools to address the problem are, effectively intimating a strong sense of urgency towards the problem is critical. Mainly because the observed threats to democratic values I have observed are purposefully complex and I am still developing how to present these complex concepts to teachers most usefully. Getting teachers to buy into threats to democratic values afforded by a hypermediation perspective of digital technology will be far more effective if the implications for their students’ future success are clearly articulated.

**Tools or strategies must be possible with any level of technology access (and all other contextual truths).** Through the analysis of the Stage 1 interviews, I decided any tool or strategy I create must hold adaptability as a central priority. The Stage 1 participant observation provided further insight on things to keep in mind in creating these supports, most saliently that any support’s applicability and usefulness cannot be predicated on the teacher’s access to digital technology or their adeptness or comfort with using digital technology in their instruction.

The Stage 1 interview analysis indicated tools or strategies must be adaptable as evidenced by the countless varieties of needs arising from the use of digital technology in instruction. In the same vein, I saw activities during my time at Site 1 which were immediately registered to me as applicable to addressing the social complexities of digital technology (and eventually the democratic implications of those complexities), This in spite of the observed teachers not utilizing digital
technology in their instruction when employing their strategies. This means the tools and strategies I wish to create must not only be adaptable, but individually adaptable to any specific context.

The specific context includes (but by no means limited to) the level of access to digital technology, requirements regarding using or not using technology, the teacher’s personal philosophy towards digital technology in instruction, the teacher’s past experience approaching democracy in his or her classroom, the teacher’s experience in their own lives through the affordances of digital media and technology, and many other variables. As I said in the analysis of the Stage 1 interviews, I want my tools and strategies to facilitate a foundational rationalization of promoting democratic values into one’s teaching practice. Honoring the context of a teacher’s instructional practice is undoubtedly an essential step in aiming for that foundational rationalization.

**Reflection on a teacher’s personal instructional practice is where tools or strategies for support should start.** Directly leading out of the previous theme, another realization this round of data collection and analysis inspired was the utility/common-sense of having teachers reflect on their personal teaching practice as a seminal part of tools and strategies I intend to create. As mentioned, anchor charts, guided creative expression, and culture-setting/social-emotional were three examples of strategies I observed at Site 1 which could be used to address the social complexities brought about by digital media and technology. These instructional strategies struck me because despite the teachers telling me these are common strategies they use for a math or writing lesson, viewing them through the analytical lens I immediately saw them in terms of what else they may be used to teach.

Whether it be addressing the social complexities afforded by digital media and technology or the importance of channeling democratic values one’s life, a teacher’s best chance for success is to draw from what they are already doing. Rather than being given a new strategy to learn and customize, why not start with having a teacher reflect on how and why they use something like
anchor charts in their classroom? And then from that reflection, there could be guidance to enable the teacher to adapt that strategy towards a democratic aim, rather than having to create or learn a new strategy. I think this approach would be beneficial because 1) starting from someone’s established strengths is an effective way to build confidence and self-efficacy for something new and 2) by striving to work in discussion regarding democratic values through the teacher’s already existing assets could partially ameliorate the negative feelings associated with ‘slippery slope’ of never feeling caught up and there always being something new to learn.

**New Guiding Questions.** After reflection on the analysis of the first round of participant observations described above, I created the following sets of guiding questions for the interviews in Stage 2:

- What are the democratic skills/values that teachers think students must acquire for the 21st century? Why do teachers find them to be important? What is at stake if they are not acquired? How do they approach them already?
- If ‘technology can also be taught without technology,’ would the same logic hold for democratic values that are complicated by the affordances of digital media and technology?
- What are other instructional strategies teacher’s already employing which could be leveraged towards promoting democratic values? How can teacher’s effectively be prompted to look at tried and true instructional strategies a different way? How would democratic values be unobtrusively incorporated into these strategies?

**Stage 2 Interviews and Analysis**

After completing the participant observations at Site 1, I conducted four more interviews with educators for the first round of data in Stage 2. Two interviewees are current teachers, and two are ‘teaching practice experts’ (currently working in a role supporting teacher practice and has previous experience as a classroom teacher). All interviews were 60-90 minutes in length. The following table contains relevant information for each interviewee. As a reminder, as part of this inductive analysis, all previous data from Stage 1 was re-examined. Some quotes/observations from Stage 1 participants contribute to these domains as well.
<table>
<thead>
<tr>
<th>Stage 2 - Teachers</th>
<th>Current Position</th>
<th>Previous Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pseudonym</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tony</td>
<td>Elementary school art teacher</td>
<td>Previous experience teaching elementary and middle school</td>
</tr>
<tr>
<td>Mia</td>
<td>3rd Grade teacher</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2 - Experts</th>
<th>Current Position</th>
<th>Previous Teaching Experience</th>
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</thead>
<tbody>
<tr>
<td>Pseudonym</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carter</td>
<td>School leader at Site 1</td>
<td>Previous experience teaching elementary and middle school</td>
</tr>
<tr>
<td>Cassandra</td>
<td>School Leader at Site 2</td>
<td>Previous experience teaching elementary school</td>
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</tbody>
</table>

**Domains.** After completing these interviews, creating transcripts, and reviewing those transcripts multiple times according to the inductive analysis process presented in Chapter 7, the following domains emerged:

- Need to promote community-minded democratic values
- Skills for community-minded democratic values
- Possible solutions to innovation barriers with teachers

**Need to promote community-minded democratic values.** The first two domains apply to the ‘why?’ and ‘what?’ regarding democratic values for the 21st century. The ‘why?’, the rationale for urgency towards this topic, emerged quickly from this data as newly emerging concerns teachers have about the social world their students inhabit. These concerns pointed towards a common ‘threat’ to students embodying community-minded values in their actions. I interpreted the interviewees’ references to concepts like ‘community,’ ‘shared values,’ and ‘social responsibility’ to be thematically synonymous to the Deweyan understanding of democracy as ‘the search for the great community. This domain has a rationale semantic relationship between its included terms and the cover term.
Table 13: Need to promote community-driven democratic values

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities for isolation</td>
<td>is a reason for</td>
<td>promoting community-driven democratic values</td>
</tr>
<tr>
<td>Social norms in digital spaces</td>
<td></td>
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Opportunities for activities in isolation is an attribute of teachers’ newly emerging concerns about the social world their students inhabit. The increasing opportunities for individual activity in digital spaces is a primary concern of the interviewed teachers. Mia voiced concern about the impact of students learning and interacting alone and unsupervised in a digital space:

*Mia: In the digital space they’re really isolated. Yeah, and so you don’t really know what are they learning? What are they doing? And it kind of isolates them from the reality of always being around other people.*

Carter voiced similar concern and related it to their 4-year-old child’s ease in becoming engaged with new technology:

*Carter: [Kids today] are kind of like the ‘jump-in generation.’ They don’t ask ‘how do I use this?’ Even [my 4-year-old child] can use almost anything put in front of her because tech is converging so they can just use it more and more. There’s more opportunities for time being by yourself with technology.*

This reminded me of an insight gained from analyzing the domain of ‘Stress and Tension from Instructional Technology’ in the interviews from Stage 1 — the concern about lower levels of critical thinking and conversation. Interviewee Lee referred to it as a ‘deterioration of classroom
conversation.’ Returning to the Stage 1 data in this round of analysis, a quote from Mark refers to
the idea of community as being at risk due to more isolation and less interaction online:

Mark: How do we teach our kids how to be active participants in a future world? [My school] talks
a lot about if you are unhappy with a situation or another student, how do you resolve it? And so
there’s a lot of emphasis on community. Like how do you remain an active part of a community
conversation? I don’t know that we’re doing enough in preparing kids for what happens when they
don’t get their way or don’t agree with someone else’s idea online because they don’t have to always
interact with other people online. There is more opportunity with technology at school for [questions]
like, ‘How do you become and remain a part of an active participant in your society?’

Social norms in digital spaces is an attribute of teachers’ newly emerging concern about the social
world their students inhabit. Related to the increased opportunities for isolation afforded by digital
spaces, appropriate and safe norms for social interaction in digital spaces which afford it (e.g., social
media, online comment sections, etc.) is the other key area of concern for teacher’s regarding the
transforming social world. Interviewees all acknowledged the necessity of exposing students to
emerging digital media and technology, but many worried about their students’ behavior when they
are interacting with others unsupervised in digital spaces:

Tony: I think I mean [digital technology] definitely gives them a screen to hide behind. I think that’s
the big thing about cyberbullying and all that. It gives them anonymity. To be able to do things that
they probably shouldn’t but others can’t know is them. I think that’s a big one.

Carter: They all use technology in some way in their lives, so I think like responsible uses are
significant. For me, the biggest part of that is related to cyberbullying. Being conscientiousness about
what you’re posting and like promoting and moving forward.

There were examples of this concern about students knowing appropriate norms in digital spaces
from Stage 1 as well:

Mark: Social media use has gotten out of hand, and it’s turned into bullying that then impacts focus
and issues at school. The most important thing is not how technology works in the sense of like how
to manipulate and how to use it but rather like the understanding what you post is very public, and
your actions using technology have consequences.
Lee: I think a big problem is it kind of that you feel like it’s anonymous. Like it doesn’t feel like I’m talking to you. You see kids at [my school] that are really not overall mean kids, but when they get technology, it’s like, I’m gonna be really sneaky. I think adults have that we have somebody on Twitter like yeah, you know like we see it’s not me talking to your face. I can say something really mean, like people as fake accounts, you know, like we had a teacher in [my state] that got like fired recently because she had a fake account on Twitter like blasting her kid. So I think that we see that happening in students and adults, when like you have a chance to be like anonymous.

