OPENING CLASSROOMS:
INSTRUCTIONAL PRACTICES AND STUDENT EXPERIENCE AS PREDICTORS OF OPEN CLASSROOM
CLIMATE FOR DISCUSSION

by

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Abstract

Since the 1970’s, work on civic education has identified the importance of open classroom climate for discussion (OCC), or “the extent to which students experience their classrooms as places to investigate issues and explore their opinions and those of their peers,” as one of the most effective practices to support political socialization, build civic knowledge, and develop citizenship. Further, there is evidence that access to OCC is not equitably distributed, and that urban or underprivileged students are most likely to miss out. While policy could play a role in increasing access to OCC, relatively little work exists on the determinants of open classroom climates themselves, especially the role of teacher instructional practices. This study seeks to identify the relationships between teacher instructional practices and OCC in secondary social studies settings using a mixed methods explanatory sequential design. First, I use the 1999 IEA CivEd dataset in order to identify which teacher instructional practices are the strongest predictors of student perceptions of an open classroom climate for discussion. Second, I examine whether and to what extent these effects are moderated by students’ socioeconomic backgrounds. Overall, I find that teacher practices can and do predict student perceptions of OCC, and that some of these relationships vary by student socioeconomic background. Finally, I undertake a qualitative study in Miami Dade County Public Schools to explore how the behaviors, relationships, and beliefs of students and teachers within classrooms define when and how teacher practices allow an open climate to manifest. I find that before teachers can focus on using instructional practice to foster OCC, they must separately create an environment in which students feel safe and respected.
Primary Reader and Advisor: Ashley Rogers Berner

Secondary Reader: Stephen Morgan
Dedication

In memory of Randy F. Siegel

1934 – 2020

Career educator, devoted grandfather.
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Chapter 1: Introduction

A primary purpose of public education has always been to support the development of future generations of informed and engaged citizens, in order to ensure the continued health and functionality of our democratic society. In addition to teaching the literacy and numeracy skills important for economic success, schools are also tasked with socializing young people into becoming productive and cooperative members of the public sphere. In our present moment of increasing political polarization, there has been a resurgent interest in civic education as an important tool for protecting democratic values. For instance, the 2018 Brookings Institution Brown Center Report on American Education focused on the current state of civics education in light of the heightened political awareness in schools. One clear finding from the Report is the prevalence of including “discussion of current events” as an approach to social studies and civic education (Hansen et al., 2018). In the United States, all 50 states and the District of Columbia have adopted this mandate into standards and curricula\(^1\) (Hansen et al., 2018). While discussion of current events is often cited as a strong predictor of civic outcomes and even a “proven practice” according to the Guardian of Democracy: Civic Mission of Schools report, the role of discussion in producing civic knowledge is mediated by the importance of an open classroom climate for discussion (OCC) (Jonathan et al., 2011).

\(^1\) They find that the phrase “Discussion of [current/present/contemporary/today’s] [events/issues]” was present in K-12 state social studies standards or state civics curriculum frameworks in all 51 cases.
Open Classroom Climate

The concept of an “open classroom” is often referred to by a variety of terms across the literature, including “democratic dialogue,” “open discussion/dialogue,” “authentic discussion,” and others. While researchers use different specific definitions for this phenomenon, they all point to a central student experience – conversations between students, facilitated by a teacher, where multiple perspectives and opinions are presented and welcomed.

In this dissertation, I use the construct defined by the IEA studies for their open classroom index. The IEA’s index includes six items to which students are asked to respond “never,” “rarely,” “sometimes,” or “often.” While these items refer to “teachers” and “class” generally rather than social studies courses specifically, the prompt does specify for students to “think especially about classes in history, civics/ citizenship, or social studies,” and thus the index should primarily measure students’ perceptions of the climate in their social studies classrooms, or at least include their social studies class and teacher within an overall perception of climate.

These six statements to which students are asked to respond are:

- Students feel free to disagree openly with their teachers about political and social issues during class.
- Students are encouraged to make up their own minds about issues.
- Teachers respect our opinions and encourage us to express them during class.
- Students feel free to express opinions in class even when their opinions are different from most of the other students.
• Teachers encourage us to discuss political or social issues about which people have different opinions.

• Teachers present several sides of an issue when explaining it in class.

It is important to note that some of these items ask about what teachers do, while others ask about how students feel. As a result, teacher practices and student perceptions emerge as the two primary determinants of OCC. Open classroom climate is not only a function of the methods employed by teachers, or the use of discussion as a pedagogical tool, but it is also dependent upon student perception and feelings about the classroom social climate. Though teachers may aim to foster an open classroom, they may not always be successful. They must rely upon the buy-in and acceptance of students, as with all instruction.

Previous research on this topic has sought to define fostering OCC as simply an instructional practice (Godfrey & Grayman, 2014; Martens & Gainous, 2013). However, research has yet to meaningfully tackle how teachers effectively organize instruction in order to create such a climate. In fact, ample evidence suggests that discussion practices are neither simple to implement nor necessarily effective at making students comfortable with controversy, even when well designed (Hemmings, 2000; Kahne et al., 2000). A parallel practitioner-focused literature on open classrooms is awash with suggestions for how to incorporate regular discussion of controversial issues into classroom practice (Brookfield & Preskill, 1999; Cohen, 1986; Dillon, 1994; Henning, 2008; Hess, 2009; Kunzman, 2006a).

Overall, the above literature suggests that teachers find facilitating discussions to be difficult, and often feel unprepared or unable to facilitate discussions in the “right” way. As a
results, open discussions of controversial issues occur rarely in real classrooms, despite teachers’ interest and attempts to use them as instructional tools (Kahne et al., 2000).

As such, it seems reasonable to ask not just what the experience of OCC does for students, but how and where these climates arise. What teachers do in their classrooms to try to facilitate controversy, and whether these strategies are effective mechanisms for fostering open discussion, is still unclear. This study considers both the individual and also the social factors engaged in classroom climates, with specific attention paid to the distinct role that each might play.

**Predictors of Open Classroom Climate**

Open classrooms are an important indicator of positive civic formation. Numerous studies using the IEA Civic Education Study (CivEd) and International Civics and Citizenship Studies (ICCS) datasets have linked open classroom climates to positive civic outcomes, including civic knowledge, predicted political participation, and positive attitudes about diversity and democratic values (Alivernini & Manganelli, 2011; Campbell, 2007, 2008; Edwards, 2012; Kennedy, 2012; Knowles & McCafferty-Wright, 2015; Maiello et al., 2003; Quintelier & Hooghe, 2013; Torney-Purta, Lehmann, et al., 2001; Torney-Purta et al., 2008; Torney-Purta & Barber, 2005; Treviño et al., 2017; Zhang et al., 2012). However, it is only recently that researchers have begun to explore what predicts open classroom environments themselves. Recent literature using the 2009 IEA International Civic and Citizenship Education Study (ICCS 2009), as well as a handful of other studies focused on similar constructs to the IEA open
classroom climate index, have begun to tease out useful predictors at the individual, classroom, and school level.

*Individual Effects*

Prior research using a variety of data finds that a number of individual student characteristics, not only demographics but also malleable factors such as efficacy and achievement, are strongly associated with perceptions of open classroom climate. Claes, Maurissen and Havermans (2017) conducted multi-level analysis of the ICCS 2009 data from 22 European countries and found that boys and students of lower-socioeconomic status consistently report lower levels of OCC. Students with low self-efficacy are also less likely to perceive their classrooms as open. In addition, outside political discussion with friends and family and community engagement are both positively correlated with OCC. These findings are supported by several other studies of the same data that explore predictors of OCC using different methods and different country samples (Kuang et al., 2018; Reichert et al., 2018).

In addition to the ICCS 2009 data, Kelly (2008) looked at a sample of U.S. English classes from the National Research Center on English Learning and Achievement (CELA) Partnership for Literacy study in order to identify how individual and classroom-composite characteristics influence engagement in classroom discourse and dialogue. Although his constructs are based on observational rather than survey data, the findings are in line with those from the ICCS studies, in that students with higher socioeconomic status (SES) were about 30% more likely to participate in classroom discourse, and 42% more likely to do so when higher-order thinking
was involved. He also found that the strongest predictor of participation is initial achievement, with higher-achieving students more likely to participate.

Finally, drawing from the qualitative literature, Hadjioannou’s (2007) rigorous case study of a U.S. 5th-grade classroom that was frequently the site of what she calls “authentic discussions” identified several key factors that make such dialogue possible. At the individual level, this included student beliefs about the value and importance of engaging with and participating in discussions, suggesting that a predisposition to dialogue, whether innate or intentionally fostered by the teacher, is an important factor in student perceptions of OCC.

Classroom Effects

At the classroom level, we find that many of these individual predictors aggregate to whole-class predictors of OCC, including efficacy, achievement, and SES. For example, Claes, Maurissen and Havermans (2017) found that there was also an aggregate efficacy effect, meaning that in classrooms where more students believe they are capable of participating in civic life, all students perceive the classroom as more open. In terms of classroom demographics, Campbell (2007) found that more diverse classrooms led to lower perceptions of OCC, and that students’ perceptions of OCC increased as a greater percentage of students in the classroom were of the same race as the respondent. Kelly (2008) similarly found that while composite classroom achievement levels were unrelated to the overall frequency of discourse, predominantly black & low-SES classrooms experienced structured talk less frequently between teachers and students overall, even after adjusting for individual student propensity to participate. He also found that students tended to conform to stereotypical race and gender
roles, such as boys speaking more often and Asian students speaking less often relative to other students in the classroom. This is one area where survey and observational data diverge. The role of gender in classroom discussions is complex, in that boys consistently perceive their classrooms as less open, even while participating in discussions more frequently than their female counterparts.

Classroom effects are often better defined and captured in qualitative analyses. Researchers and practitioners alike have long known that interpersonal relationships between members of the classroom community – including students, teachers, and others – are central to shaping the classroom environment (Hirschy & Wilson, 2002; Raider-Roth, 2004, 2005b, 2005a). Hadjioannou (2007) also pointed to relationships as a central feature of her open classroom environment, arguing that students need to trust that all participants will be respectful and receptive as a precondition of open discussions taking place, and that it is also important that the teacher be willing to meaningfully and personally engage by sharing personal opinions, experiences, and values.

School Effects

School environments also play a role in fostering OCC beyond supporting teacher autonomy, and more recent research using the ICCS 2009 data has begun to explore how school contextual factors are related to open classroom climate. Reichert, Chen and Torney-Purta (2018) found that in Scandinavian countries OCC is often, but not always, related to school-level democratic climate and student empowerment. Kuang, Kennedy and Mok (2018)
looked at the Asian subsample (Chinese Taipei, Hong Kong, Indonesia, South Korea and Thailand) and found that while school-level contexts vary significantly in their relationships to OCC across countries, positive student perception of student-teacher relationships at the school is a consistently strong predictor of OCC. Maurissen, Claes and Barber (2018) also found in the European country samples that positive student-teacher relationships and collective efficacy were significant predictors of OCC at both the individual and school level. Finally, Quintelier and Hooghe (2013) found across all 35 participating countries that students’ and principals’ perceptions of student influence on decisions about the school, as well as student perceptions of the quality of student-teacher relationships at the school, and teacher perceptions about students’ relationships with one another at the school level, were all positively correlated with OCC.

**Teacher Influence on Open Classroom Climate**

Teachers themselves are key in fostering an open classroom climate, and while practitioner-facing literature focuses on teacher practices to moderate and manage discussions, the empirical literature has focused primarily on teacher characteristics. Reichert, Chen and Torney-Purta (2018) conducted a latent class analysis of Scandinavian countries using the 2009 ICCS data in order to identify student perceptions of both OCC and Confidence in Participation at School. Groups that report high perceptions of OCC were associated with teachers who are confident in their teaching abilities, who participate in school governance, and who are female. Hadjioannou (2007) discussed the importance of teacher beliefs in defining instructional practice because they inform decision-making, determine how they understand and learn from...
experiences, and provide a framework for using judgement in the classroom. Gainous and Martens (2016) also found that teacher beliefs predict OCC in their analysis of the 1999 IEA CivEd U.S. data, in which they showed that teachers with more liberal political views produced better scores on individual OCC items as well as on the index as a whole. This makes logical sense because fostering an OCC, by definition, requires teachers to relinquish control and precludes them from taking an authoritarian stance; control and authoritarianism are traits associated with political conservatism. As McQuillan (2005) described, empowering students allows them to take ownership over and responsibility for their own learning, directly engaging them in the technology of instruction. For him, a disempowered student is a disengaged student, and so the simultaneous acts of engaging students in discussion and turning power over to them in the classroom through open pedagogy go hand in hand. In his words, the ideal form for an open classroom dialogue is “a conversation in which everyone feels safe to speak and all voices are respected” (McQuillan, 2005, p. 645). This is not an easy balance for a teacher to strike, and it requires both a willingness to take risks by relinquishing control of the conversation and also a school environment in which the teacher feels they have the instructional freedom and time to implement meaningful discussion in the classroom. This is also reflected in Hadjioannou’s (2007) argument that teacher decision-making power is crucial to allow them to employ practices that matter to them and present subject matter that they care about and want to engage with.

Two studies directly address teacher practices in relation to OCC. Gainous and Martens (2012) used the 1999 IEA CivEd U.S. data to show that instructional breadth, or using lots of
different teaching techniques, has a negative effect on student knowledge but positive effects on political efficacy after adjusting for OCC. In subsequent work with the same sample, Martens and Gainous (2013) used open classrooms as a teaching practice to predict student outcomes, and showed not only that this scenario occurs in combination with other types of instructional methods, but also that all other methods are most effective when they are paired with an open classroom environment. Thus, while teacher practices form one part of the mechanisms that generate OCC, the question remains what the impact of those practices is on the classroom climate itself.

Because open classrooms are difficult to implement and because they require a willingness on the part of the teacher to depart from certain norms, not all teachers desire or are able to create open classrooms for their students. The literature suggests what we might expect: highly-resourced students are more likely to receive open instruction, and high performing schools are more likely to host open classrooms (Conover & Searing, 2000; Dull & Murrow, 2008). There is also evidence that opportunities for dialogue and higher order thinking are highly infrequent overall (Kahne et al., 2000). In addition to individual teacher choices about which instructional methods to use, students’ cultural norms or resources at home can lead to underpreparedness for class discussion, or expectations for how school should look and preferences for certain teaching practices that may make some groups more open to class discussion than others (Hemmings, 2000; Uekawa et al., 2007). Finally, school policies and the professional constraints of teachers may foster environments in which teachers are deeply disincentivized from pursuing open classroom environments (Dillon, 1994; Onosko, 1991). Thus,
while teachers may seek to implement open classrooms equitably, the social and institutional structures around them may lead to inequitable distribution of cases where open classrooms are possible and where we observe their implementation.

While challenges persist in terms of equitably distributing access to open classroom environments across students and schools, teachers can play an important role in determining whether open classrooms climates are possible and how they impact students. By better understanding what creates and sustains an open classroom climate, we can bring these positive outcomes to more students. While we have a strong understanding of the importance of open classrooms for civic development and who has access to them, work on the determinants of open classroom climates themselves is relatively new and underdeveloped. Therefore, the purpose of this study is to identify classroom-level determinates of an open classroom climate for discussion in secondary social studies settings.

**Structure of this Dissertation**

This dissertation takes a three-paper format, in which I present three studies, each of which takes a separate approach to the question, “How do teachers’ instructional practices relate to student perceptions of open classroom climate?” I undertake this investigation using a modified explanatory sequential mixed methods design, first to describe quantitatively the classroom-level characteristics associated with an open climate, and then qualitatively in order to understand how these characteristics influence student perceptions and participation within their classrooms. Quantitative data comes from the United States sample of the 1999 IEA Civic
Education Study, and qualitative data was collected in Miami-Dade County Public Schools during the 2019-2020 school year.

In the first study, I consider which teacher instructional practices are the most strongly associated with student perceptions of an open classroom climate for discussion. I conduct this analysis using hierarchical linear models to measure the relationships between classroom-level measures of instruction and student-level perceptions of OCC. I find that while discussion of current events is the only practice strongly associated with the OCC scale as a whole, some other student-centered practices including debate, simulation, and reading multiple sources are associated with specific OCC items.

In the second study, I examine the relationships identified in the prior chapter, and consider whether and to what extent these effects are moderated by student socioeconomic status, specifically access to educational resources at home including books, newspapers, and mothers’ education level. I find that in some cases these practices have variable relationships with students’ perceptions of OCC based on these characteristics, and that while discussion of current events appears to have an especially positive relationship with OCC for lower-SES students, other classroom activities that appear to be positively related to OCC items overall actually have null-to-negative associations for those students lowest on the SES scale.

Finally, Chapter 4 qualitatively addresses how the behaviors, relationships, and beliefs of students and teachers within classrooms define when and how teacher practices allow an open climate to manifest. I look at three cases of teachers implementing discussion activities in different contexts, and how those relate to students’ feelings about the classroom climate and
teachers’ intentions for instruction. I find that while many of the subscale items do appear to manifest by virtue of these instructional practices, the overall climate of respect, care, and safety requires a strong set of positive relationships among all members of the classroom community.

The last chapter of the dissertation provides overall commentary on how the studies fit together and discusses the contribution to the research literature and to education policy. First, I provide an overall justification for the for the three studies and my methodological approach. I next provide a summary of each study including the overall argument, findings, and implications. Finally, I discuss the broad policy implications of all the studies taken together and directions for future research suggested by the findings of this dissertation.
Chapter 2: Teaching for Citizenship: Instructional Practices and Open Classroom Climate

Since the 1970’s, work on civic education has identified the importance of open classroom climate for discussion (OCC), or “the extent to which students experience their classrooms as places to investigate issues and explore their opinions and those of their peers,” as one of the most important predictors of positive political socialization, building civic knowledge, and citizenship development (IEA Civic Education Study Technical Report, 2004). The first IEA Civic Education study in 1971 used a four-item index designed to measure “independence of opinion encouraged in the classroom;” the IEA built upon this concept in subsequent international studies in 1999, 2009, and 2016. Across time, OCC has consistently been shown to be one of the strongest predictors of positive civic outcomes such as civic knowledge, political efficacy, student attitudes towards democracy and the rights of others, and intention to vote (Alivernini & Manganelli, 2011; Campbell, 2007, 2008; Caponera & Losito, 2011; Edwards, 2012; Godfrey & Grayman, 2014; Kennedy, 2012; Knowles & McCafferty-Wright, 2015; Maiello et al., 2003; Quintelier & Hooghe, 2013; Torney-Purta et al., 2008; Torney-Purta, Hahn, et al., 2001; Torney-Purta, Lehmann, et al., 2001; Torney-Purta & Barber, 2005, p.; Treviño et al., 2017; Zhang et al., 2012).

Despite this strong evidence in favor of OCC as an important component of civic development in schools, research into what fosters such a classroom climate is relatively new. Increasingly, evidence points to the importance of individual factors such as students’ self-efficacy, and of contextual factors such as positive student-teacher relationships at the school level, in predicting student perceptions of open classroom climate (Claes et al., 2017; Kuang et
al., 2018, 2018; Maurissen et al., 2018; Reichert et al., 2018). However, because classroom environment is fostered at the classroom rather than the individual level, and exists between teachers and the students within their classes, it seems crucial to understand how the characteristics of a classroom are associated with OCC, as well. Much less is known about how classroom makeup, teachers’ beliefs and behaviors, and instruction are associated with open classrooms, but what evidence does exist suggests that the interpersonal relationships present at the classroom level are an important component of how students perceive openness for discussion (Campbell, 2007; Hadjioannou, 2007; Hirschy & Wilson, 2002; Kelly, 2008; Raider-Roth, 2005b, 2005a).

But it is not only who is in the classroom that defines its climate, but also what instructional activities take place habitually there. As such, this study will examine whether and to what extent the instructional activities taking place within a classroom are predictive of students’ perceptions of open classroom climate for discussion. This study makes an important contribution to our understanding of the classroom-level determinants of OCC, as well as the ways in which classroom-level contexts shape student experiences that may in turn impact their civic development and political socialization.

**Teacher Practices and Civic Development**

There are many ways in which teachers attempt to make space for discussion in their classrooms, and many ways in which those discussions may manifest or be organized. Which methods teachers use are typically influenced by teachers’ own beliefs and experiences (Subedi, 2008; Washington & Humphries, 2011). This can lead to widely variable experiences,
and overall tends to mean that opportunities for authentic and open discussion are relatively rare in American schools (Kahne et al., 2000). However, thoughtful and well thought-out instructional design, which strives to include diverse participant voices and careful facilitation of conversations, plays an important role in creating positive opportunities for civic learning (Dryzek et al., 2019).

A number of rigorous, empirical studies support the claim that discussion improves student outcomes, usually supported by a theoretical underpinning which asserts that discussion deepens learning by requiring that students take charge of their own learning, rather than relying upon the authority of the teacher or other thinkers (Warner & Bruschke, 2001). Hess and Posselt (2002) undertook a mixed methods study, in which they found that students who engaged in classroom discussion improved in their ability and willingness to engage in discussion of public issues with their classmates. However, they did not explore its effect on content knowledge or other civic skills. Van Camp and Baugh (2016) used a pre-post design to assess whether student civic knowledge and engagement increased after taking a class focused on discussion of contemporary social issues. They found significant increases in almost all measures of student engagement and knowledge, and students self-reported being better able to “consider alternative viewpoints, appreciate diversity, monitor and understand current events, and think critically” (Van Camp & Baugh, 2016, p. 24).

There is also experimental evidence supporting the impact of discussion on knowledge-building. Johnson, Anderman, Milne, Klenk and Harris (1994) compared students who studied an issue and discussed it with those who were exposed to the same background information (a
video of a news program) but did not discuss it. They found that those who participated in the discussion performed better on a current events test. Similarly, Fishkin and Farrar (2005) found that deliberative polls, in which a random group of adults discusses a community issue in a structured format, increased knowledge relative to those who did not participate, and that these knowledge gains were sustained over time. Thus, there is strong evidence for the role that facilitated discussion can play in increasing knowledge about political or civic content, cultivating civic attitudes, and developing skills necessary for civic engagement and informed participation.

In addition to the relationship between open classrooms and positive civic outcomes for students, teacher instructional practices, especially those typically associated with experiential or student-centered learning and the social studies, are often associated with the same outcomes. The correlation between the outcomes predicted by OCC and those predicted by student-centered instructional practices provides some preliminary evidence to support the hypothesis that these instructional practices are positively associated with OCC. Importantly, however, there have not been any major studies that seek to identify whether these practices influence OCC, which in turn improves student outcomes, or if teacher practices and OCC are jointly correlated with student outcomes via other confounding factors.

Here, I specifically look at four types of instructional practice, different varieties of discussion, most commonly associated with opportunities for meaningful student dialogue in the social studies, including debate, roleplay and simulation, collaborative learning, and inquiry-based instruction. Each of these instructional methods, when implemented well, is able to
foster specific aspects of an open classroom climate. The nuances between different types of discussion are discussed in more detail below.

**Debate & Discussion of Current Events**

Debate as both an academic extracurricular activity and a pedagogical tool has been the subject of a significant line of research. In general, debate is seen as an activity that supports students in both developing academic skills and citizenship identity (Mirra et al., 2016; Youniss et al., 1997). Open discussion or debate provides students with the opportunity to present and defend an opinion or a solution to a posed problem. While these types of interactions can range from impromptu and unstructured classroom discussion to highly structured and intensively researched policy debates, I will follow the lead of other authors and focus on the practice of debate, rather than focusing overly on the particulars of rules or style (Warner & Bruschke, 2001).