Additionally, in the observation follow-up interviews with Eve and Ana in Stage 1, they told me about an incident at Site 1 from the previous school year involving using Google Docs and how even a simple, shared digital space like a shared document presents is a complicated space where students can test boundaries:

Eve: So what was happening was we taught them to share their documents with us, but then they were also sharing documents with each other, and some of these documents weren’t shared with us, teachers. Some of those documents where just [students] sharing and writing stories… but then would also ended up happening was people getting into other people’s accounts and looking at stories. And they were making comments which were channeling interpersonal-frustrations that were popping up amongst student elsewhere during the school day. It became an outlet for them. So they like make comments anonymous or through somebody else’s account saying like “F**K YOU” and like rage-filled comments because they were upset of something that was happening in the real world, but then like using the Google as a platform to like troll people.

Both Ana and Eve (and Site 1 school leader Carter) noted that incident was particularly illuminating because the students involved were generally not the type to engage in bullying behavior.

**Needed skills for 21st century democratic values.** As part of my guiding questions for this round of data collection, I sought to understand what teachers consider to be attributes of contemporarily-minded democratic values. The previous domain illuminated community-mindedness as a way these teachers think of what needs to be reclaimed in light of the transforming social landscape. I view this notion as analogous to the promotion of democratic values I am advocating for. From the data, specific skills emerged as fundamental for students continued
development of democratic values. In this domain, there is an attribution semantic relationship between the included terms and the cover term.

**Table 14: Skills for community-minded democratic values**

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
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<tbody>
<tr>
<td>Contemporary critical thinking skills</td>
<td></td>
<td>the contemporary democratic values students need for success</td>
</tr>
<tr>
<td>Collaboration</td>
<td>is an attribute of</td>
<td></td>
</tr>
<tr>
<td>Digital Citizenship</td>
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</tbody>
</table>

Contemporary critical thinking is an attribute of the contemporary democratic values students need for success. Critical thinking unsurprisingly emerged as an attribute of democratic values important to teachers. While critical thinking is a common aim for other areas of instruction in K12 education, concerning democratic support development of students the ability to critically think in the context of our contemporary world is where the urgency lie. When I asked Carter, the school leader of Site 1, about contemporary democratic values/skills, they saw the urgency in students being able to use emerging resources to push critical thinking towards problem-solving.

*Carter: I think a really broad base umbrella is the critical aspect. How to think critically about problems that are presented but also think critically about the resources are presented. Is this the best resource to use? What other resources should I bring in the making my decision anything?
Tony sees a similar urgency instilling critical problem-solving in students. He notes that in his 5 years as a teacher, he has observed in decline in students willingness to problem-solve if the solution is not readily apparent:

Tony: I think the learning how to problem-solve is a big thing because I think that’s starting to become a concern. I’m even noticing within these five years that it’s starting to lack even more. They need to be shown how to have the willingness to try to problem-solve.

Teachers seemed to believe that while the current need for a push towards critical thinking stems from many areas, technology is seen as a salient contributing factor. Cassandra sees technology (and effective use of it) as a fundamental part of promoting democratic values but that technology-use as it exists today can promote non-democratic values:

Cassandra: As far as with technology, That’s a piece that we have been thinking about a lot because … we’re seeing a lot in which technology right now is contributing to our society, but in ways, it’s contributing to a less democratic society. And it just doesn’t have to be that way, and I think that we have an absolute responsibility to offer children experiences with technology in which they are going to be engaging towards open-mindedness, towards asking questions towards, towards welcoming a variety of viewpoints. I think the technology can support that just as much as it can take away from so that’s been a big, big question.

Data from Stage 1 supported the idea of teachers believing developed critical thinking to be an essential need for students. Though the context these quotes came up in was not about democratic values precisely, but the similar descriptions of the need points to critical thinking skills in today’s world being a typical value in teachers. Mark and Daisy noted the particular need for this at lower grade levels:

Mark: I definitely think [critical thinking through technology] is something that should be taught. If for no other reason than I think a lot of our kid’s parents don’t have the capacity right now. I guess I would think that as with most skills, you can scale down. Like my initial thought would be that that would be something that would be really appropriate for like maybe late middle school or high school on it, but scaling it down is important because I think when the kids [getting to middle or high school] didn’t already have that, there is a point where it’s more difficult to get it.

Daisy: We need to help build that critical thinking skill [at the elementary level]. I think our kids lack this idea of just asking themselves, does that make sense?
Collaboration is an attribute of the contemporary democratic values students need for success. In addition to critical thinking, efficacy in collaboration came up as a democratic value students need for success in the 21st century. Speaking on the Reggio-inspired nature of her school (Site 2), Cassandra pointed out to me that progressive education styles frequently come out of a period of war, and that this points to why collaboration always is a crucial part of moving society in a responsible progressive direction:

Cassandra: Progressive styles of education were developed out of war. So, Reggio, or Waldorf, or Hawkins, they’re all coming from this sort of place of like we’ve hit rock-bottom. How do we as a community go about putting pieces back together? It’s a big piece.

Tony, Mia, and Isaac (from Stage 1) stated collaborative projects and activities are how they build critical thinking towards academic subjects, but recognize the particular importance of effective collaboration skills in today’s world.

Tony: Working together is so important for students to learn both in and out of school. We do some collaborative projects, and they get to experience balancing people’s needs.

Mia: I think the number one thing you’re probably learning [related to democratic values] because it is a group setting, is learning to collaborate with others. Not just working together, but to hear others opinion. And respect that and also truly listen to that and see the value in other people’s opinions.

Isaac: They’re going to need to know how to type a paper. They’re going to need to know how to give a presentation. Individual skills. But it also needs to use technology to work together. Technology is used in the world to collaborate. I mean, that’s a skill. We [as teachers] don’t always speak to collaboration with technology sure.

Digital citizenship is an attribute of the contemporary democratic values students need for success. Finally, digital citizenship emerged as an attribute of the contemporary democratic values students need today. As discussed in Chapter 4, ‘digital citizenship’ is a catch-all term which is broadly used to describe teaching responsible practices online, relating to things like safety, plagiarism, bullying, and finding reliable sources of information. As stated in Chapter 4, I don’t believe the various
curricula/tools developed for K12 teachers to address digital citizenship are practical; however, I do think the various lessons they are trying to impart are worthwhile things for students to learn. I am using ‘digital citizenship’ to mean lessons about digital spaces (e.g., social media, online research, news) relating to responsible use.

Almost every teacher interviewed (in Stage 1 and Stage 2) mentioned SOMETHING related to safety and responsible digital practice (some using the term digital citizenship and others not). Below are some representative examples:

*Carter: I think digital citizenship is extremely important. You have to know how to not get yourself into trouble. Right? This also goes along with the critical thinking piece because obviously most research is done online and like how to find valuable good trustworthy sources … and am I being safe in how I find these sources?*

*Mia: For me, a big part is learning to be respectful online the same way we would expect for them to be in the classroom. Also how they’re using technology and making sure they are safe and responsible.*

*Isaac: [Online skills for research] are really important. I think sometimes when we’re teaching we ‘present’ like, ‘Here is a article we’re going to read’, but like I’ve done the critical thinking as the teacher to decide this is a valuable and reliable source. When we present, we don’t show them how we think, but its hard to fit that kind of modeling in when there’s so much else to do. It’s not an excuse, but it isn’t an explicit standard that we’re required to teach and so a lot of times we don’t get to it.*

*Lee: There’s a basic literacy kids need relating to being adept with basics of Internet safety, how to search, how type, you know not immediately believing everything I read online is true.*

**Possible Strategies to Address Innovation Barriers.** Apart from getting a clearer understanding of necessary skills teachers believe students must develop for lifelong democratic engagement, I also sought more insight relating to my ultimate aim of creating strategies and tools to support teachers’ promotion of democratic values promoting a spirit of community. This orientation led to insight into possible ways to consider the various barriers for teacher’s taking time to innovate their instructional practice. The data presented direct examples of ways to reckon with this innovation
barrier as well as sparking some ideas of my own. The insights sprung mainly from my interview with ‘expert’ Cassandra (an administrator at Site 2). This included terms in this domain arose from self-reflection on my personal experience provoked by Cassandra’s words, rather than from comparison with other pieces of data. I consider this to be methodologically appropriate due to personal experience being a primary value of pragmatism. There is a means-end semantic relationship between the included terms and the cover term in this domain.

Table 15: Possible strategies to address innovation barriers

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing the teacher as learner</td>
<td>is a way to</td>
<td>innovate teaching practice without burdensome</td>
</tr>
<tr>
<td></td>
<td></td>
<td>time/labor</td>
</tr>
<tr>
<td>An innovation mindset</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Viewing the teacher as learner is a way to innovate teaching practice without burdensome time/labor. In my interview with Cassandra, she brought out the concept of ‘teacher as learner’ being part of a teacher’s pedagogical development. It is a core value at Site 2, practiced by lead teachers and imparted to into apprentice teachers from Site 2’s associated master’s degree program. I had previously heard of the idea of ‘teacher as learner’ in passing, but Cassandra’s explanation gave me a deeper understanding and made clear how it relates to this project:

*Cassandra:* One piece that was really active for [my previous employer] is the idea of the teacher as learner and that this strong belief that teachers not only deserve to be active learners because we are human beings and that as humans were constantly questioning our surroundings, but that we are also better teachers when we are active learners. We were actively engaged in this idea, and it was eye-opening because there is a piece of it that I think contributes to the teacher burnout problem when
we forget why we do it personally. I think that that comes from the engagement with research about our teaching, the engagement without their own learning and understanding. When we lose that engagement, a teacher can get to this point of thinking of ‘teacher as martyr.’

Having been a corps member for Teach For America from 2011-2013, this idea of ‘teacher as martyr’ is something I am quite familiar with. It promotes the fallacious concepts of self-sacrifice being a necessary part of one’s commitment to teaching. That to be an effective teacher, one must put the needs of their students above their own personal needs. As a Teach For America corps member, I was told by a training facilitator that majority of ‘transformational teachers’ (a buzzy termed used as motivation for corps members) stay after school most days for 2-3 hours for additional preparation. I don't remember if there was any kind of accompanying data to support this, but I remember immediately feeling guilt-stricken about not doing enough for my students.

If I had been forced to write it out, I believe my definition of ‘teacher as learner’ before talking to Cassandra would be something relating to a teacher always trying to learn about ways to develop their instructional practice. But now I understand ‘teacher as learner’ as about more than instruction, but about finding personal fulfillment in the actively engaging in their classroom environment to unearth new understanding to apply towards new strategies. Having personal fulfillment undoubtedly increases one's investment and motivation for doing something, so it is logical to posit that by helping teachers find personal fulfillment in promoting democratic values for the 21st century they will be more invested and motivated to innovate their practice.

Developing a mindset is a way to innovate teaching practice without burdensome time/labor. After using the concept of ‘growth mindset’ as an example of the embedded neoliberal language/logic I observed in Stage 1, my mind returned to it after my interview with Cassandra. Not about ‘growth mindset’ specifically, but the concept of having a ‘mindset’ in general. This was sparked by Cassandra telling me a metaphor a former professor used to describe a continuum of educational theoretical approaches:
I really like this analogy because of the unendingly-malleable connotations of something being ‘gooey’ like syrup or melting caramel; able to be held, shaped, and directed to an extent, but overall extremely unpredictable in what it will do moment-to-moment. Questions of digital technology and teaching practice become complex because of how quickly they are accelerating, never settling into a solid state. After racking my brain for weeks for a good word to describe a teacher understanding and rationalizing the ‘gooey’ relationship between K12 instructional practice and the promotion of democratic values, I kept returning to the idea of ‘establishing a mindset.’

Supporting teachers in establishing a ‘mindset’ towards promoting democratic values for the 21st century during regular instruction could encourage teachers actively observing their own teaching practice. By teaching teachers in a purposeful way how to think about democratic values and subtle threats to it in their classrooms, they can learn to identify moments during regular instructions which could be leveraged towards democratic values and/or subtle threats against it. Adeptness at identifying these moments would empower teachers to do much of the innovation work during their regular instruction — recognize a moment to leverage, interrupt instruction, attempt to leverage the observed moment for a brief discussion on democratic values, resume regular instruction, reflect on how it went, use that reflection to inform action in the next identified moment to leverage.

**Themes and analysis.** After deliberation on the data and the domains of analysis coming out of this round of interview, including a re-examination of data from Stage 1, the following themes were identified.

- Democratic values must be framed purposefully and concisely for teacher’s to become invested.
• The pull away from democratic values can be interrupted any time during the school day (instructional or not).

• If thoughtfully organized as a limited number of foundational skills, strategies or tools for promoting contemporary democratic values could be highly contextually adaptable.

**Democratic values must be framed purposefully for teacher's to become invested.** A substantial thematic insight coming from this round of interviews is the importance of thoughtfully and purposefully craft precisely what one means by ‘democratic values.’ I did not mention ‘democracy’ or ‘democratic values’ in my questioning in Stage 1 nearly as much as I did in Stage 2. When I asked something like ‘Can you think of democratic values that are important to youth today?’ I frequently had to clarify what I meant and sometimes struggled in effectively verbalizing some of the subtle meanings behind my words. The emerging social concerns the interviewed teachers indicated around opportunities for isolation and social norms in digital spaces related to worry of students having less involvement with their community.

I found when in place of ‘democracy’ or ‘democratic values’ I said ‘community’ or ‘working for the good of the community,’ teachers were able to more quickly get to what they believed to be important skills for 21st century citizenship. I learned ‘democracy’ on its own as a starting point is too multifarious in connotations to exude the Deweyan context I am trying to convey. The interviewees from this round spoke of the need for ‘community’ values in similar ways to the way I spoke about speak of the need for ‘democratic’ values, leading me to hypothesize that associating ‘democracy’ with the teacher’s personal conception of ‘community’ is a way to increase investment in innovating one’s teaching practice.

**The pull away from democratic values can be interrupted any time during the school day (instructional or not).** I closed Chapter 6 explaining the tools or strategies I intend to create to approach education discursively and work towards developing a pedagogy of interruption to
elucidate the pull away from democratic values afforded by the subjectifying capacities of the neoliberal logic rampant in our society (Erneling, 2010; Biesta, 2010). With those concepts in mind, while looking for themes across domains in the data, I realized I was limiting where during the school day I was looking to interrupt. A discursive approach means attending to the context of each classroom space, but an extension of that could be the different contexts within the classroom/school. I had been thinking about interruption during direct academic instruction, but now see the opportunities outside of academic instruction.

If the primacy of community-driven thought and action are values that teachers wish to impart on their students, then teachers can look for opportunities for that imparting whenever they can. The complex nature of social norms in digital spaces could be discussed in the context of using Google Docs, but also in the context of playing on the playground or waiting in line the hallway. Connecting to my thought from the domain analyses regarding developing a ‘mindset’ for promoting community-minded, democratic values, I began thinking of the asset I would like to help teachers develop as an ‘interruption mindset.’ A mindset for identifying moments within one’s interactions with students (relating to instruction or not) where subtle threats to the importance of community-minded efficacy can be interrupted, acknowledge, and used for reflection later.

*If thoughtfully organized as a limited number of foundational skills, strategies or tools for promoting contemporary democratic values could be highly contextually adaptable.* I entered Stage 2 wanting to learn more about democratic values that teachers want their students to embody. In this round of interviews, I found ‘community’ to be a more familiar and thought-provoking alternative to ‘democracy.’ I also realized I was overthinking something. I am not looking for ‘values’ of democracy or community which students need developed — I am looking for tools which students need developing to be used towards embodying community-minded values in their actions for the rest of their lives.
In Stage 1, I found that many strategies which teachers already utilize can frequently be adaptable to address the complexities afforded by digital media and technology. Now I see helping students build skills involving critical thinking, collaboration, and ‘digital citizenship’ towards their academic goals as potentially doubling as an opportunity for developing those foundational skills towards understanding how and why critical thinking, collaboration, and ‘digital citizenship’ are related to success in all aspects of life. Additionally, teachers could use the opportunity to help students grasp the implications of people not developing these skills by connecting their importance to being successful, safe, and productive in digital spaces.

**New guiding questions.** After reflection on the analysis after the Stage 2 interviews, I created the following sets of guiding questions for the Stage 2 participant observations:

- If students understanding the importance of ‘community’ and how to be an active participant in a community is of high urgency, how can teachers complicate the concept of ‘community’ to incorporate the complexities of contemporary social life afforded by digital media and technology? What already existing features of teacher experience could be utilized towards this complication.
- What could everyday interactions between teachers and students (instructionally based or not) be leveraged towards fostering democratic citizenry? What do these interruptible moments look like?
- How can a teacher develop critical thinking, collaboration skills, or ‘digital citizenship’ in a contemporarily minded way? What opportunities are there to apply these skills outside the context of academic instruction?

**Stage 2 Participant Observations with Follow-up Interviews**

The following table contains relevant details for the observed teachers for Stage 2.

*Table 16: Stage 2 observed teachers*

<table>
<thead>
<tr>
<th>Stage 2 - Observed Teachers</th>
<th>Pseudonym</th>
<th>Grade’s and Subjects Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midge</td>
<td>Pre-Kindergarten</td>
<td></td>
</tr>
<tr>
<td>Richard</td>
<td>Pre-Kindergarten</td>
<td></td>
</tr>
<tr>
<td>Elena</td>
<td>Pre-Kindergarten</td>
<td></td>
</tr>
</tbody>
</table>
Domains. After completing these participant observations and follow-up interviews, and reviewing observation notes, transcripts of my personal end-of-observation initial reflections and of the follow-up interviews, the following domains were identified:

- Complicating the democratic idea of ‘community’
- Moments of interruption

Complicating the democratic idea of ‘community.’ In analyzing the data after the Stage 2 interviews, ‘community’ was identified as a more common term used in classrooms than talking explicitly about democratic values. In the spirit of working from what teachers are already doing, in the Stage 2 observations, I looked for ways the teacher could complicate the democratic idea of community. There is a means/ends semantic relationship between the included terms and the cover term.

Table 17: Complicating the democratic idea of ‘community’

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instilling a nested-view of community</td>
<td></td>
<td>complicate the democratic idea of ‘community’ from a contemporary perspective</td>
</tr>
<tr>
<td>Instilling a diachronic view of community</td>
<td>is a way to</td>
<td></td>
</tr>
<tr>
<td>Modeling effective negotiation of conflict</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instilling a nested-view of community is a way to complicate the democratic idea of community. Site 2’s grounding mission and vision holds encouraging community values and the importance of active participation in one’s community as core values. These values are demonstrated in a short story Cassandra, the administrator at Site 2 (interviewed in Stage 2), told me relating to an ‘A-ha!’ moment she had with a student regarding what interrogating a student’s actions through a community-oriented lens looks like:

*Cassandra: So I remember having a very strong sort of ‘A-ha!’ moment in a classroom where there was a child who was very young working with some blocks. And sort of doing a bit of like Dragon-boarding, keeping all the blocks for himself. I start having a conversation [with the student] about … what is your purpose for having all these blocks? Is it just to have the most? Or is it because you have a plan where you’re going to use them?*

*It’s great if you have a plan to build a tower or castle. That is a great reason to be using that many blocks because that’s something that contributes to the community as a whole to enjoy.*

Rather than assigning a narrative onto why the student was hoarding blocks (i.e., the student is not wanting to share), Cassandra asked the student to consider his or her actions and how they were contributing to the community within the classroom. During my observations at Site 2, I saw many examples of this value of understanding one’s role in a community. I particularly noticed strategies which addressed the community in a very contemporary way, which I am calling a nested-view of community.

Each classroom’s culture and norms were co-constructed by the teachers and the students, instilling a shared sense of ownership in their classroom community. Setting classroom norms as a group is a strategy I’ve observed (and attempted as a teacher) before, but within the classroom’s at Site 2 the sense of personal investment in the community from the students was remarkably evident. For example, Midge’s classroom had labels for where certain materials are stored, such as scissors, markers, and tape. This is a common practice in classrooms, but I had never seen it done like this.
The labels were written in a young student’s still-developing penmanship with a printed quote from a student, said during a conversation earlier in the school year about taking care of classroom materials.