Structured debate requires extensive research and preparation, asks students to be able to defend a position that may not be in line with their own, and focuses on developing the same academic skills necessary for a successful classroom discussion. Mezuk, Bondarenko, Smith and Tucker (2011) posited that policy debate trains students in six academic skills, including “(1) reading and interpreting complex non-fiction text, (2) developing and writing arguments based on these texts, (3) verbally expressing and defending evidence-based claims, (4) listening to and interpreting opponents’ arguments, (5) collaborating with peers, and (6) time-management” (p. 624). Billig (1987) noted that debate requires students to recognize both sides of a question, resists a tendency toward absolutist conclusions, requires thorough
questioning of propositions, and develops the value of continually challenging ideas. While the
different points of view present in a debate may lead to a competitive atmosphere, Warner and
Bruschke (2001) pointed out that competitive activities can create dialogues across groups that
would not otherwise take place and motivate otherwise unmotivated students.

The empirical evidence for the independent value of debate considers a wide range of
student outcomes that are similar to those predicted by OCC, including knowledge and civic
skills, and other positive non-cognitive outcomes. Mezuk et al (2011) used matching methods
to approximate experimental design, and found that debate was associated with an increased
likelihood of graduating high school, higher ACT scores, and higher GPA, as well as better
connection to school in general. A number of studies also linked debate to improved critical
thinking (Allen et al., 1999). In terms of soft skills, Winkler (2011) found that participation in
extracurricular debate increased student engagement and improved a number of behavioral
measures.

Debate is one of the most common ways that teachers incorporate current events and
moral or ethical issues into the classroom, since “all policy debates invoke questions of what
the current social order is like and how it can be improved” (Warner & Bruschke, 2001, p. 6).
Frequent, open, and well-moderated discussion of current events has been shown to have a
significant impact on student civic knowledge, appreciation of diverse viewpoints, and
acceptance of the democratic process (Campbell, 2008; Hess, 2009; Hess & Posselt, 2002; Mutz,
2006). Niemi and Junn (1998) found that including regular discussion of current events
increased the effects of civics coursework on the NAEP civics assessment from 4% to 11%.
Other research has shown that current events discussion is associated with improved critical thinking and increased interest in current events outside of school, as well as empowerment, efficacy, and improved interpersonal communication (Bellon, 2000; Campbell, 2008; Hess, 2009; Mirra et al., 2016).

Because of its focus on articulating an argument and exploring multiple sides of the same issues, debate may be associated with OCC by allowing students to practice healthy disagreement, normalizing the presentation and exploration of multiple sides of an issue, and recognizing social or political issues about which people have different opinions and how there may be rational arguments that result in different conclusions.

Simulation

Much of the literature on simulations is heavily practitioner-focused, centers around pedagogical strategies of implementation, and rests upon author experiences with a single case or two (Asal, 2005; Asal & Blake, 2006; Wright-Maley, 2015b). One way simulations appear in the literature is through studies on experiential learning more generally, which is related to improved engagement, critical thinking and analysis, and appreciation of diverse viewpoints (Dack et al., 2016). Simulations create situations in which students can practice skills they might use outside the classroom, can increase participation and engagement, and may allow risk-taking in a safe environment (DeLeon, 2008).

While the consensus among scholars in this area is generally that simulations are not the most effective strategy for promoting rote learning of content knowledge, they are effective tools for fostering engagement, complex thinking and problem-solving, and soft skills
development (Wright-Maley, 2015a). However, there is still evidence that they do have some impact on student knowledge. For example, Niemi and Junn (1998) found a significant and positive relationship between participation in social studies simulations including “mock elections, councils or trials” and political knowledge. They found that participation is related to a 2.6% increase in overall knowledge, even after accounting for individual achievement and characteristics. Participation also led to greater interest in the study of government, college aspirations, taking civics, and discussion of current events. They also found that participation had significant positive effects on political attitudes, including trust and efficacy. Frederking (2005) conducted a semi-experimental study comparing American Government courses that did and did not include a simulation of the U.S. Senate. He found that students who participated in the simulations scored significantly better on course exams and rated their own experiences of the course significantly higher than students who had not experienced classroom simulation. There is also evidence that simulation leads to better long-term knowledge retention (Pate & Meteja, 1979; Pierfy, 1977). In one such study, Bernstein and Meizlish (2003) followed students who took part in a simulation of American politics as part of a course on the subject. Three years later, they found that students who had taken part in the simulation were able to recall course content better than students who hadn’t taken part in the simulation.

In terms of soft skills, simulations can provide a sense of accessibility to complex moral or policy problems, and allow students to explore the interests or experiences of others, allowing them to develop more nuanced understanding of complicated phenomena (Colella, 2000; Marsh & Bucy, 2002; W. Parker et al., 2011; Preston & Cottam, 1997; Stephens et al.,
Several studies have found that simulation builds empathy at the individual and global level (Bachen et al., 2012; Byrnes & Kiger, 1990; Ganzler, 2010; Maitles & McKelvie, 2010; A. Pellegrino et al., 2012; Zappile et al., 2017). They also impact efficacy and engagement (Bredemeier & Greenblat, 1981; Ganzler, 2010; Gehlbach, 2011; Gehlbach et al., 2008; Ioannou et al., 2009; Yukhymenko, 2011). Lo (2017) used semi-structured interviews, classroom observation and questionnaires to conduct a qualitative cross-case analysis of the experience of two students participating in a series of in-class political simulations. She found that role play “informed the development of their civic identities” and that authentic simulations helped them link their behavior during class to “how they might participate in politics in real life” (Lo, 2017, pp. 200–201). Finally, there is evidence that simulations appear to reduce discipline problems in the classroom, which may help to create space for OCC (Dunleavy et al., 2009; Wright-Maley, 2015b).

While simulations may not be as common a strategy as discussion, they remain popular in social studies classrooms across the country (Wright-Maley, 2015a). By allowing students to take on roles different from themselves, simulation may enable students to feel more comfortable expressing opinions even when they differ from the rest of the class.

**Collaborative Discourse**

There is an extensive literature which explores the ways in which collaboration improves student learning (Slavin, 2014). However, not all collaboration creates opportunities for student dialogue that we might expect to lead to OCC, and not all collaboration is equally effective. The nature of that collaboration, not only its presence, matters (Felton et al., 2015; Rittenhouse,
Students need explicit instruction in how to engage in useful, cooperative dialogue if they are to build knowledge, rather than merely being given an opportunity to have such conversations (Gillies & Khan, 2009). The types of collaborative-discourse instruction discussed below differ from other types of group work or cooperation, in that they explicitly foster discussions in which students work together to reflectively construct or critique ideas.

Empirical evidence suggests that collaborative reasoning is associated with improved argumentation skills and critical reasoning. For example, Reznitskaya, Archodidou and Kim (2001) compared persuasive essays of fourth- and fifth-grade students who had participated in five weeks of collaborative reasoning discussions with students from classrooms that had not. They found that the students who had participated in collaborative reasoning discussions wrote essays that scored significantly higher on measures of reasoned argumentation, including incidence of arguments, counterarguments, rebuttals, and citations of evidence. Chinn, Anderson and Waggoner (2001) compared reading group discourse among fourth graders, and found that use of collaborative reasoning led to deeper student engagement and higher-level cognitive processes. Importantly, they also found that both high- and low-proficiency students showed increases in use of evidence and elaborating on points, and found no evidence that more talkative students were more aggressive about taking and holding the floor for discussion. Therefore, this may help to mitigate some of the influence of status hierarchies on student participation in discussion. Gillies and Khan (2009) compared elementary classrooms where teachers had been trained to question students in order to challenge thinking and scaffold learning during group work to those where they had not, and found that students in the former
set of classrooms provided more help to one another, and more detailed explanations and justifications of their reasoning during oral interactions. Kuhn and Crowell (2011) randomly assigned middle school classrooms to an intervention that asked them to consider a controversial issue, discuss it in small groups and in a more formal debate, and then write a debriefing essay. The comparison group participated in more traditional, whole-class discussion. The research team assessed students’ persuasive essays across three years after the intervention, and found that students in the treatment group were significantly more likely to develop complex arguments that incorporated multiple perspectives, and that these effects persisted and became stronger over time. They were also able to replicate the findings with a sample from another cohort of students. Overall, their study makes a very strong case in favor of collaborative argumentation in regards to its ability to improve critical reasoning.

This type of collaboration is also associated with improved content knowledge and conceptual understanding. Zohar and Nemet (2002) conducted a quasi-experiment in which ninth-grade science classes in the treatment group were given instructions about argumentation and opportunities to discuss controversies in the practice of human genetics, while the control group was allowed merely to solve traditional human genetics problems. The treatment group performed substantially better on a subsequent knowledge test. While not a true experiment, this study suggests that the opportunity to discuss and debate ideas, including the incorporation of argumentation, can support knowledge acquisition. Felton, Garcia-Mila, Villarroel and Gilabert (2015) used a randomized control trial in a science classroom setting to consider how differences in argumentative discourse related to differences in student learning.
outcomes. The authors found that students arguing to reach a consensus rather than to persuade were more likely to advance each other’s claims, incorporate new ideas or amend their own, and search for ways to integrate opposing views. They also found that this condition resulted in greater content knowledge and better written arguments during post-test (Felton et al., 2015). Similarly, Asterhan and Schwarz (2007) ran an experiment in which pairs of undergraduate students were asked to watch a video on evolution and then to discuss problems related to the theory, and either work together to develop the best solution, or to argue for and against different possible solutions. They found that the collaborative dyads displayed deeper conceptual understanding that persisted longer after the initial discussions.

Considering these effects of collaboration in the classroom, it seems that the effectiveness of collaborative discourse as a pedagogical tool for increasing social studies knowledge and civic development may also lead it to be an effective tool for fostering open classroom climate by encouraging students to respect others’ opinions while also having space to make up their own minds about issues.

*Inquiry-based instruction*

Inquiry based instruction is a pedagogical method that aims to avoid prescriptive approaches to learning by centering instruction around a compelling question and asking students to draw their own conclusions and support them using a variety of evidence (Grant et al., 2015). The inquiry design model includes three core components: a framing question, a variety of source materials, and a summative task that requires students to articulate an argument and support it with evidence (Grant et al., 2017). Although they do not necessarily
center on discussion or verbal dialogue, inquiry-based approaches to social studies do foster many of the same skills and experiences as discussion-based practices, and may also be effective tools for creating an open classroom climate. Like discussion, inquiry gets at many of the concepts and skills at the heart of social studies, including synthesizing information and constructing arguments (National Council for the Social Studies, 2013; National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010). By centering inquiry in the social studies learning process, students are expected to draw their own conclusions from a variety of multiple viewpoints or perspectives, and to learn to apply that knowledge to novel or unexpected situations (Bain, 2005; Bansford et al., 1999; Husbands, 1996). The inquiry process involves students “asking meaningful questions, finding information, drawing conclusions, and reflecting on possible solutions” (Levstik & Barton, 2001, p. 13).

Because inquiry-based instruction in the social studies necessarily requires students to consider multiple perspectives and to articulate and support an evidence-based argument, there is ample opportunity to incorporate a variety of instructional practices and assessment mechanisms that might contribute to an open classroom climate, including things like research projects, persuasive essays, or presenting ones’ argument during a debate or panel discussion (Lee, 2010; Nokes, 2008; Rodriguez et al., 2005; Twyman & Tindal, 2005).

Inquiry models of instruction lead to greater engagement and more complex and nuanced discussion of controversial or difficult topics (Bain, 2005; Davis, 2010; De La Paz, 2005; Foels, 2010; Gradwell, 2006; Lucey et al., 2004; Smith & Niemi, 2001; Swan et al., 2011; Thacker & Friedman, 2017). The concept emerged from evidence which suggested that when students
learn by questioning and looking for information, it both increases student interest and engagement, as well as making space for creativity and deepening analysis (A. M. Pellegrino & Kilday, 2013; Rone, 2008). In contrast to more rote, standards-based approaches that often focus on convergent thinking, inquiry-based learning can help students to develop and interpret responses to questions that don’t have a right answer (Abrams et al., 2008). This creates a natural path to disagreement and being able to make up one’s own mind, both of which are part of the open classroom index. Case studies of successful implementation demonstrate that this can happen in a variety of ways. For example, Chin Yang (2009) found that the process of historical inquiry not only impacted critical thinking and problem-solving skills, but also encouraged students to improve their teamwork and other interpersonal skills. Hernandez-Ramos and De La Paz (2009) found that middle school students were more able to see history as a constructed narrative requiring an argument and evidence, rather than as a presentation of facts.