Simple strategies like this, personally investing students in their classroom community, were present in all the classrooms I observed at Site 2. What was even more striking was the efforts I saw to establish community were not solely towards the classroom community, but the larger community of the school as well. And most important, what it means for one’s classroom community is nested within a different, but related community. In our follow-up interview, Richard told me about a project involving a donated Sphero Star Wars BB-8 remote control robot. The class had spent weeks establishing norms around the robot, having decided to treat it as the classroom pet, building a habitat and all. Once the class had set their standards around the robot, they began discussing introducing it to the rest of the school:

Richard: And it was so interesting. The students went around to the younger classrooms in small groups because they didn’t want to disrupt the classes too much. The students took cameras and took photos of what kind of materials in the younger students classrooms weren’t in, the older student spaces and being mindful if they would like BB-8 to go visit, what they could do to prepare for BB-8 to join a younger classroom.

Some of them were like, well, maybe we should make a video for BB-8 to show them first. So they’re not scared when he comes in. So then there’s like this whole video we made, and then we showed it to different groups in the school, and then my students talked about what they observe [the younger students] doing while they were watching. And then for like the youngest students at the school, [my students] were like, maybe the video would be too long for them to sit through, so they just projected a video of BB-8 rolling around for a few seconds.

Richard had students consider the implications of bringing one set of norms or values into a different space, which has been co-constructed according to its own students and teachers. Though they are part of the same community (the school), one must be thoughtful of differences between the smaller communities (classrooms) nested within the larger one.
In Elena’s classroom, there was a student-created classroom decoration which clearly aimed to link the community of the school to the community of the surrounding area. Elena’s class created a map of the immediate area around Site 2. Teachers took the students on a walk around the neighborhood, taking pictures of certain ‘landmarks’ to aid in creating the map of their neighborhood when they returned to the classroom. The map marks the various places the students went on their exploration, with pictures showing what the view at certain points of the map looks like. The community-value rooted in the pedagogy of Site 2 finds ways to address the complex, overlapping nature of community in the 21st century the most basic of ways.

Instilling a diachronic view of community is a way to complicate the democratic idea of community. In addition to embodying a nested-view of community in their instruction, observed teachers at Site 2 also honored a diachronic view of community. As opposed to a presently-focused synchronic view, a diachronic view of community pays particular attention to how, by nature, communities develop and evolve over time. It is essential for students to understand social life is informed by the actions of others in the past and that current actions will inform social life in the future. A shared space within Site 2 particularly embodies this idea.

Referred to as ‘the space hallway,’ one hallway in Site 2 is painted black. Within this hallway is a ‘rocket ship’ made from a mishmash of materials like PVC pipe and plywood, boxes full of dead technology (from laser printers to Blackberry phones) for students to build space equipment, and a handmade, two-seater ‘moon buggy’ suitable for any and all imaginary outer space adventures. Information about additions to the space hallway, all created through collaborative class projects, adorn the walls, dating back to 2002. Current students are able to see pictures of the materials they are playing with being created by former students dating back almost 20 years.

In addition to the shared space hallway, the observed teachers all additionally appealed to a diachronic view of community through documentation. While ‘documentation’ always sounds like
an overwhelming endeavor, the teachers at Site 2 made it look natural. They all had cameras (phones or otherwise) and would regularly document student’s work throughout the day. The school has a photo printer available for employee-use, so teachers regularly document student work and then incorporate it into the classroom environment. For example, in the Lego building area of Midge’s room, there are photos of some of the students’ favorite things they have built. Midge snapped pictures of students’ Lego structure before they’re dismantled, prints out the photographs, and places the pictures near to the Lego area as all-time favorite builds.

There were also examples of projects from year’s past on the walls of the classrooms I observed. Even though the students in the classrooms were not involved with every previous project displayed, they know that the projects which they participate in will be present even after they leave that classroom. While it may seem subtle, a diachronic sensibility towards community is a necessary aspect of an engaged democratic citizen - critically thinking about how one’s actions will impact those who come after and what can be learned from those who came before. While this is a quality of democratic citizenry, in the 21st century or otherwise, it is a value which I worry is too often not stressed enough.

Modeling effective negotiation of conflict is a way to complicate the democratic idea of community. In our follow-up interview, Midge and I discussed what community-minded social skills she views as most important for students to embody. She brought up communication skills as paramount, specifically as it relates to negotiating conflict:

Midge: I think it is critical to learn communication skills. And also how to navigate and negotiate conflict. I think those are two very complex skills that have like a lot of different moving pieces to them and they both rely really heavily on like strong social-emotional development. And so I think like a lot about how our culture is uncomfortable with conflict in general, but conflict is, I believe personally, inevitable and is also crucial to democracy and to collective action and to any time you’re working like you towards a strong sense of community. I don’t think it’s possible for people to come together and always reach consensus — even on the paths to consensus and people happen to get there, there’s bound to be conflict.
Looking back to my observations of Midge’s instructional practice, she embodied these words consistently. For example, a student ripped a page out of a book another student was reading, making this student upset to the point of tears. As the conflict arose, Midge calmly diffused any tensions and had all the students sit down for a discussion. With multiple emotionally agitated students, Midge told the students the following:

Midge: We all have the power to make each other feel better. It’s not your job — you don’t have to, but a lot of times, making that choice helps the group held and move forward.

Rather than resorting to some sort of punitive measure against the offended student, Midge led a discussion striving to make all students feel emotionally understood and had their right to participate in conversations relating to their community honored. I saw this type of thoughtful negotiation of conflict in the other classrooms as well, such as Richard thoughtfully talking through the competitive element of ‘winners and losers’ during a game of musical chair and Elena brokering a compromise between two groups of students with different ideas for decorating a particular space in the classroom.

Navigating conflict effectively was found to have come up in previous rounds of data as well, with interviewees commenting on the importance of responsible conflict in our society:

Mark: [At my school, teachers] talk a lot about if you are unhappy with a situation or with another student. Like how do you resolve it? And so there’s a lot of community, like how do you be an active part of a community conversation?

Tony: If somebody’s trying to help another student, I try to then teach them a more proper way to critique. You don’t have to say you suck at drawing, you can say, ‘Hey, I like that you’re trying here are some tips of what I could help’ or ‘here’s the part I think I could help you improve.’

Moments for interruption. With ideas for tools or strategies to establish the ‘interruption mindset’ in teachers beginning to percolate in my head, at Site 2 I specifically looked for moments during the school day which could lend itself to being ‘interrupted’ for the sake of a brief discussion or activity.
about democratic values. Notably, quite a few examples from previous rounds of data collection emerged as being applicable as moments to ‘interrupt’ the possible subjectification of neoliberal values. Due to the number of observed instances of interruptible moments I would like to share, examples will be shared in a chart after the domain table. There is a means/end semantic relationship between the included terms and cover term of this domain.

Table 18: Teacher as interrupter

<table>
<thead>
<tr>
<th>Included Terms</th>
<th>Semantic Relationship</th>
<th>Cover Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughtful use of personal technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collectively inquiring about technology in the classroom</td>
<td>is a way to</td>
<td>interrupt the pull away from democratic values</td>
</tr>
<tr>
<td>Modeling how to view the world through a critical, democratic lens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughtfully interrogating assumptions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Table 19: Interruptible Moments

<table>
<thead>
<tr>
<th>Interruptible Moments</th>
<th>Explanation</th>
<th>Examples from Data</th>
</tr>
</thead>
</table>
| **Documentation**     | With easily accessible documentation of students previous work (either individual or collaborative), the teacher can interrupt instruction to discuss the how the classroom or the students work has transformed over time. | • The previous projects displayed in the ‘space hallway at Site 1  
 • Class Instagram accounts to document happenings in a classroom (Isaac & Tony) |
| **Thoughtful use of personal technology** | Personal technology like smartphones can purposefully be used by the teacher during instruction to acknowledge it not only as a personal communication, but frequently a consistent presence in people's lives. | • Teachers at Site 2 using their personal smart phones for documentation  
 • Eve’s (Site 1) phone going off during a lesson – she said something like, “Aren’t these things annoying? We use them for so much but they can certainly get in the way.” |
| **Collectively inquiring about technology in the classroom** | When bringing a new piece of digital media or technology into the classroom, the teacher can facilitate a collective inquiry into the device, including how it may augment or detract from democratic values. | • Midge’s students wanted to get more Lego’s for the class, so she spent time online with different students researching options.  
 • Richard’s class’ investigation of BB-8 |
| **Modeling how to view the world through a critical, democratic lens** | Using purposeful language, a teacher can refer in a critical way to the complex social world and how a given lesson relates to it. | • Midge: I like to tell my students that everything is created. Everything is constructed...the idea that the things they encounter generally have like a motivation.  
 • Eve commenting on how much advertisements on websites drive her crazy while pulling up a video for her class to view. |
| **Thoughtfully interrogating assumptions** | Rather than reactively disciplining students for breaking norms, asking the student questions about their actions (or their perceptions of another student’s actions) encourages critical thinking about one's actions. | • After students ran down the hallway ahead of Elena after asking them to wait, rather than punishing them Elena asked, “Whoa! You all forgot me! How do you think that made me feel?”  
 • Ana probing a disagreement over the rules for a math review game towards a mutual resolution |
Themes and Analysis. This is the final round of data collection for this stage of inquiry before applying new insights towards creating prototypes of tools or strategies for promoting community-minded, democratic values in the K12 classroom. In light of this, themes and analysis from this round will be presented through the presentation of the prototypes in the next chapter. Namely, exactly how my insights gained from Site 2 manifested in the creation of the prototypes.
Chapter 8

Prototypes of Resources and Strategies for Developing an

Interruption Mindset and Looking Forward

After completing Stage 2 data collection and analysis, I felt confident I had produced enough insights to make my first attempt at my ultimate aim: Creating resources and strategies for teachers to promote democratic values for the 21st century. I set out to create prototypes – I am purposefully calling them prototypes because these are in no way finished products – prototypes as starting points from which I aim to continue to develop beyond the scope of this dissertation. As I mentioned in Chapter 6, I have decided to use the term ‘interruption mindset.’ Inspired by the idea of interrupting neoliberal subjectification in G.G. Biesta’s ‘pedagogy of interruption,’ the interruption mindset seeks to guide teachers in identifying classroom interactions that subtly implicate socio-structural features of the 21st century afforded by digital media and technology (e.g., social acceleration, timeless time, space of flows, increased screen time of young people, more opportunities for rationalizing consumer-driven values).

As a refresher, below are the most significant insights gained from the 2 Stages of data collection and analysis. These were heavily considered in the construction of these resources and strategies:

Stage 1 Interviews

- Adaptability to any classroom context a must.
- The consistent neoliberal implications of digital media and technology’s presence in the classroom.

Stage 1 Participant Observations

- The physical presence of digital media and technology in instruction is not required to
teach about how digital media and technology have transformed our society.
• Structured reflection is where a teacher’s development of an interruption mindset should start.

Stage 2 Interviews
• ‘Community’ is a term which helps ‘democratic values’ resonate more with teachers.
• Interruption can happen throughout the school day, whether or not during instruction.

Stage 2 Participant Observations
• A nested and diachronic view of community helps students begin to understand the complex nature of our social world
• Negotiating conflict is a recurring opportunity for interrupting the pull away from democratic values

After describing the resources and strategies (with actual examples of these included as appendices), I will shift to discussing how I intend to continue this inquiry and developing these resources and strategies. I will then consider what I believe to be the contribution of this project to the academic research and close by revisiting the provocation I take from John Dewey I discussed in Chapter 1.

Prototypes of Resources for Teachers
The first set of prototypes are resources for teachers to learn about what is meant by ‘interruption mindset.’ These are my attempts to provide explicate an appropriate amount of theoretical grounding for developing an interruption mindset. The prototype of each described resource is found in Appendices A-E.

Workshop. The first resource is a prototype for a 90-minute workshop for K12 teachers and educators. The workshop intends to present ideas (and related resources and strategies) to teachers and educators regarding democratic values and students. Titled “Democratic Engagement
Transformed: Teaching Community-Minded Values for the 21st Century,” the workshop aims to accomplish the following:

- Complicate the way people think about what it means to be an ‘engaged citizen’ in the 21st century due to socio-structural features
- Share and contextualize the concept of an ‘interruption mindset’
- Collaboratively envision and generate possible strategies to help teachers foster democratic values in their students

The intention is to find opportunities to offer this workshop to people working in K12 education in any way. Though the workshop is directly focused on instructional practice, I feel any non-teachers working in K12 education (e.g., principals, academic coaches, central office staff, district leadership) should be part of this conversation from the start. The term ‘socio-structural features’ is a broad, catch-all term for concepts like social acceleration, timeless time, space of flows, or neoliberalism.

Possible venues include conferences, professional development programming, faculty meetings, or teacher prep programs. A detailed plan for the workshop is found in Appendix A.

**Brochure.** As I created the workshop, I realized I needed to create some kind of material participants could take home. I made a few attempts at creating a 1-page front-and-back reference sheet version of the presentation, but it kept coming out crowded and clunky. I decided to simplify and ended up at a brief brochure for ‘interruption mindset.’ This brochure intends to serve a brief reminder of what was covered in the workshop, short previews of strategies to get started developing an interruption mindset and direct them to an online bank of resources and strategies. Teachers and educators can reach his online bank (currently housed in Google Drive) by scanning the QR code on the back of the brochure or using the supplied link.¹ The remaining resource and

strategy prototypes in this chapter are available on the online bank. The brochure prototype is found in Appendix B.

**Building your interruption mindset.** This resource largely reiterates the information on the brochure with slightly more detail. It gives practical information about utilizing the online bank as well as broad ways to encourage teachers to privilege their personal experience in building an interruption mindset. This prototype is found in Appendix C.

**What are socio-structural features?** This resource will provide information about the socio-structural features referenced in the workshop (social acceleration, timeless time, space of flows, and neoliberal values) as well as what is meant by ‘socio-structural feature.’ It will also give other examples of socio-structural features and insights into how they relate to a contemporary threat to democratic values. The resource is found on the online resource bank and in Appendix D.

**How are socio-structural features implicated in regular classroom interaction?** This resource addresses possibly ways certain socio-structural features implicate in everyday classroom interactions. This includes the concepts from the data analysis like ‘embedded neoliberal language,’ effectively negotiating conflict, complicating the idea of ‘community.’ as well as easy ways to uncover implications. The prototype for this resource is found in the online resource bank and in Appendix E.

**Prototypes of Strategies for Teachers**

The second group of prototypes is actual strategies which any teacher can use to begin developing the foundational sensibilities of an interruption mindset. These require minimal time/effort and aim to be adaptable to any educational context. The prototype of each described strategy can be found in Appendices F-H.
Journaling about personal experience to get started. Channeling the importance of reflection in Dewey’s process of inquiry, this strategy encourages teachers to consider their past experience through guided journaling. This idea also comes out of research involving the concept of contemplative pedagogy. There are two versions of the guided journaling: one journaling framework for teachers just beginning to explore developing an interruption mindset and one to encourage teachers to reflect on their instructional practice briefly at the end of a school day. These strategies are found in the online bank and in Appendix F.

Track your interruptions with an anchor chart. This strategy was created out my thoughts about anchor charts developed through the data analysis at the end of Stage 1. Anchor charts have struck me as an easy way for teachers (and their students) to maintain a visual record of moments of interruption in their classroom and the democratic implications discussed. This strategy gives things for a teacher to consider when creating a democratic values-oriented anchor chart for their classroom. Also included in the prototype are pictures of examples. As the examples of moments for interruption, these will hopefully eventually be examples from real classrooms, but for now, they are created by me. This strategy is found on the online bank and in Appendix G.

Develop your mindset out loud. The final strategy strives for a collaborative spirit around promoting democratic values for the 21st Century amongst teachers and educators. While teachers are best equipped to use an interruption mindset in their own classrooms, innovation is most successful when it involves other people. I want to encourage teachers and educators to not only explore the resources and strategies themselves but to feel empowered to start a conversation about it with their colleagues. I believe through collaboration teachers, and educators will be able to create new and novel applications of an interruption mindset. This strategy’s prototype is found in the online bank and in Appendix H.
Next Steps For This Inquiry

Throughout the field research, I knew I wanted to ultimately create resources and strategies for teachers to use grounded in the theoretical framework of the conjuncture—but the looming question was always, “What do I do with it once I am done?” Part of the plan moving forward was always apparent: once I create resources and strategies, I have to show them to K12 teachers—a lot of them. I organized the workshop not only as a means to share my ideas and concepts but also as a mechanism to receive feedback on my thoughts and concepts.

As of this writing, I have conducted the workshop once as a professional development opportunity for local teachers. Through interactions during the workshop, an end-of-workshop feedback form, and personally reflecting on the experience, I am already receiving excellent insights to refine further my description of an interruption mindset, why I believe it’s important, and how to apply it. The aim is to use feedback to ensure everything from the language I use to the amount of time I take to explain certain concepts is optimized to be useful for teachers and educators.

Frankly, until the field research was complete, I did not have much thought regarding other ways I will continue this inquiry once this dissertation was finished. Once the dust settled after hours of data collection and analysis in the field, I realized that my future plans for this project up until this point had utterly forsaken the thing which made my interactions with teachers unique: my theoretical grounding.

In addition to the continued practice-based exploration of interruption mindset with teachers, I’d also like to present the idea and develop it through the academic community. While I have confidence in my understandings/application of social acceleration, timeless time, space of flows, or hypermediation, it would be hubristic to think I’ve learned all I can from academics. I intend to continue to develop my theoretical posturing by writing pieces which go more in-depth
into the ‘socio-structural features’ I am presenting to teachers regarding their impact. This would involve hermetic pieces where I strengthen the applicability of theory to practice as well as pieces appraising any new ideas about connecting theory and practice through empirical work.

Envisioning where my inquiry will go from here evokes unbridled excitement. I had such a wonderful experience putting this project together and am thrilled for an opportunity to continue developing my skills as a researcher and applying them towards aims of promoting democratic values in the 21\textsuperscript{st} century. But as much fun as looking forward it, it is also worth pausing and looking backward at my experiences as a scholar-in-training and what I believe I have contributed to academic research.

**Contribution to the Academy**

As I reflect on my experience within the academy, there are aspects which coalesce with me and some that do not. This is not a love/hate or praise/condemn dichotomy, but areas of strength/areas for refinement. I hope that my work may contribute to improving some of what I observe to be the areas of improvement, particularly the importance of interdisciplinary in Media Studies and the application of pragmatic inquiry as a research paradigm.

**The critical importance of interdisciplinarity.** I am not historian about the intellectual history of the field of media studies, but I have understood as a field which grew out of various others. There is an intellectual diversity within media studies which is both blessing and curse. Media studies scholars I have come into contact with were trained in various intellectual traditions, including cultural studies, communication, sociology, journalism, history, and critical theory. This is a blessing because of the range of knowledge present within media studies departments, creating a space for various backgrounds to come into conversation with one another – an elementary school
teacher, a recent M.A. graduate, a historian, a divinity school graduate, and a person at the forefront of the emerging discipline of digital humanities populated my first year PhD pro-seminar.

This wealth of different backgrounds becomes a when considering an outward identity: What is media studies? Is it the same thing as mass communication? Is media studies part of social science or humanities? Is it similar to film studies? Why do some media studies scholars go to the annual conference for the Association of Educators for Journalism and Mass Communication (AEJMC) while others attend the yearly conference of the International Communication Association (ICA)? The field of Media Studies lacks definition in its scope, at least compared to other fields. This is why interdisciplinarity is the key to the continued progression of Media Studies, and I hope this work contributes to this.