Finally, as with discussion, simulation, and collaboration, inquiry-based models are also associated with positive civic development outcomes. Inquiry-based learning is related to civic development because it helps students develop the kind of skills and thinking necessary for democratic citizenship (Barton & Avery, 2016; Barton & Levstik, 2004; Hess, 2009; Journell, 2016; Levesque, 2008). These include reading and interpreting complex sources of information, synthesizing and assessing evidence, and constructing and articulating arguments. In addition, many approaches to inquiry-based instruction also culminate in students taking informed action, or civically engaging with the content learned (Grant et al., 2017). In these cases, rather
than focusing on the argument as the primary outcome of the inquiry arc, students instead engage in informed action on a contemporary issue (Hammond, 2010). These can take the form of traditional service learning projects, or more robust collective actions such as testifying before a local legislature or petitioning to change the name of a public site (Morris, 2008; Terry & Panter, 2010). What is important about this civic action component of inquiry-based instruction is that it is informed by the knowledge and opinions students have developed over the course of the inquiry arc. When based in knowledge and evidence-based action, service learning experiences are a crucial part of adolescent identity formation as civic and political actors, increasing a sense of efficacy and a helping youth develop a realistic assessment of issues and how they might have an impact (Yates, 1999). Prior research has consistently shown positive associations between service learning in high school and positive social, civic, and political engagement outcomes (S. Billig et al., 2005; Campbell, 2006; Gibson & Levine, 2003; Hart et al., 2007; Perry & Katula, 2001; Youniss et al., 1999). As such, there is sufficient evidence to suggest that components of an inquiry-based model may both lead to more open classroom climates and foster positive civic development.

Overall, this literature demonstrates that there are a number of teacher practices that have been shown to foster civic development that are also strong theoretical candidates for fostering an open classroom climate. Given that there is limited research on the role of teacher practices in predicting an open classroom climate, and that there is evidence these practices matter in fostering a positive classroom climate and civic development, this paper addresses the following research questions:
Research Question 1.1 (RQ1.1): To what extent do teacher instructional practices predict student perceptions of an open classroom climate for discussion?

Research Question 1.2 (RQ1.2): Which instructional practices are the strongest predictors of open classroom climate for discussion?

I expect that student-centered practices including discussion, role play and simulation, and opportunities for collaboration will have a positive relationship with OCC, while more traditional teaching practices including textbook reading, lecture, and worksheets will be negatively related to OCC.

Method

Data & Sample

This paper examines the United States (U.S.) sample from the 1999 International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study (CivEd), which was designed to assess the civic knowledge and skills of 14-year-olds from twenty-eight countries (IEA Civic Education Study Technical Report, 2004). It was only the second international study of civic education, building off of the initial inclusion of civics in the 1971Six Subject Survey (Oppenheim & Torney, 1974; IEA Civic Education Study Technical Report, 2004; Torney et al., 1975). Follow-up studies, now called the International Civic and Citizenship Education Study (ICCS) took place in 2009 and 2016, with the next wave scheduled for 2022. However, unlike the 1999 CivEd data, survey design for the ICCS does not allow teacher and student data to be linked, because it takes a representative sample of all teachers in the target grade, rather than sampling a single social studies class and that class’ teacher (Brese et al.,
It is therefore not possible to confirm that sampled students took classes with any of the sampled teachers, in social studies or otherwise. As such, I use the 1999 data in order to be able to draw inferences about students’ experiences in their social studies classrooms.

In addition to assessing student civic knowledge, a questionnaire collected information on student home and background characteristics, and asked about students’ “concepts of democracy and citizenship, students’ attitudes regarding institutions, minorities, and national identity, and students’ civic-related actions” (IEA Civic Education Study Technical Report, 2004, p. 8). There were also a teacher and a principal questionnaire, which were designed to collect contextual information about the school and the teacher’s professional characteristics and attitudes. Finally, all three surveys also asked about “aspects of civic-related teaching and learning” (IEA Civic Education Study Technical Report, 2004, p. 8).

The United States participated in the 1971 and 1999 studies but has not participated in the ICCS studies. The CivEd United States sample consisted of 2811 students in 124 schools. The sample was stratified and constructed in such a way that all students in the U.S. had a roughly equal probability of being selected. Sampled students appeared to be representative of the U.S. population of 14-year-olds at the time on observed characteristics (Baldi et al., 2001). The dataset includes four sets of surveys – student assessments and questionnaires, teacher surveys, and principal surveys.
Due to missing data from the teacher surveys, this study employs a subset of the sample. Of the 124 classrooms included in the sample, only 115 had teacher surveys. Given the lack of information about these teachers, any imputation of teacher characteristics would be unreliable, since imputation is based on other observed characteristics of the case. This left 2562 students in the remaining 115 classrooms. Missing values were imputed using the mice package in R (Royston, 2004; Rubin, 1996, 2004; Schafer, 1999; van Buuren & Groothuis-Oudshoorn, 2011; White et al., 2011). Table 1 presents a comparison between the full and analytic samples. This analytic subset is statistically different from the complete sample in that there are fewer students from the West region, based on which teacher surveys were missing. While this is the only observable difference in the samples, it should be noted that region remains a strong predictor of OCC at level-2, and is likely to be a proxy for unobserved structural, political, and contextual factors. This unfortunately erodes the external validity of this analysis and the ability to generalize to the full population of 1999 U.S. 14-year-old students.

In addition, these data are now 20 years old, which limits contemporary generalizability. While this has an impact on demographic characteristics of the sample, it may be less pronounced in terms of instructional practices. It is likely that some aspects of student opinion and classroom organization have changed in the years since, especially in the post-9/11 era and with the increasing use of technology in classrooms. However, many of the instructional practices asked about remain the same, including those I hypothesize will be most likely to be connected to OCC such as discussion of current events, classroom debate, roleplay and
simulation, and group work. Despite these limitations, this is the best available data for addressing these questions. No other nationally representative datasets explicitly measure OCC, and this is the most recent IEA civics study with a sample design which allows us to link students to their social studies teachers, and in which the U.S. participated. Thus, this data still provides valuable insight into the relationships within classrooms between teacher practices and student perceptions of OCC.

**Measures**

*Open Classroom Climate for Discussion*

The dependent variable for this analysis is open classroom climate for discussion (OCC), an index of six likert-type items related to teacher behaviors and student feelings that measures “the extent to which students experience their classrooms as places to investigate issues and explore their opinions and those of their peers” (Torney-Purta, Lehmann, et al., 2001, p. 137).

These six items in the student survey were:

- Students feel free to disagree openly with their teachers about political and social issues during class.
- Students are encouraged to make up their own minds about issues.
- Teachers respect our opinions and encourage us to express them during class.
- Students feel free to express opinions in class even when their opinions are different from most of the other students.
• Teachers encourage us to discuss political or social issues about which people have different opinions.

• Teachers present several sides of an issue when explaining it in class.

Students were asked to respond to each item on a four-point scale of “never,” “rarely,” “sometimes,” or “often.” Students were most likely to agree that they felt free to express their opinions, and least likely to agree that teachers encouraged discussion. Summary statistics for all six individual items can be found in Table 2.

These items were combined by the original research team into a single index using Item Response Theory, internationally normed with a mean of 10 and standard deviation of 2 (α=0.82) (IEA Civic Education Study Technical Report, 2004; Sibberns, 2005; Torney-Purta, Lehmann, et al., 2001). Scores in the U.S. sample range from 2.58 to 15.54 with a mean of 10.42 (weighted grand mean of 10.41) and standard deviation of 2.25. Distribution of scores across individuals is relatively normal with a left skew. Scores also vary at the classroom level in both magnitude and spread. Both the index and the individual items are used in this analysis (Gainous & Martens, 2016).

Teacher Instructional Practices

The focal independent variables for this analysis measure teacher practices, drawn from both the teacher and student surveys.

The teacher survey included a set of 10 likert-type items, which asked respondents “How often are the following activities used in your classes?” to which they could respond “never” [1], “sometimes” [2], “often” [3], or “very often” [4]. A complete list of items and
associated descriptive statistics can be found in Table 2. For four of these items – “the teacher chooses the issues to be discussed in class,” “students study textbooks,” “the teacher asks questions and the students answer,” and “the teacher includes discussion on controversial issues in class” – all teachers reported using the practice at least “sometimes.” This suggests that some practices are almost universally used in classrooms, and it may be difficult to draw meaningful conclusions about their efficacy given a lack of variation. The other six items were more mixed, and included a wider spread of responses.

The country-specific portion of the student questionnaire for the U.S. also included a set of 12 yes/no questions from the student survey, which asked “Do you do any of the following when you study social studies?” A complete list of items and associated descriptive statistics can be found in Table 2. In some cases, answers were fairly consistent within classrooms, such as “Read from your textbook,” to which all classrooms had high proportions of students answering “yes.” However, most items were more variable and classrooms ranged dramatically in the proportion of students who responded positively. Each of these items was converted to a classroom-level measure which is the proportion of students in that class who responded “yes.” Although disagreement between students means that these are not perfectly reliable measures of classroom instruction, this aggregated measure may be more likely to capture the extent to which these practices are present in the social studies classroom environment than any one student’s individual recall of specific activities.

The three overlapping items between the teacher and student surveys were roleplay and simulation, studying material from textbooks, and worksheets. Correlations between
teacher and the student reported measures of practices across these items vary. For role play and simulation, the correlation is 0.25, and for textbooks it is 0.14. For worksheets the correlation is 0. There are a few reasons this might be the case. First, there are slight differences in how these questions were phrased, which could have led to different interpretations of the activities listed. It is of course also possible that students are not reliable reporters of what instructional practices are used in their classrooms. Students may be disengaged, frequently absent, or unclear about the terms used. It is also possible that dichotomous phrasing of the question might cause students to underreport things they do only occasionally, and to instead only say yes to things that happen with more regularity. Aggregating individual responses to the classroom level may help to improve reliability. What may be more likely is that teachers feel pressure either via social desirability or from the school principal (who also completed a questionnaire) to say that they use certain practices more or less frequently than they actually do, especially because prior research supports this conjecture (Kahne et al., 2000). Thus, while I expect the aggregated measures across all students in a classroom to be somewhat more valid and reliable, I conduct an exploratory analysis of both sets of variables.

**Covariates**

I also include a set of covariates describing students, teachers and school/classroom context in order to account for confounding factors that are likely to influence both teacher instructional practice and OCC.
Student Characteristics.

Gender. Students were asked on the questionnaire to self-identify as male or female. Gender plays an important role in both how students perceive their role within classrooms and how they have been socialized to engage in discussion. Boys overall report lower scores on the OCC index and have lower scores on the civic knowledge test.

Race. Students were asked to identify as White, Black or African American, Asian, Native Hawaiian or Pacific Islander, or American Indian or Alaska Native, and were also asked whether their ethnicity was Hispanic or Latino. Binary race variables were coded for White non-Hispanic, Black non-Hispanic, Hispanic, and “other race.” The “other race” category was created for the small percentage of students who identified as Asian, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, or multiple races. This is not intended to indicate that these racial identities are similar or easily conflated; rather, that the numbers of students who self-identified in these groups are too small to draw meaningful conclusions about the how these racial identities relate to student experience. White non-Hispanic will be omitted from analyses as the reference category as the largest group of respondents.

Immigrant status. This is an indicator for whether or not the student self-reported that they were born outside of the United States.

Non-English-speaking home. This is an indicator for whether the student reported speaking English at home “Sometimes” or “Never.”

Within-class home educational resources. This is a group mean-centered measure of home educational resources, standardized within classrooms rather than across the entire
sample in order to measure students’ status relative to their immediate peers. This measure is a composite of mother’s level of education, receiving a daily newspaper at home, and number of books in the home (Kawashima-Ginsberg & Levine, 2014). This is an individual deviation from the group mean of a standardized variable, so a student score of 0 represents a student with an average level of home resources within their classroom, and a score of 1 represents a student who is one standard deviation above the class average in terms of home resources.