I draw from my personal background in education frequently, but beyond that, I also actively pursued opportunities to interact with people from the field of education. This included taking classes, attending events within the School of Education, and meeting with faculty and graduate students to ideate about what education and media studies can offer one another. The affordances of digital media and technology impact so many areas of social life, including various fields of study. When channeling an interdisciplinary spirit, media studies scholars are in a unique position to complicate how other intellectual traditions reckon with digital media and technology, as I attempted in Chapter 4. The ways digital media and technology are theoretically understood is already varied within Media Studies, so a scholar bringing their sensibilities into purposeful conversation with a scholar from a completely different discipline makes more sense than arguing within the field about which theory, method, ontology, or epistemology regarding media is most usefully accurate.

**Applying pragmatic inquiry as a research paradigm.** The academy is a highly, sometimes obtrusively, structured environment. Knowledge is created by an individual or group of
academics, refined through conference presentations, and legitimized through peer-reviewed journals. I do not reject this system (as I mentioned in the previous section, I intend to continue to participate in this system of knowledge development), but find it limiting in terms of room for innovation due to limits in scope.

Conference presentations typically last 15 minutes with limited time for questions, and journal articles tend to be 20-30 pages in length. These limits contribute to the vast majority of conference presentations and journal articles I have attended/read inadequately addressing both the application of the understanding uncovered through exploration of a given research question and the import of understandings as they relate to lived reality in the social world. More frequently, new insights are related to how they further the academic field of research in and of itself. Scholars can always publish books without having to adhere to format limitation; however, one assumedly needs to build a considerable amount of capital from conferences and journal articles to have one’s book read widely. Using pragmatic inquiry as a research paradigm as I have in this work provides much-needed flexibility to create more space for innovation at all levels of notoriety amongst scholars.

As described in Chapter 6, pragmatic inquiry provides ontological and epistemological flexibility which leads to greater methodological flexibility. This flexibility affords scholars opportunities to explore their areas of research in ways which are not possible if adhering dogmatically to particular research paradigm. For example, a media studies scholar studying video game culture amongst senior citizens may be paradigmatically situated in strict constructivist sensibilities. Another scholar may be interested in the exact same area of study but was trained and ascribed to a post-positivist posturing. The first scholar uses participant observations and in-depth interviews to deeply understand contextual relationships between senior citizens and video games, while the second scholar uses an N=3000 survey design to find statistically significant correlations between personal attributes of senior citizens and their video game usage.
For me, both these approaches provide valuable insight, yet due to likely different conference circuits (Scholar one probably attends ICA while scholar two likely attends AEJMC) and preferred journals, these two scholars are likely never to meet and see what their respective research can offer one another. Pragmatic inquiry allows scholars to begin conversations between intellectual traditions on their own accord, equipping them with a more expansive perspective of their area of research and thus facilitating more interdisciplinary work across the academy.

**Revisiting Dewey’s Provocation**

Towards the end of Chapter 1, I discussed the contemporary provocation the work of John Dewey provides for the development of scholarship. I claimed Dewey’s work provokes working towards action without the rejection of the importance of strong theory. This is what I hoped to embody with this work. Reflecting on the entire experience, I already see different choices that could have been made, involving everything from word choice to how I planned my fieldwork. These reflective insights do not evoke regret, but rather an excitement towards the future. I accomplished what I set out to do: channeled theoretical arguments into empirical work towards synthesizing resource and strategies for teachers. But Dewey’s provocation still rings loudly in my mind, and I want to see what else can be learned where theory intersects with practice.

Unfortunately, I do not believe the university setting provides enough space for me to develop my theory and practice according to my sensibilities. I have no interest in splitting this dissertation into five standalone journal articles to get a jump start on tenure. Nor do I have an interest in seeking a non-research teaching position where I am limited in my contributions to theoretical conversations due to not being on the tenure track. Many PhD students/candidates see leaving academia for work outside of it as a failure, the manifestation of a deficit in their respective research contributions.
This is fueled by the morally questionable practice of university’s requiring such a significant time investment for initial applications for tenure-track positions when a high percentage of applicants will be removed from consideration due to gut reactions from the selection committee. For example, about 6-months ago I tested the waters of the academic job market. In one case I spent around 20 hours preparing materials including a CV, a cover letter, a teaching statement, three letters of recommendation, and response regarding the importance of Weber in the 21st century. I assume I did not make it past the first stage of applicant consideration, but I never heard anything about my application status. I just was left with doubts about the quality of my work, frustration towards the amount of time I sacrificed to submit an application, and resentment towards the University for not even having the decency to send a mass email thank applicants for their time and that they will not be proceeding in the selection process.

This experience emphasized the asynchrony between the institutionally located academy and the other spheres of society; an asynchrony similar in nature to K12 schools discussed in Chapter 2. If a recent Ph.D. grad wants to pursue a job outside of academia, the path for each person is customizable and contextually unique. Through LinkedIn, I contacted and held informational interviews with six people with doctorates in the humanities or social sciences who currently utilize their methodological training in the private sector. Each of their paths were unique, yet they all found their work very fulfilling. Meanwhile, a recent Ph.D. grad who wants to pursue an academic position must follow the prescribed path of ambiguous timelines, multi-page cover letters, wrangling letters of recommendation from over-worked faculty, and depressing ratios of qualified applicants to available positions. For me, this disparity is too glaring to condone it as “just how it is.”

One thing almost all academics agree on is the herculean efforts it takes to enact lasting change within a department, let alone across a whole university system. Just like I described in Chapter 2 about K12 classrooms, universities are institutionally organized in a way which makes it
difficult, if not impossible, to keep up with the speed of innovation outside the walls of the ivory tower. I fear if operating as a pragmatic researcher according to Dewey’s provocation, it is hard to imagine a home within the academy where I would feel intellectually fulfilled.

I am leaving the sphere of academia for now not as a default, but as a purposeful choice. I want to see what is possible if I take my knowledge developed within the academy and apply it outside. My frustrations should not be construed as dismissive or hateful – I LOVED my graduate experience within the academy. It has been the most formative period in my life, helping me find and refine my passions. I still want to be involved with the academic community through conferences and adjunct teaching opportunities, but, personally, desire to see how else I can bring amazing theoretical work into action outside of a conference or lecture hall.

To the academy, thank you for teaching and pushing me to complicate how I view society and how I ask questions about it. I have to leave right now, but will always strive to be connected and may find my way back one day. Until next time, farewell.
References


“Help Wanted…” (1772, August 10). The Virginia Gazette.


Democratic Engagement Transformed: Working Towards Fostering Citizenship in the 21st Century classroom

**WORKSHOP AIM:** To 1) complicate the way people think about what it means to be an ‘engaged citizen’ in the 21st century, 2) share and contextualize the concept of an ‘interruption mindset,’ and 3) collaboratively envision and generate possible strategies to help teachers foster democratic values in their students

**Learning Aims:**
Part 1:
- Understand the unique socio-structural features of our historical moment: e.g., primacy of consumer-driven values, the complexities of social interaction in digital spaces
- Appreciate why it is important to be aware of these features when asking questions about what it means to be a ‘citizen’ i.e. why not attending to certain historical specificities will lead to an ineffective conversation

Part 2:
- Embrace a pragmatic approach to innovating teaching practice: pragmatic thinking is key – whether it’s at school, at home, or anywhere else, one must develop strategies which privilege the contextual specificities of every space of learning
- Understand the concept of an ‘interruption mindset:’ a mindset shift which seeks to complicate non-democratic features of our society by identifying and giving space for students to problematize

Part 3:
- Feel empowered to use these concepts when thinking and making decisions about students: establish this workshop as a call to action, not simply ‘here’s something interesting to thinking about. This will be through the use of a collaborative activity
Agenda:

- **Opening Activity:** “Democracy is....”
- **Part One**
  - a. Broad overview of workshop
  - b. Brief introduction about myself
  - c. The world is different now
    - i. Social acceleration
    - ii. Timeless Time and Space of Flow
  - d. How does this complicate democracy and citizenship?
    - i. Structured discussion
- **Question Break**
- **Part Two**
  - a. Interruption Mindset
    - i. The importance of pragmatic thinking
- **Question Break**
- **Part Three**
  - a. Collaborative strategy synthesis activity
**Detailed Breakdown:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Key Agenda Item</th>
<th>Description</th>
<th>Facilitator Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes</td>
<td>“Democracy is...”</td>
<td>Using the prompt “Democracy is...”, all participants will text message a word or phrase which will be displayed as a word cloud. The resulting word cloud</td>
<td>Using pollanywhere.com; integrated into presentation</td>
</tr>
<tr>
<td>15 minutes</td>
<td>Part One: The World is Different now</td>
<td>A brief explanation of some of the way our social lives are transformed through digital media and technology. Within the context of interruption mindset, these are classed ‘socio-structural features’</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td>Part One: Implications for Democracy</td>
<td>A journaling prompt will be presented and participants will be given instructions for small group discussions</td>
<td>Pens and pages of notebook paper will be available to participants to journal with</td>
</tr>
<tr>
<td>5 minutes</td>
<td>Question break</td>
<td>A pause to allow individuals to ask any pressing questions they have prior to proceeding to Part 2</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td>Part Two: Interruption Mindset</td>
<td>An explanation of my approach for uncovering strategies for leveraging democratic citizen development through what teacher’s already do</td>
<td></td>
</tr>
<tr>
<td>5 minutes</td>
<td>Question Break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 25 minutes | Part Three                            | Collaborative Activity to Generate Strategies  
- Each group is given a broad description of a lesson  
- Groups discuss the following questions, with a designated recorder taking notes  
  - What threat to democratic values of community could be interrupted in this lesson? What socio-structural  
  - Once interrupted, what could the 5-minute discussion/activity look like to provide a democratic counterweight?  
  - What other parts of the school day might the same socio-structural feature be illuminated and interrupted?  
- After discussing for 10-15 minutes, the recorder reviews highlights of what was said.  
- Each group collaboratively negotiates a 1-2 sentence group response for each question and writes them on a piece of chart paper  
- Each group shares with the all participants the strategies and insights they came up with | Example of broad description of a lesson: ‘4th grade math lesson on long division’  
During collaborative work, the facilitator is circulating amongst the groups and giving feedback/guidance when appropriate. |
| Total: 90 minutes |                                              |                                                                            |                                                        |
DEVELOPING YOUR INTERRUPTION MINDSET

JOURNAL ABOUT YOUR EXPERIENCES IN AND OUT OF THE CLASSROOM
Check out the journal guides in the additional resources. Journaling is an effective tool from getting started to fine tuning your interruptions.

TRACK YOUR INTERRUPTIONS ON AN ANCHOR CHART
Using a simple anchor chart to record your interruptions is a great way to establish continuity across your interruptions for your students. Look in the additional resources for examples and more info.

DEVELOP YOUR MINDSET OUT LOUD
Personal reflection is key for development, but collaborating with others is how your interruption mindset will grow in unthought of ways! Look for ideas about this in the additional resources.

SCAN OR ENTER THE LINK INTO A WEB BROWSER FOR ADDITIONAL RESOURCES ON DEVELOPING YOUR INTERRUPTION MINDSET

FOR MORE INFORMATION
Contact Colin Ackerman, Ph.D.
ackermanct@gmail.com

INTERRUPTION MINDSET
Teaching Towards Community-Minded Democratic Values
WHAT IS AN INTERRUPTION MINDSET?

An interruption mindset is a lens through which a K12 teacher can approach their instructional practice. A teacher with an interruption mindset looks for opportunities to interrupt the threats to democratic values such as community-minded critical thinking, dissent, and collaboration which permeate our culture.

WHAT IS BEING INTERRUPTED?

Our use of web-enabled digital technology (e.g., smart phones, tablets, computers) has become pervasive in many aspects of our lives. With this ubiquitous connectivity comes new and numerous opportunities to internalize socio-structural features like the primacy of consumer-driven values. An interruption mindset aims to provide a democratic counterweight to these features in students' social development.

TEACHING WITH AN INTERRUPTION MINDSET

An interruption mindset grounds itself in each teacher's unique, contextual experience. How it is used in a given teacher's practice is dependent on their already established instructional sensibilities.

Elements of an interruption mindset:

- Awareness of socio-structural features of our society
- Purposeful reflection on past experiences in K12 education (as a teacher and student) relating to socio-structural features
- Look for ways those features may be implicated in normal classroom interactions
- Interrupt those moments by illuminating the feature, relating it to the current lesson/activity, and have no more than a 5-minute interaction/activity related to it before resuming regular instruction.

"Democracy has to be born anew every generation, and education is its midwife."

- John Dewey -
Appendix C: Getting Started with an Interruption Mindset

What is an Interruption Mindset?
A teacher channeling an interruption mindset strives to ensure students understand the complexities of society in the 21st Century by illuminating socio-structural features and interrupting their threat to community-minded, democratic values. The teacher aims to provide a democratic counterweight to arguably undemocratic features of our world. This sounds complicated, but it’s actually simple!

Start with the “First Four Steps” below and check out the resources and strategies

First Four Steps for Developing an Interruption Mindset

1. Understand what is meant by ‘socio-structural feature’
   - Check out the resource titled What are Socio-Structural Features
2. Journal to reflect on what of the innumerable socio-structural features are most important to you regarding your students’ long-term success
   - Look for the Journaling to Get Started strategy
3. Look for ways those socio-structural features manifest in your classroom
   - Consult How do Socio-Structural Features Manifest? to learn more
4. Interrupt moments during instruction where socio-structural features can be illuminated and have a 5-minute discussion/activity relating to its potential threat to democratic values

In the context of an interruption mindset, democratic values refer to utilizing skills like critical thinking, responsible dissent, and collaboration towards community-minded goals (the good of many) as opposed to individual success (the good of one).
Appendix D: What are Socio-Structural Features?

What are Socio-Structural Features?
An interruption mindset requires a teacher to have an awareness of socio-structural features of our current age. But what are these? Socio-structural features are human created rules and norms that are so commonplace, they sometimes are understood as naturally occurring. For example, thirteen years of school prior to enrolling in college (K-12) is a norm created by humans, but has become standard to the point where alternatives to that norm are rarely discussed.

Tensions Beneath the Surface
When teaching with an interruption mindset, a teacher is looking to expose tensions of our world which are not plainly visible. More importantly, an interruption mindset should be keenly focused on exposing tensions which pose a threat to developing democratic values to utilize in critical thinking, responsible dissent, and collaboration.

Broadly, socio-structural features that pose threats to democracy views the needs and efficacy of the individual as superior to the needs and efficacy of an entire community. Students must learn to be engaged, community-minded citizens in the complex society of the 21st Century. Teachers are uniquely positioned to complicate student assumptions (and possibly their own) about how the world works.

Reflective journaling is a great way to wrap your head around socio-structural features. Practice identifying socio-structural features in your everyday life by reflecting on your day and writing it down.
Examples of Socio-Structural Features

Below are three examples of socio-structural features in our society today. As you read about them, see if you can think of moments in your classroom which could relate to these. Consider why it is important for your students to be aware of them.

**Social Acceleration**

Digital media and technology (like smartphone, tablets, and laptops) are increasingly pervasive to every-day life. Our devices allow us to communicate and accomplish tasks faster than ever before. This increasing pace of social life can lead to living one’s life at a frenetic pace. This frenetic pace can lead to stress, anxiety, and a lack of space to critically consider one’s actions.

Students must understand the fast pace of life afforded by digital devices is both a positive and a negative. People’s use of digital media and technology has created more opportunities to connect with one another, but it has also created more opportunity to speak or act instinctively/without proper deliberation. Unfortunately, human’s instincts are not always inherently community-minded.

**Flexible Time and Space**

Not only does digital media and technology allow us to live our lives at a faster pace, but it also allows us to use our time and space in a new way! Instead of having to do be certain places at certain times for work or leisure, people are able to customize where and when their work and leisure happen. For example, instead of meeting at a specific time at the movie theater to catch a flick, people can meet at any time and in any space with a screen and internet to watch a movie due to digital streaming services like Netflix.

While this new flexibility is exciting and convenient, it can distract a person from understanding and engaging with their immediate community. Students must learn to effectively navigate the digital and physical portions of our world with embodied democratic values of community.

**Nested/Intergenerational Communities**

Digital media and technology allows humans to interact with the parts of our society and our world, past and present, like never before. Because humans have more and easier access to information, we can participate and stay up-to-date on issues and be part of communities all over the world. We can also learn about our society’s past in greater detail than previously possible.

To productively engage in communities previously inaccessible until the internet, one must understand the nested and intergenerational nature of community. Nested relates to the ways one’s local community (e.g., city or state) is both separate and related to larger communities one claims membership to (e.g., national or global). Intergenerational refers to past actions informing the present state of a given community and current actions informing it’s future state. Students should have an understanding of how their actions fit into and impact their respective community.

Remember! These are just three examples of socio-structural features. As you develop your interruption mindset, keep an open and creative mind when thinking about rules or norms in the world which are human-made yet accepted by some as natural reality.
Appendix E: How Do Socio-Structural Features Manifest in the Classroom?

How do Socio-Structural Features Manifest in Your Classroom?

Socio-structural features are unavoidable, but frequently obscured, conditions of our society. This means identifying moments for interruption within your instruction is a matter of “knowing what to look for” rather than “knowing where to look.” In the classroom, socio-structural features can be found in everything from the language we use to the content we teach.

Find Moments For Interruption That Resonate with YOU!

Your instructional practice and students are unique to YOU! That means when looking for socio-structural features to interrupt and illuminate, it is easiest to start with your own passions regarding democratic values.

Are you concerned about digital media and technology being a detriment critical thinking ability? Or maybe you see collaborative skills as what is most critical for students in the 21st Century? Perhaps you fret about students identifying accurate information online?

Beginning with a broad area of concern related to students being community-minded citizens in the 21st Century society make socio-structural features easier to spot. Their implications relating to your students are more apparent.

While it is important to begin with your personal experience when developing an interruption mindset, don’t forget to think about the diverse experiences your students bring as well! Difference in experience between teacher and student can be a great starting point for discussing how socio-structural features impacts different people in unique ways!
Examples of Moments For Interruption

Using the community-minded application of critical thinking, collaboration, and the critical appraisal of information sources as key attributes of an engaged, democratic citizen, the following are examples of moments for interruption:

**Critical Thinking**

Scenario: During a lesson about multiplying 3-digit numerals, a few students continually complain about how long it takes and wished they could use a calculator.

Socio-structural feature to illuminate: Social acceleration

Interruption: The teacher pauses the lesson and asks the students why they wish they could do the work faster. The teacher probes the rest of the class for 5-minutes about why critical thinking is important and how doing things ‘fast’ is not always conducive to critical thinking; technology is part of our lives and we have to learn to its best to use and not use it.

**Collaboration**

Scenario: A teacher is explaining a group project to an 11th grade History. This is the first time students are hearing of the project and will be assigned groups.

Socio-structural feature to illuminate: Digital media and technology lending itself to individual rather than collaborative work.

Interruption: After assigning groups, the teacher asks the students to consider the benefits/drawbacks to online collaboration vs. in-person collaboration. Student’s journal for 3-minutes before discussing the question in their new groups. The teacher circulates to small groups, emphasizing the importance of thinking about what kinds of collaboration are best facilitated online vs. in-person.

**Appraisal of Information Sources**

Scenario: A middle school science teacher is teaching about the solar system.