*Educational aspirations.* Students were asked how many years of further education they intended to complete after the current year in categories ranging from “0 years” [1] to “More than 10 years” [7]. Students intending to complete high school would have selected “3 or 4 years” [3], and those intending to complete a four-year college degree (the modal response) would have selected “7 or 8 years” [5].

*Civic knowledge.* This measure is based on individual student responses to a set of 38 multiple choice questions that covered both civic knowledge and skills. Civic knowledge questions covered three primary domain areas (democracy and democratic institutions, national identity, and diversity and social cohesion) and were designed to test students’ abilities to “recognize fundamental principles and processes of democracy” (Torney-Purta, 2002, p. 205). Civic skills items were designed to assess students’ abilities to process and interpret civic information. These 38 items were combined into a single scale by IEA researchers using Item Response Theory, internationally normed with a mean of 100 and standard deviation of 20 ($\alpha=0.925$) (IEA Civic Education Study Technical Report, 2004; Sibbers, 2005; Torney-Purta, Lehmann, et al., 2001).
Liberal Political Beliefs. This is an index of students’ political beliefs based on their responses to 11 items about what the role of government should be. More liberal responses were coded higher and more conservative response were coded lower, then the items were combined and converted to a 0-1 scale of possible scores, with a mean of 0.59 and a standard deviation of 0.11.

Teacher Characteristics.

Gender. I include an indicator for whether or not the teacher self-identified as male. More than two-thirds of the sampled teachers were male. Current research suggests that social studies teachers tend to be disproportionately male, relative to other subjects (Hansen et al., 2018). This may be reflective of the fact that social studies teachers are often hired primarily to coach sports and secondarily to fill a teaching spot, or it could indicate a relative preference among men for the subject.

Age. This is an interval variable indicating the teachers’ age from a selected band, including “Under 25” [1], “25-29” [2], “30-39” [3], “40-49” [4], “50-59” [5], and “60 or more” [6]. The modal response was 50-59, although only two teachers reported being 60 or older, and only 6 reported being under 25 years of age.

Tenure. Teachers were asked “How many years, including the present year, have you been teaching altogether?” Responses took a bimodal distribution with one cluster having taught 1-5 years, and another cluster at 30 years.

Education. Teacher education is measured using an indicator for whether the teacher had a master’s degree or higher in any discipline.
**Professional Development.** This is an indicator variable for whether the teacher responded yes to the question “Have you participated in in-service professional development activities or training in a discipline related to social studies or civic education? (This includes Summer Institutes, courses offered by universities, school districts, and organizations.)”

**School Characteristics.**

**Region.** During sample selection, schools were identified as belonging to one of four regions (Northeast, Southeast, Midwest or West) as defined by the NAEP. These are included as bivariate indicators. Northeast will be omitted from the analysis as a reference category.

**Urbanicity.** The data includes information from the sampling frame which indicates whether schools were in urban, suburban, or rural areas, as defined by the U.S. Census Bureau. Suburban will be omitted from the analysis as a reference category because it comprises the largest group.

**Private School.** This is an indicator for whether the school was a private, as opposed to public, school.

**School Choice.** This is an indicator for whether students had a choice to attend the school. Principals were asked “How are the students in your school admitted?” and given an option of “They are assigned,” “They have a choice,” or “Other.” A school was marked as a choice school if the principal selected “They have a choice,” or if they indicated in the “please specify” section of “Other” that at least some of the students in the school participated in a choice program.
Classroom home educational resources. This is a grand mean-centered measure of the classroom average home resources score. As with the broader measure, it is a composite of mother’s level of education, receiving a daily newspaper at home, and number of books in the home. This is intended to be indicative of the classroom/school’s resources and socioeconomic status relative to the entire national sample.

Analytic Strategy

Because of the nested structure of the data, classroom-level predictors of OCC were estimated using multi-level modeling. Because only one classroom and one teacher were surveyed at each school, the data were collapsed to two levels, where level-1 represents the individual, student level, and level-2 represents the contextual classroom and school environment. The intraclass correlation for OCC was 0.06, meaning approximately 6% of the variance lay between, as opposed to within, classrooms. Although this is relatively low, I err on the side of using multi-level analysis to account for correlation within classrooms. Models will be estimated using full maximum likelihood estimation in order to allow for the comparison of nested models in terms of both fixed and random effects. Because our sample is relatively large (j=112, n=2099) this method should yield nearly identical estimates to restricted maximum likelihood estimation.

Research Question 1.1 (RQ1.1): To what extent do teacher instructional practices predict student perceptions of an open classroom climate for discussion?

Research Question 1.2 (RQ1.2): Which instructional practices are the strongest predictors of open classroom climate for discussion?
Based on previous research on student-centered instructional practices, I hypothesized that some practices such as discussion, role play and simulation would have a positive relationship with OCC, while others such as textbooks and worksheets would have negative effects.

I describe this association using a series of multilevel models in which I predict OCC as a function of each instructional practice, adjusting for covariates. I then identify which practices appear to have non-null effects on OCC, and compare the magnitude and direction of those effects.

This set of multilevel models was defined as:

$$OCC = \gamma_{00} + \gamma_{01}\text{ instructional practice} + \gamma_{0k}W_{kj} + \gamma_{k0}X_{ki} + r_{ij} + u_{0j}$$

Where $X$ is the set of level-1 covariates, and $W$ is the set of level-2 covariates, including teacher and school characteristics.

I determined $X$ and $W$ using a “tear-down” strategy of nested models in which we begin with a saturated model that estimated fixed effects for all theoretical confounders, and systematically removed parameters at the contextual and then individual level that did not statistically influence observed variation in order to produce a parsimonious set of covariates. I estimated only fixed effects because there was no precedent that proposed an empirical or even theoretical model for how the level-1 and level-2 covariates would interact, and therefore in the interest of parsimony I assumed fixed effects. The final set of level-1 covariates are student characteristics including gender, group-mean-centered home resources, educational aspirations, political beliefs and speaking a language other than English at home. The final set of Level-2 covariates are teacher age, grand-mean-centered classroom-level home resources, and
region. Details of the tested models, as well as comparative model fit parameters, can be found in Table 3.

Results

Models estimating the relationships between instructional practices and OCC are displayed in Table 4. When taken as a composite score, open classroom climate does not appear to have a strong relationship with instructional practices. There does not appear to be any association between open classroom climate and teacher-reported instructional practices. Even bivariate estimates of the relationships between teacher reported practices and OCC appear null, and these results do not change after adding covariates to the models.

When considering the proportion of students in a classroom who reported whether given instructional practices were used in their classrooms, there appears to be a much stronger association between which activities students believe occur during instruction and how open they perceive their classrooms to be. The first set of bivariate estimates suggests that there is a strong correlation between OCC and a wide range of instructional practices, including discussion of current events, reading, completing worksheets, writing reports, and taking part in debates or panel discussions. However, most of these associations do not hold after accounting for covariate student and classroom characteristics. The only association that is robust to the controls is the strong positive relationship between open classroom climate for discussion and discussion of current events in the classroom. In classrooms where 100% of students report discussing current events, student scores for perceptions of openness are, on average, 1.55, or 0.68 standard deviations, higher on the open classroom climate index. When
we consider previous work that finds a one standard deviation increase in OCC to be associated with a 0.6 standard deviation increase in civic knowledge and 0.14 standard deviation increase in intent to vote, this suggests rather significant substantive effects of including discussion of current events in social studies classrooms as a means of engendering positive civic development outcomes (Campbell, 2008).

It is also worth noting that while reading extra material not from the textbook doesn’t remain statistically significant at the $p<0.05$ level after including covariates in the model, it does still appear to be associated with open classroom climate. In this case, students in classrooms where more students report reading supplemental materials also appear to perceive those classrooms as more open, though the size of the effect appears to be much smaller, with a point estimate of 0.75 on the OCC index, or 0.33 standard deviations. This is an interesting result, as reading is not typically thought of as an instructional method associated with opportunities for robust discussion of controversial ideas. However, reading a variety of sources is likely to be associated with multiple perspectives, which may be a better explanation for this result.

In order to further investigate these somewhat unexpected results, I next disaggregate the OCC index and instead look at whether the individual open classroom climate items are associated with teaching practices. These results, displayed in Table 5, are much more in line with the hypothesized relationships.

First, discussion of current events remains a strong predictor of five out of the six OCC items. Only the first item, “Students feel free to disagree openly with their teachers about
political and social issues during class,” is not associated with greater numbers of students reporting discussion of current events. The fact that discussing current events is so strongly associated with the other five items makes it clear why it is such a good predictor of overall scores of OCC, and reinforces the importance of discussion of current events as an effective instructional practice associated with an open classroom climate and ultimately engendering positive civic development in students.

The first item, “Students feel free to disagree openly with their teachers about political and social issues during class,” is associated with student-reported participation in debates or panel discussions. This makes sense, since debates provide a structured setting in which disagreement is not only explicitly acceptable, but actively encouraged (M. Billig, 1987; Mezuk et al., 2011). This is also the only item that is not associated with discussion of current events.

The second item, “Students are encouraged to make up their own minds about issues,” does not appear to be significantly associated with classroom practices beyond discussion of current events. It is worth noting that this item had the highest mean response and lowest standard deviation, because fully 82% of the students surveyed responded positively to this item, with 46% who reported that this was “often” the case, and another 36% who reported it was “sometimes” the case. This seems to suggest that social studies teachers in the U.S. are consistently effective at engendering classroom climates in which students are encouraged to make up their own minds, regardless of which instructional practices they use.

Item 3, “Teachers respect our opinions and encourage us to express them during class,” not only has a positive association with discussion of current events, but also appears to be
negatively predicted by two of the most traditional teaching methods – lecture, and “teachers ask questions and the students answer” which in practice tends to include primarily factual quizzing and closed-ended, fill-in-the-blank type questions (Bain, 2005; Grant et al., 2017; Lucey et al., 2004). This is also in keeping with our hypothesis that such teaching methods would be negatively associated with OCC, but we see here that those effects are concentrated to whether or not students feel their opinion matters. When teachers are using instructional practices that do not make room for students to share opinions or ideas, they report feeling that those ideas are less respected.

Like the second item, the fourth item, “Students feel free to express opinions in class even when their opinions are different from most of the other students,” does not appear to be strongly related to instructional practices in the classroom. There is some weak evidence that worksheets are positively associated with this item, and that talking about videos is negatively associated with this item, but overall only discussion of current events is a strong predictor of whether students feel free to express unpopular opinions. It is possible that this particular item is much harder to engender through instructional practice alone and has more to do with the relationships and culture of the group and the ability of the teacher to engender feelings of safety beyond just the learning activities taking place.

Item 5, “Teachers encourage us to discuss political or social issues about which people have different opinions,” is the item most strongly related to instructional practices. It is for this item that discussion of current events has the largest and most statistically robust effect size, and is also predicted by the types of teaching practices that I hypothesized would be associated
with open classroom climate. It is worth noting that this item falls quite squarely into the “what
teachers do” aspect of OCC, which may be what makes it malleable to the influence of
instructional practices. In addition to discussion of current events, roleplay and simulation,
research projects or writing reports, and debates or panel discussions, all positively predict
student perceptions that their teachers encourage them to discuss issues about which people
have different opinions. For this item, similar practices as reported by both teachers and
students show consistent relationships with the outcome. Both teachers’ and students’ reports
of roleplay and simulation, as well as writing papers or doing research projects, are mutually
supported. The positive association between discussing ideas people have different opinions
about and research reports implies that these assignments are likely to reinforce the primacy of
argumentation in social studies, asking students to support a thesis statement with a coherent
evidence-based argument (National Council for the Social Studies, 2013; National Governors
Association Center for Best Practices and Council of Chief State School Officers, 2010). Finally,
the strong association between debates and panel discussions and this item is also intuitive, as
the topics for these activities are by nature issues about which people have different opinions
(Hess, 2009; Hess & McAvoy, 2014). Although it is not possible to draw causal conclusions, the
results for this item generally align with the hypothesis that instructional practices could
influence open classroom climate. Because this relationship is concentrated within this
particular aspect of the construct, it may be harder to tease out in aggregate.