Socio-structural feature to illuminate: Increased and immediate access to vast amounts of information through technology

Interruption: After telling the class about Copernicus and his heliocentric model of the solar system, the teacher pulls up a picture of Ptolomy’s geocentric model (with the Earth at the center). The teacher pauses instruction to talk about that while it seems silly today, many people believed Ptolomy over Copernicus. The teacher leads a 5-minute discussion on what goes into a person labeling something as ‘accurate’ information.

*Start with skills or values you think your students need to be engaged, democratic citizens in the 21st Century and go from there! Don’t be afraid to mess up – if the interruption doesn’t go well, reflect on why and adjust your actions for next time!*
Appendix F: Journaling Resources

**Interruption Mindset**

Journaling to get Started
In developing an interruption mindset, a teacher must adapt the mindset to their personal identity as a teacher and NOT the other way around. Journaling is a useful tool for purposeful reflection on your personal experiences. Insights about yourself and your teaching practice gained through reflection are your raw materials that an interruption mindset will be built out of.

**Why is Journaling Useful?**
Social theorist and education scholar John Dewey understood human experience is built around two interrelated questions: What are the meanings of our actions? And, from where do we develop our belief? These two questions are linked in a cyclical relationship of our beliefs informing our actions, and the experienced outcomes of our actions informing our beliefs.

If we passively reflect on our experience (or do not reflect at all) we develop habits. For a teacher to innovate their teaching practice past their developed habits, they must purposefully reflect on their experience, contemplate how their experience informs their beliefs (or changes their beliefs), and channel new or adjusted beliefs in their instructional practice.

Journaling is not the only way to facilitate purposeful reflection on your experience. Some people meditate, video blog, or participate in group reflection. If journaling doesn’t feel quite right, don’t give up! Explore other ways to purposefully reflect.
Journaling Two-Ways

Below are guides for two versions of journaling: First Approach and Lightning. Each involve different aspects of developing an interruption mindset. The guiding questions and prompts from the guides (found on separate documents) are not solely applicable to journaling and can be utilized for any kind of reflection activity.

**First Approach Journaling**

*First Approach* journaling is meant as a foundation step in your journey to interrupting threats to your students learning how to embody community-minded, democratic values in their actions.

Journaling can be done with physical pen and paper or on a computer (depending on your preference). If you’re new to journaling, start with sustaining undistracted journaling in 10-minute increments (this will feel longer than you think!), As it becomes more natural, extend the length of your sessions as you see fit. If you feel your mind wander, acknowledge (don’t judge!) that you’re distracted, and bring your attention back to your journal. Pair journaling with activities you find pleasurable, like listening to a record, a cup or glass of your favorite beverage, or a tasty snack.

Over the next few weeks or months, set aside time for short journaling sessions, using the *First Approach Guiding Questions* (separate document). Feel free to spend multiple journaling sessions on the same questions, moving on to the next set at your own pace.

**Lightning Journaling**

*Lightning Journaling* is meant for teachers who are ready to attempt interruptions during their instruction. These journaling prompts do not change and aim to allow a teacher to quickly prepare for/reflect on an interruption.

Spend no more than 5-minutes journaling! Set a timer! Your journaling here should be quick thoughts about how you want things to go or how things went; this should not feel like a stressful time-waster! Just brief moments of reflection at the beginning and end of your day.

Consult the *Lightning Journal Prompts* (separate document) about what to write about relating to your interruptions for promoting democratic values. Journaling can be done in a physical notebook or in a document on a computer. If you’re unsure of your preferred medium, experiment with both to see which suits you more.

Feel encouraged to customize your journaling process/routine! These exploratory activities should be enjoyable and exciting. They’re opportunities creatively innovative something which you know more than anyone else about—your instructional practice and your classroom culture!
First Approach Guiding Questions

Starting with #1, use the following guiding questions for journaling sessions (starting with 10-minutes at a time if you’re inexperienced with journaling). Use the main questions and sub-questions to facilitate your self-exploration, answering as much or as little of each question as you feel appropriate. Only reflect on one set of questions per journaling session.

If you feel stuck, re-read the questions and then return to writing. Move on to each successive set of questions at your own pace. Try starting with journaling sessions once a week, and adjust to find a personal preference for frequency.

1. What are socio-structural features?
   o How would you define them? Do certain features seem particularly threatening to democratic values?
   o If you’re stuck, start thinking about how digital media and technology (smartphones, etc.) has led to a transformation in how we socially interact with one another.

2. How can socio-structural features discourage students from embodying democratic values like critical thinking, responsible dissent, and collaboration towards community-minded progress?
   o How do socio-structural features impact the terms in which we interact with one another? When does critical thinking or collaboration encourage thinking about the needs of an individual over the needs of the community? What is at stake if a student grows up to value self-interests over community-interests?

3. Are there any instances in your K12 educational experience (either as a teacher or from childhood as a student) that, now reflecting back, you can see the presence of a socio-structural feature threatening democratic values?
   o What was the feature? How did it manifest? What non-democratic lesson or value may the students involved internalized? How is that lesson or value detrimental to developing community-minded values?

4. Reflect on your experience in your past few months of teaching – can you see any potential opportunities for illuminating a socio-structural feature to your students?
   o What was happening at the time? How could your actions or the actions of your students relate to a socio-structural threat to democratic values? How might you illuminate the relationship to your students?

5. In your last few days of teaching, think of and reflect on a potential moment for interruption.
   o What was the moment? What socio-structural feature could you have illuminated? If you had interrupted the moment, what could a 5-minute discussion or activity have looked like? How could you make it an engaging experience for your students?
Lightning Journaling Prompts

Lightning journaling is for teachers seeking quick opportunities to reflect on their interruption mindset in action! There are two sets of prompts: Before School and After School. Lightning journaling sessions are intended to occur as close to just-before of just-after school as possible (you want fresh memories!) and should last NO MORE THAN 5-minutes. Don’t feel as if you need to lightning journal every day; start with once a week and adjust from there!

Once you get in a good rhythm and feel comfortable, you’re encouraged to customize your prompts and what you use lightning journaling to reflect on. Also, pay attention if you feel you get more out of either Before School or After School lightning journaling; if either one isn’t enjoyable, only lightning journal at the time of day where you feel you’re getting the greatest return for your effort.

**Before School Lightning Journal Prompts**
- If you have pre-planned an interruption or have an idea for one today:
  - During which subject/time of the day is the interruption intended to occur?
  - What socio-structural feature are you illuminating?
  - How are you relating it the lesson/activity you are interruption?
  - What will the 5-minute discussion/activity look like?
- If you have not pre-planned or have an idea for an interruption:
  - What subject/time of the day will you look for potential moments for interruption?
  - Why do you think this subject/time of the day would be a good time for this?
  - What socio-structural features to you predict may be applicable?

**After School Lightning Journal Prompts**
- If you had pre-planned an interruption or have an idea for one today:
  - How did the interruption go overall?
  - How well do you think your students responded? Why do you think that?
  - What aspects of the interruption might you adjust for next time?
  - What aspects of the interruption went particularly well?
- If you have not pre-planned or have an idea for an interruption:
  - Describe any potential moments for interruptions you observed
  - What socio-structural feature could have been illuminating?
  - How could you have related it to the lesson/activity?
  - What might the 5-minute discussion/activity look like?
Appendix G: Track Your Interruptions with an Anchor Chart

**Track Your Interruptions with an Anchor Chart**

Anchor charts are visually conspicuous sources of information that are always accessible to students. Traditionally they are used for academic content, such as conventions for using punctuation or a map of the United States.

Teachers can use anchor charts (of which many already do) to create a visual reminder of moments of interruption had in the classroom throughout the school term. This will give a reference point for students to provide continuity of mission across moments for interruption.

**Aim for Minimal Necessary Time and Effort for Upkeep**

Applying an interruption mindset towards one’s instructional practice is meant to be as unobtrusive to a teacher’s already crowded schedule. An anchor chart for tracking interruptions should be made out of materials readily available to the teacher at school. It could be a piece of chart paper, a segment of bulletin board paper, or even a lined-off portion of the dry-erase board.

After each interruption, add it to your anchor chart as part of a running list. The amount of information/details you include is up to you. Be sure to spend time setting up the function of the anchor chart with your students, and you’re encouraged to involve students in the process of adding to the list.

Experiment with creating a digital anchor chart! If you are a teacher who already uses online file sharing like Google Docs or SkyDrive as part of your instructional practice, create a shared document with students where interruptions are added.
Below are three examples of what anchor charts tracking a classroom’s interruptions could look like. Each have unique formats and amounts of information, but each are still centered around a running list of interruptions occurring in a given classroom.

Experiment with ways you can reference your anchor chart between interruptions. For example, you could base a writing prompt around relating the choices a character made in a story to one of the interruptions listed on the anchor chart.

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Appendix H: Develop your Mindset Out Loud

Purposeful reflection on past personal experience is a fundamental part of developing an interruption mindset. You may also find talking with others about your reflections and identified moments for interruption out loud may be beneficial. Sharing ideas with others out loud makes us process information differently, in no small part because others can give you valuable feedback! Verbalizing aspects of your interruptions mindset will benefit you with their feedback and benefit others in exposing them to the idea of an interruption mindset.

Who Should We Speak With?
Anyone and everyone you think could provide you with valuable feedback and/or might benefit from developing their own interruption mindset. This includes (but not limited to) co-workers, your students, or personal friends/family.

Below are some examples of ways you can create productive conversations around interruption mindset:

**With Your Co-Workers:** If a few teachers at your school show interest in developing an interruption mindset, schedule monthly meetings share how its going and give one another feedback.

**With Your Students:** Set assign 20-30 minutes of instructional time to tell your student about what an interruption mindset is and why you are developing one

**With Personal Friends/Family:** Next time someone asks, ‘How’s work?’ attempt to explain your efforts around interruption mindset. Ask if they understand and which things you said are unclear.

You’re encouraged to try journaling about your experiences developing your mindsets out loud! What was beneficial? What aspects of interruption mindset are better developed individually?