Finally, the last item, “Teachers present several sides of an issue when explaining it in
class,” is not only strongly related to discussion of current events, but also associated with
reading extra material not from the textbook. This is again an intuitive finding, as presenting multiple perspectives in an effective way should necessarily require multiple sources beyond the secondary descriptions of historic events or sociopolitical issues presented in textbooks.

Discussion

This study suggests that some instructional practices are associated with higher levels of OCC, which is important evidence of how, specifically, teachers can better make space for open classroom climates through their teaching. This is an important contribution to understanding what predicts OCC at the classroom level. While teachers may seek to create intellectually open, stimulating and inclusive classrooms for their students, only a handful are able to do this successfully (Hemmings, 2000; Kahne et al., 2000). Most have little or no training in how to effectively host discussion or introduce controversial issues (Kunzman, 2006b). By identifying which practices are most strongly associated with OCC and how teachers use them to effectively foster open discussion, more teachers will be able to design their instruction accordingly, and teacher preparation programs may be able to support teachers in feeling confident about making space for discussion in the classroom.

The contrast between the two analyses presented here – results showing which instructional practices predict the OCC index as a whole and which predict individual aspects of the OCC construct – suggests that teachers may need to implement a variety of practices to be effective and the need to take a holistic view of how instructional practices influence OCC. Discussion of current events appears to be the most consistent way of engendering an open classroom climate. However, other discussion-based practices such as debate and simulation,
and inquiry-based practices such as research reports and examining multiple sources, may also supplement current events discussion to help improve specific aspects of the classroom climate for discussion. Finally, there is some evidence that teachers should avoid practices such as lecture and recitation that discourage student participation, because these may make students less likely to feel that their opinions are respected or their ideas welcome in the classroom. While these findings do not imply a causal relationship, they do provide valuable insight into what open classrooms look like beyond demographics, in terms of actual instruction. Further research is needed with more recent data in order to understand the nature of these associations and the underlying mechanisms which might support these relationships.

More broadly, understanding which instructional practices are associated with OCC can pave the way for schools and districts to create policy environments in which those teaching practices are supported and encouraged. If schools wish to emphasize civic development as an educational goal, shifting priorities to encourage teachers to engage students in meaningful classroom discussion can lead to more open environments for the students who need them most.
Chapter 3: Open for whom? Equity and identity in fostering an open classroom climate

Students and teachers interact in the context of classrooms, and it is those group dynamics and relationships that influence student perceptions of open classroom climate. Classroom-aggregate student perceptions of climate have been validated as a measure by Barber, Sweetwood and King (2015), which suggests that teachers can and do implement open classroom climates in a way that is consistent across all students in the classroom. They found that while open classroom measures are highly reliable at the individual level, they are only moderately so when aggregated to classrooms, because students have individual experiences and characteristics that influence their own perceptions of their classrooms. However, this validity was context dependent. Variability between students was lower in classrooms with higher average OCC, and in classrooms with more resource-advantaged students. Overall, they found that higher levels of classroom-aggregate openness do predict better student outcomes including knowledge, intent to vote, and trust in government, even after adjusting for individual variation.

If classroom climate as a whole is an important predictor of student outcomes, it becomes important to recognize not only the factors that predict individual perceptions of OCC, but also the contextual factors which determine for whom open classrooms exist. Because open classrooms may be difficult to implement and because they are not universally observed, existing inequities between students may exacerbate gaps in civic engagement and political empowerment if more resource-advantaged students have access to more effective teaching to foster an open classroom.
Equity and Open Classroom Climate

The literature suggests what we might expect, namely that high-status students are more likely to receive open instruction, and that high-performing schools are more likely to host open classrooms. Conover and Searing (2000) interviewed students from four distinct, representative communities across the United States, and found that those from rural and suburban communities were more likely to report that political issues were discussed in their classrooms than those from urban or immigrant communities. Dull and Murrow (2008) reported similar results from their observational study of classrooms in New York City. They found that dialogue occurred more commonly in more affluent schools and in classrooms with high-achieving students, and was less likely to be observed in schools that served populations with lower-socioeconomic status and in heterogeneous classrooms. Kahne, Rodriguez, Smith and Thiede (2000) also found that opportunities for dialogue and higher-order thinking were highly infrequent overall, based on observations of a representative sample of classrooms in Chicago Public Schools. They asserted that one reason we see so few open classrooms in urban environments like Chicago may be because “low expectations combined with a desire for order and control lead educators to provide working class and poor students fewer opportunities to examine social issues or to engage in higher order thinking than more privileged students receive” (Kahne et al., 2000, p. 333).

This distribution of open classrooms away from low-income students could also be the result of school policies and professional constraints upon teachers that may foster environments in which teachers are tacitly discouraged from pursuing open classroom
environments. For example, Dillon (1994) considered the various structures of schooling that preclude discussion, including “curriculum as content coverage, aims as tested outcomes, teaching as management and control” and social norms that act as barriers to open classrooms, including privileging individual achievement over the group, and favoring “authority and policy instead of community and inquiry as sources of knowledge” (p. 107). Onosko (1991) identified five key barriers for why teachers might resist implementing open instruction. These included seeing teaching as knowledge transfer, or that the teacher’s primary role was helping students to acquire an understanding of the conclusions drawn by others; a curriculum that emphasizes broad, superficial coverage, instead of deep exploration of specific issues; low expectations of students, in which they were perceived as incapable of doing the higher-order thinking, or reaching the ‘correct’ conclusions themselves, especially among low-achieving students; large class sizes and the need to maintain control of the classroom; and lack of teacher planning time or pedagogical knowledge of how to facilitate discussion. He also pointed out that all of these issues were exacerbated in schools serving students of lower socioeconomic status or other at-risk populations. Thus, while teachers may seek to implement open classrooms equitably, the pressures and institutional structures around them may lead to inequitable distribution of cases where open classrooms are possible and where we observe their implementation.

**Cultural Capital and Open Classrooms**

It is not clear, however, that these findings are related solely to teacher choices about instruction. Several other possible explanatory mechanisms are presented in the literature. For example, differences in student cultural norms could be part of the story. There may be a gap
between school and home pedagogies that leads to preparedness issues for class discussion, or expectations for how school should look and preferences for certain teaching practices may make some groups more open to class discussion than others (Hemmings, 2000; Uekawa et al., 2007). As such, it may not be reasonable to assume that all classrooms can or should benefit from an open climate (Subedi, 2008). This is in line with research on culturally responsive teaching, which suggests that traditional pedagogical approaches to teaching are designed to reinforce existing hierarchies and that instead teachers should consider instructional adjustments to bring classrooms and teaching more in line with students’ existing cultural competencies and norms (Bordieu, 1973; Ladson-Billings, 1995; Villegas, 1988). This also brings up questions of the hidden curriculum of schooling, and how classrooms are organized to reinforce existing class structures (Anyon, 1980). More advantaged students are socialized at home to interact with teachers, advocate for themselves, and take responsibility for their own success in school (Calarco, 2018). Many of these same skills are mirrored by student-centered instructional strategies such as debate, role plays, or group projects. As such, these kinds of pedagogies may inherently privilege students from more advantaged homes in terms of their engagement and success in class, and lead them to perceive these activities as promoting a more open environment than their less advantaged peers.

In line with these ideas, there is some evidence that classroom discourse is often defined by, or replicates, hierarchical student interactions across identity domains. For example, Cohen (1986) considered how status ordering during discussion and especially group work reinforces existing hierarchies. These status hierarchies could be both academic, in terms
of perceived ability and expertise, even if it isn’t directly related to the task at hand, or social, including peer status within school, or status and privilege at a societal level. Academic and social status are closely correlated, meaning that their effects are often exacerbated and reinforced. During class discussions and group work, high-status students dominate conversations and decision-making, while low-status students are often excluded or ignored. This has consequences for student outcomes, because it denies lower-status students the same opportunities for learning and thus exacerbates inequities. It also reinforces societal stereotypes and norms by privileging those who are already advantaged. Finally, it decreases the overall ability of the group by excluding individuals who are possible sources of knowledge and ideas, and simultaneously reinforcing the ideas of individuals who could benefit from considering alternative viewpoints. These findings were supported by Kelly (2008), who found that initial achievement was the strongest predictor of participation, with higher achieving students more likely to participate, though overall classroom achievement levels were unrelated to the overall frequency of discourse. He also found that in general, students conformed to stereotypical race and gender roles, for example, boys speaking more often and Asian students speaking less often. This could reinforce harmful stereotypes in the classroom, whether driven by student or teacher behavior. McFarland (2001) also examined the relationships between student-centered instruction and social status hierarchies, but in the context of disruption and negative consequences for classroom environments. He found that student-centered instruction leads to more incidents of student opposition or outburst, because it gives students more power over interactions and more opportunities to speak. He
also found that teacher-centered instruction increases the saliency of social standing in predicting incidents of student defiance, because such practices tend to silence lower-status students more than higher-status students. This suggests that when teachers use traditional instructional methods, only advantaged students have the space to defy them, but during student-centered instruction unpopular students become the center of disruption. Thus, rather than simply democratizing classroom discourse, open classrooms interact with student hierarchies to influence who does and does not comply with teachers, leading to variation in outcomes across instances of implementation.

These three authors point to some potentially negative outcomes as a result of open classrooms, and ways in which they may exacerbate problems of inequity not only between groups we see in society as advantaged or disadvantaged, but also along lines of student peer hierarchies. Because these statuses tend to be correlated, they may serve to reinforce one another and magnify the negative consequences for equity.

However, other scholars see more opportunity for positive outcomes. Uekawa, Borman and Lee (2007) argued that schools do not inherently alienate disadvantaged students, but classrooms can instead vary in the degree to which they are hostile or welcoming to different groups in terms of both the classroom makeup and the instructional activities used by the teacher. Whether open classrooms exacerbate or mitigate problems of inequity is a function of who is in the classroom and how the teacher manages classroom discourse.

Overall, these findings suggest that open classrooms may be experienced differently by different types of students. In addition to inequities in terms of which classrooms are presented
with opportunities for an open classroom climate to emerge, students within those classrooms may experience differential effects of teacher instructional practices on OCC. Thus, there is reason to expect that the impacts of teacher practices on perceptions of OCC will vary by both students’ individual and classroom composite characteristics. This study, therefore, asks the following question:

**Research Question 2 (RQ2):** To what extent are the relationships between classroom-aggregated measures of teacher instructional practices and individual student perceptions of open classroom climate moderated by students’ individual demographic characteristics, specifically their access to home educational resources?

I expect that collaborative practices including discussion, group work, and roleplay or simulation will be less strongly related to open classroom climate for students who are of lower socioeconomic status, while more traditional teaching practices will have more uniform associations across students.

**Method**

Using the results from the previous paper, I consider whether the significant effects of teacher practices in how students perceive the presences of an open classroom climate vary by indicators of student socioeconomic status. To do this, I test the interactions between instructional practices and home educational resources scores to see if the relationships between these practices and perceptions of OCC vary for students across the socioeconomic spectrum. Prior research suggests competing effects, as some work suggests that lower-resourced students tend to have stronger relationships between open classroom climate and
civic outcomes, while others have suggested that certain instructional practices may be more in line with the norms or values of some groups over others (Campbell, 2007; Hemmings, 2000; Uekawa et al., 2007). I expect, therefore, to see complex patterns of interaction across different types of instructional practice.

This set of models will be defined as:

\[ OCC = \gamma_{00} + \gamma_{01}\text{instructional practice} + \gamma_{0k}W_{kj} \]
\[ + \gamma_{10}\text{instructional practice} \times \text{student home resources score} \]
\[ + \gamma_{20}\text{student home resources score} + \gamma_{k0}X_{ki} + r_{ij} + u_{0j} \]

Where \( X \) is the set of level-1 covariates, and \( W \) is the set of level-2 covariates.

Data & Sample

This paper uses the United States (U.S.) sample from the 1999 International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study (CivEd) which consisted of 2811 students in 124 schools (IEA Civic Education Study Technical Report, 2004). The dataset includes four sets of surveys: student assessments and questionnaires, teacher surveys, and principal surveys. After excluding classrooms with no teacher surveys, this study uses an analytic sample of 2562 students from 115 classrooms. Missing values were imputed using the mice package in R (Royston, 2004; Rubin, 1996, 2004; Schafer, 1999; van Buuren & Groothuis-Oudshoorn, 2011; White et al., 2011). Sample characteristics are presented in Table 1.
Measures

*Open Classroom Climate for Discussion*

The dependent variable for this analysis is open classroom climate for discussion (OCC), an index of six likert-type items related to teacher behaviors and student feelings that measures “the extent to which students experience their classrooms as places to investigate issues and explore their opinions and those of their peers” (Torney-Purta, Lehmann, et al., 2001, p. 137).

These six items in the student survey were:

- Students feel free to disagree openly with their teachers about political and social issues during class.
- Students are encouraged to make up their own minds about issues.
- Teachers respect our opinions and encourage us to express them during class.
- Students feel free to express opinions in class even when their opinions are different from most of the other students.
- Teachers encourage us to discuss political or social issues about which people have different opinions.
- Teachers present several sides of an issue when explaining it in class.

Students were asked to respond to each item on a four-point scale of “never,” “rarely,” “sometimes,” or “often.”

These items were combined into a single index using Item Response Theory, internationally normed with a mean of 10 and standard deviation of 2 (α=0.82) *(IEA Civic Education Study Technical Report, 2004; Sibberns, 2005; Torney-Purta, Lehmann, et al., 2001).*
Scores in the U.S. sample range from 2.58 to 15.54 with a mean of 10.42 (weighted grand mean of 10.41) and standard deviation of 2.25. In addition to the scaled index, I use the individual items, which range from 1 to 4, to identify specific aspects of open classroom climate that may be influenced by teacher practices.

Teacher Instructional Practices

The focal independent variables for this analysis measure teacher practices. The CivEd study asked about teacher practices in several ways, as part of the teacher and student surveys. The teacher survey included a set of 10 likert-type items, which asked respondents “How often are the following activities used in your classes?” to which they could respond “never” [1], “sometimes” [2], “often” [3], or “very often” [4]. A complete list of items can be found in Table 2. The United States’ country-specific portion of the student questionnaire also included a set of 12 yes/no questions from the student survey, which asked “Do you do any of the following when you study social studies?” A complete list of items can be found in Table 2. These student-reported questions have been aggregated to a classroom-level measure of the proportion of students answering “yes.” For the purposes of this paper, I examine only those practices which the prior study found to be significant predictors of at least one component of open classroom climate. These include the teacher-reported practices of lecture and asking questions, and the student reported practices of discussing current events, debates or panel discussions, role play or simulations, writing reports, and reading additional material not from the textbook.
Home educational resources

This is a measure of home educational resources (HER) standardized across the entire sample. This measure is a composite of mother’s level of education, receiving a daily newspaper at home, and number of books in the home (Kawashima-Ginsberg & Levine, 2014). A student score of 0 represents a student with an average level of home resources, and a score of 1 represents a student who is one standard deviation above the national average in terms of home resources. This measure is used as a marker of students’ socioeconomic status, because traditional markers including educational attainment and occupational status are not available for children.

Level-2 Covariates

I also include a set of covariates derived from the models presented in Table 3.

School Region. During sample selection, schools were identified as belonging to one of four regions (Northeast, Southeast, Midwest or West) as defined by the NAEP. These are included as bivariate indicators. Northeast will be omitted from the analysis as a reference category.

Teacher Age. This is a categorical variable indicating the teachers’ age from a selected band, including “Under 25” [1], “25-29” [2], “30-39” [3], “40-49” [4], “50-59” [5], and “60 or more” [6]. The modal response was 50-59, although only two teachers reported being 60 or older and only 6 reported being under 25 years of age.
Level-1 Covariates

Gender. Students were asked on the questionnaire to self-identify as male or female. Gender plays an important role in both how students perceive their role within classrooms and how they have been socialized to engage in discussion. Boys overall report lower scores on the OCC index and have lower scores on the civic knowledge test.

Non-English-speaking home. This is an indicator for whether the student reported speaking English at home “Sometimes” or “Never.”

Educational aspirations. Students were asked how many years of further education they intended to complete after the current year in categories ranging from “0 years” [1] to “More than 10 years” [7]. Students intending to complete high school would have selected “3 or 4 years” [3], and those intending to complete a four-year college degree (the modal response) would have selected “7 or 8 years” [5]. This is also a proxy indicator for socioeconomic status in lieu of actual educational attainment.

Civic knowledge. This measure is based on individual student responses to a set of 38 multiple choice questions that covered both civic knowledge and skills. Civic knowledge questions covered three primary domain areas (democracy and democratic institutions, national identity, and diversity and social cohesion) and were designed to test students’ abilities to “recognize fundamental principles and processes of democracy” (Torney-Purta, 2002, p. 205). Civic skills items were designed to assess students’ abilities to process and interpret civic information. These 38 items were combined into a single scale using Item Response Theory,
internationally normed with a mean of 100 and standard deviation of 20 (\(\alpha=0.925\)) (IEA Civic Education Study Technical Report, 2004; Sibberns, 2005; Torney-Purta, Lehmann, et al., 2001).

**Political Beliefs.** This is an index of students’ political beliefs based on their responses to 11 items about what the role of government should be. More liberal responses were coded higher and more conservative response were coded lower, then the items were combined and converted to a 0-1 scale of possible scores, with a mean of 0.59 and a standard deviation of 0.11.

**Results**

In the overall model of the relationship between discussion of current events and open classroom climate, there is some evidence that this relationship is moderated by students’ access to home educational resources. Both of the base effects are strongly positive, so as the proportion of students who report discussing current events goes up, OCC goes up, and more highly resourced students also perceive their classrooms as more open. However, the interaction term is negative, which, although not significant, may suggest a diminishing effect, that the positive effects of discussion are less robust for more highly resourced students. This model is presented in Table 6, and the interaction is illustrated in Figure 1. As consensus about experiencing discussion in the classroom increases, the relationship between discussion and OCC becomes more consistent across students of different statuses. This suggests that more regular discussion of current events in the classroom might lead to more equitable perceptions of OCC for all students, regardless of their access to resources at home, and is in keeping with
prior research that suggests civic education might be most effective for more disadvantaged students (Campbell, 2008; Langton & Jennings, 1968).

Turning to the item specific relationships identified in the last chapter, this same pattern of diminishing returns that match a compensatory model does not hold. Instead, the cases where there is an interaction effect appear to do the opposite, further advantaging more highly resourced students while leading their lower-resourced peers to perceive their classrooms as less open. These results are displayed in Table 7. Three of these relationships appear to be moderated by HER: debate and panel discussions and “Students feel free to disagree openly with their teachers about political and social issues during class;” the teacher asking questions and students answering and “Teachers respect our opinions and encourage us to express them during class;” and reading additional material not from the textbook and “Teachers present several sides of an issue when explaining it in class.”

Figure 2 illustrates the interaction between HER and debate and panel discussions. As proportion of students who report participating in debates and panel discussions in the class increases, average and higher-HER students report feeling more able to disagree openly with their teachers, while students with below-average HER scores report feeling less able to disagree. This finding is somewhat in contrast to McFarland (2001), who found that lower-status students were more likely to be “disruptive” during more student-centered, discussion based practices. However, this is in keeping with other work that suggests these kinds of teaching practices can reinforce existing status hierarchies (Cohen, 1986; Kelly, 2008).

Figure 3 demonstrates the moderating role of HER in the negative relationship between
the frequency with which the teacher reported that “the teacher asks questions and the students answer,” and students feeling that their opinions are respected. In this case, there is a flat relationship between this teaching practice and feeling respected for high-HER students, but as students become more disadvantaged, the negative effects of recitation become more pronounced as teachers report using it more often. This may be due to teachers asking primarily closed-ended or fill-in-the-blank style questions that have a right or wrong answer, and not creating time for students to offer their own opinions or not validating answers that fall outside of the intended response. Overall, this is an interesting finding that warrants further investigation, as this teaching practice is so prominent in all kinds of classrooms.

Finally, Figure 4 demonstrates how HER moderates the relationship between reading additional materials and teachers presenting multiple sides of an argument. While the base effect of this practice is largely positive, it appears that these positive effects are mostly driven by average- to high-HER students, while for lower-HER students there is a null or negative relationship between reading additional materials and feeling that their teachers present several sides of an argument. Again, this merits further investigation. It could be due to a wide variety of factors, such as lower-HER students being presented with lower-quality reading material, or having their own perspectives or those of writers like them less likely to be represented (Steiner, 2017).

Discussion

Overall, these results suggest that the effects of teacher practices on open classroom climate do, in some cases, vary for students according to socioeconomic indicators. While these
effects are not universal, this does make a case for the fact that teachers should be mindful of their students’ backgrounds and identities when selecting instructional practices in an effort to foster an open classroom climate.

The finding that discussion of current events has diminishing positive effects for students with more robust home educational resources is in keeping with a long line of research that points to the compensatory effects of civic education for less-advantaged students who are less likely to have access to cultural capital and robust political socialization outside of school, dating back to the foundational Langton & Jennings (1968) study in which the authors found that civic education had null effects for White students, but was an important component of political socialization for Black students. More recently, authors have suggested that because there is a strong correlation between socioeconomic status and political engagement, students from high-status backgrounds are more likely to have already had experiences that shape their civic identities outside of school, while their less-advantaged peers may benefit more from exposure to political debate and civic inquiry within the classroom (Campbell, 2008; Gimpel et al., 2003). These findings support this hypothesis in suggesting that those students with lower access to HER have a stronger association between discussion of current events and increased OCC, and therefore are more likely to have positive long-term civic outcomes as result.

The finding that debate has a positive relationship with perceptions of one aspect of OCC, feeling able to disagree openly, for higher-status students, while having a negative impact for less-resourced students, is also in keeping with existing literature in this area. In general,
higher-SES students may be socialized at home to feel comfortable openly disagreeing with and challenging authority figures, while this may run counter to the cultural norms or beliefs about schooling of their less-resourced peers (Anyon, 1980; Calarco, 2018; Subedi, 2008). This is an important finding, as classroom activities such as debates and panel discussions are often one of the first places teachers turn to try to create an open environment and opportunities for students to grapple with complex or controversial ideas. However, these results suggest that alternative instructional methods, such as written research reports or simulations, may be a better option in classrooms with lower-SES or more diverse student populations. This is one area where teachers can consider culturally responsive ways to engage students in intellectually rigorous and open activities.

Finally, the two findings that demonstrate how HER interacts with reading additional materials from outside of the textbook and teachers asking questions and the students answering are somewhat surprising and do not have notable precedence in the literature. As such, these are interesting results in that they suggest as-yet unidentified ways in which students’ socioeconomic status and access to home resources may interact with their experience of instructional practices in the classroom. This is especially salient, because these are relatively common teaching practices that many people are likely to think of as neutral or unremarkable. Further investigation into these relationships is necessary, especially qualitative research that may help uncover the causal mechanisms behind these relationships and develop theoretical arguments for how and why these teaching strategies are experienced differently by different types of students.
Overall, this paper adds to our understanding of how we can increase equity of access to open classroom environments for students from all backgrounds, and demonstrates the need for teachers to be sensitive to and thoughtful about how their practice may have differential effects for the students in their classes. These findings suggest that different students perceive instructional practices differently as demonstrated by differential relationships between these practices and perceptions of classroom climate. By paying attention to how their instructional practice align to students’ perceptions of openness, teachers may be able to ensure all students feel that their classrooms are safe places to engage in discussion of controversial issues. Because student perceptions of OCC are associated with positive civic outcomes such as intent to vote, political efficacy, and support for democratic values, it is likely that creating more open classrooms for more disadvantaged students will also help to create more equitable civic engagement and improve long term outcomes related to human rights, acceptance of diversity, and the environment (Campbell, 2008; Edwards, 2012; Knowles & McCafferty-Wright, 2015; Maiello et al., 2003; Quintelier & Hooghe, 2013; Treviño et al., 2017). This can help complicate our beliefs and ideas about how best to foster an open classroom and paves the way for identifying effective teaching strategies for OCC in the social studies and beyond.
Chapter 4: “Conversation is everything”: How teachers and students create environments where open discussion can thrive

Facilitating instructional practices for openness

Discussion has long been seen as an important component of effective social studies instruction and a key component of fostering civic development in social studies classrooms (Bolinger & Warren, 2007). However, pedagogy is only one piece of the puzzle, and the classroom climate in which those discussions take place is an important component of ensuring that they are effective for fostering positive student outcomes (Alivernini & Manganelli, 2011; Campbell, 2007, 2008; Edwards, 2012; Kennedy, 2012; Knowles & McCafferty-Wright, 2015; Maiello et al., 2003; Quintelier & Hooghe, 2013; Torney-Purta et al., 2008; Torney-Purta, Lehmann, et al., 2001; Torney-Purta & Barber, 2005; Treviño et al., 2017; Zhang et al., 2012).

For many teachers, effectively implementing thoughtful and productive political discussion in their classrooms feels daunting, and as a result, opportunities for discussion are relatively rare in American schools (Kahne et al., 2000). However, giving students the opportunity to engage with their own ideas and to be exposed to other perspectives can be eye opening, and an important component of complicating students understanding and beliefs about those who are different from them (Hess, 2009; Subedi, 2008). As such, making room to discuss current events, political issues, and controversial ideas in school is an important component of promoting positive civic and social development.

Unfortunately, most teachers receive relatively little, if any, training on how to facilitate classroom discussion of controversial or difficult issues (Kunzman, 2006b). There is no shortage
of resources available for teachers that offer different ideas and methods for hosting
discussion, debate, and deliberation in the classroom. These range considerably in complexity
and scope, from simply asking students what they think using primary source documents as
prompts, to formally structured debates for which students have spent weeks preparing. While
there are many perspectives about how best to facilitate classroom conversations, the
literature consistently highlights the need for teachers to be self-reflective and aware of how
their students are affected by discussion activities, and to respond accordingly. It is not enough
for teachers to treat all students equally and respectfully and pretend that issues of race, class,
and gender are left behind at the classroom door (Brookfield & Preskill, 1999). Rather, teachers
must work to actively engage students in building an open classroom environment that is
equalizing and to remain aware of the rights and privileges of the students within it.

Classroom environment is just as crucial to successful discussion as teacher practice
(Barton & Avery, 2016; Hemmings, 2000; Hess & Posselt, 2002; Ho et al., 2017; Levinson, 2012;
W. C. Parker, 2010). In addition to the role of the teacher, it is important to develop positive
student relations prior to discussion, and an ongoing culture of camaraderie and respect
(Hadjioannou, 2007; Henning, 2008; Washington & Humphries, 2011). This can be hard, as in
most classroom settings students may be acquaintances, but they have come together based
on administrative figuring rather than purely by choice (Beck, 2019; W. C. Parker, 2010).
Students participating in classroom discussion are subject not only to peer effects relative to
the social life of the school, but many other broader societal pressures surrounding ideological
differences and personal identities (Beck, 2019; Flynn, 2009; Hess & Posselt, 2002; Journell,
When students perceive their opinions as unpopular or otherwise minoritized, they may choose to stay silent rather than risk social consequences of speaking out (Noelle-Neumann, 1993). As a result, students need explicit instruction in how to engage in useful cooperative dialogue, rather than merely being given an opportunity to have such conversations and left to their own devices (Gillies & Khan, 2009).

**Norms for student interaction**

There are many options available for teachers when it comes to methods for facilitating discussion. Teachers make decisions about their instructional practices within the unique context and social factors of their own classroom and school communities. Regardless of how teachers organize and structure discussion, high standards for deliberative interactions can be reached regardless of participant abilities or experience when norms related to evidence and reasoning and expectations surrounding both speaking and listening are in place (Gerber et al., 2018). Students will be motivated to engage in conversations when they feel that their ideas are heard, and where they are encouraged to express themselves without being competitively compared to their classmates based on their opinions and beliefs (Hadjioannou, 2007; Hemmings, 2000).

Prior research in this area, as well as the preceding chapters of this dissertation, suggest several instructional methods for discussion that are effective at fostering an open classroom climate, or at least some components of OCC. These include discussion of current events, debate, simulation, and practices associated with inquiry-based models such as reading multiple sources beyond the textbook and undertaking research projects. This study specifically
considers how these practices work to foster OCC within classroom contexts by qualitatively assessing the relationship between discussion frameworks, teachers’ intentions and beliefs, and students’ perceptions and engagement.

**Theoretical Framework**

In this paper, I define pedagogy as the method by which teachers teach, including both the structure of instructional practices and classroom activities, and how those choices are influenced by the teachers’ beliefs about the goals of education and how best to achieve those goals. When teachers plan to implement open classrooms, they typically veer toward one of two idealized forms of classroom discussion depending on their pedagogical goals and beliefs. Hemmings (2000) described these succinctly as the liberal and radical frameworks.

A liberal framework idealizes training to participate in the institutional world as preparation for active adult civic life. Students learn to communicate comfortably using the language, customs, and manners of the ruling political class, in theory giving them the tools they need to navigate these spaces as equals. This is a more traditional view of the role of public education, and the framework of assumptions that many arguments in favor of “democratic” education operate under, such as Dewey (1916) or Gutmann (1987). A liberal climate tends to go along with social constructivist pedagogies, where learning exists in a conversation between student and teacher, and where learning is social and active but the teacher plays a role in guiding and facilitating social interactions (Vygotsky, 1978). For example, Cummins (1986) asked teachers to work toward a “reciprocal interaction” model where there is
a “genuine dialogue between student and teacher” and in which the teacher facilitates, rather than controls, student learning (p. 28).

In contrast, the radical framework builds off of the ideas of Friere (2000), and asks students to critically examine the existing structures in which they operate, recognizing the specificity of knowledge and experience and the ways in which cultural and institutional power alter understanding of facts and ideas. Radical discussion climate tends to invite opportunities for critical liberation pedagogy (Ahlquist, 1990; Magill & Salinas, 2019; Ross, 2017). Cummins (1986) argued from this perspective that in order to overcome the challenges of minority disempowerment, teachers need to incorporate minority codes and language into the life of the classroom, and that pedagogy should promote students using their own language and voice to generate knowledge. Brookfield and Preskill (1999) recommended that teachers organize their classroom management and structure to reflect alternative cultural and value structures, and possibly match them to student home environments, rather than privileging the language of power and dominant culture.

Most scholars, however, suggest that teachers find a middle ground between these two approaches, in which students should be taught the codes necessary for participation in public institutions, but should also learn that the language of power is arbitrary and reinforces the underlying power relations of society so that students may critique those social underpinnings (L. Delpit, 1988). Schultz, Buck and Niesz (2000) described two typical forms of student discussion, “bridging talk” and “conflict talk,” and then put forth their idea of a middle ground. “Bridging talk” refers to conversations where students focus on looking past differences, finding
commonalties, seeing everyone as the same, overt optimism, and avoiding real issues. “Conflict talk,” in contrast, is marked by open hostility, talking past each other, making purposely controversial statements and inciting ire. Instead, they argued that teachers should strive to create democratic conversations that “invite multiple perspectives while acknowledging the privileging and silencing that accompany them” (34). This approach is similar to Delpit’s (1988; 1995), in which the facilitator’s role is to make the power dynamics of the situation explicit, and to discuss them in tandem with the controversial content. Gutmann (1987) similarly believed that students must learn to follow the rules but also think critically about them. In her view, the two go hand in hand, because logical reasoning without moral character, and the reverse, are both dangers. She believed that both an understanding of how the world works and a willingness to challenge it are necessary for effective education.

Separate from the pedagogical frameworks, classroom climate is defined as “The intellectual, social, emotional, and physical environments in which our students learn” (Ambrose et al., 2010, p. 170). I define an open classroom climate (OCC) as “the extent to which students experience their classrooms as places to investigate issues and explore their opinions and those of their peers” (Torney-Purta, Lehmann, et al., 2001, p. 137). OCC is further defined as a climate in which the following conditions are present:

- Students feel free to disagree openly with their teachers about political and social issues during class.
- Students are encouraged to make up their own minds about issues.
- Teachers respect our opinions and encourage us to express them during class.
• Students feel free to express opinions in class even when their opinions are different from most of the other students.

• Teachers encourage us to discuss political or social issues about which people have different opinions.

• Teachers present several sides of an issue when explaining it in class. (IEA Civic Education Study Technical Report, 2004)

The teachers who make up the sample for this study primarily adopted social-constructivist pedagogies using a liberal framework. As such, the questions framing the study consider how these pedagogical choices relate to the presence of an open classroom climate. Specifically, this study seeks to address three core themes for investigation and how they collectively influence open classroom climate for discussion, including (1) behaviors within the classroom including teaching practices, standardized classroom procedures, and behavioral norms related to participation and engagement; (2) relationships and existing social structures or hierarchies among classroom members; and (3) beliefs of teachers and students about the purpose and nature of discussion. The research questions guiding the study are:

**Research Question 3.1 (RQ3.1):** How do the specific pedagogical choices teachers make when designing classroom instructional activities create an open classroom climate?

**Research Question 3.2 (RQ3.2):** How do teachers try to create environments that encourage open discussion?

**Research Question 3.3 (RQ3.3):** How do students perceive teachers’ actions, and how is that perception reflected in their experience of classroom discussion?
Method

While OCC may be thought of as a teaching strategy, it is not the same thing as the instructional practices teachers use to organize their classrooms and plan their lessons. Rather, teacher instructional practices are likely, as outlined above, to influence the ways in which teachers teach, and as a result to impact open classroom climate for discussion. While teachers may actively strive to, for example, “present several sides of an issue when explaining it in class,” the frequency at which they are able to do so is likely to be affected by the instructional organization of the classroom and the activity structure they use to approach topics. For example, teachers should have more opportunities to present multiple sides of an issue when they organize students into groups for a debate or have students analyze multiple primary sources than when they assign readings from a single textbook. As such, in keeping with a mixed methods explanatory sequential design, this paper will seek to explain quantitative findings more completely by unpacking the mechanisms by which instructional practices might contribute to and influence OCC.

Methodological Framework

Informed by the findings from the quantitative half of this dissertation, this study will conduct a multiple case study both to investigate whether the quantitative results ring true in contemporary instructional social studies settings, and also to deepen our understanding of how instructional practices influence student perceptions of classroom openness. In a sequential explanatory mixed-methods design, the quantitative data and its analysis are used to provide a general understanding of the research problem, and subsequent qualitative data
serve to refine and explain statistical results (Creswell, 2014; Ivankova et al., 2006; Rossman & Wilson, 1985; Tashakkori & Teddlie, 1998). In an ideal sequential explanatory design, qualitative data should focus on the same respondents who participated in the quantitative phase of the study. However, due to restricted access to data collection and the necessary use of an existing dataset in order to conduct the quantitative strand, this study will instead use a separate qualitative sample as a lagged follow-up to the quantitative results.

The study takes a phenomenological approach, in that I seek to better understand how participants subjectively experience classroom climate for discussion (Merriam, 2009). This phenomenon, the experience of teaching as it relates to classroom climate, is the primary focus of this investigation. However, I also use a multiple case study approach (Yin, 2003) because “the boundaries are not clear between phenomenon and context” (Baxter & Jack, 2008, p. 545). As prior research has shown, the experience of OCC is dependent on a variety of classroom and school contextual factors, and it therefore does not make sense to attempt to study teaching practices and classroom climate separate from these unique contexts (Claes et al., 2017; Kelly, 2008; Kuang et al., 2018; Maurissen et al., 2018; Quintelier & Hooghe, 2013; Reichert et al., 2018).

**Sample & Site Descriptions**

Phenomenological studies seek to compare the narratives of several participants who have shared the same experience. In this case, because the phenomenon of interest is a complex group interaction, I instead focus on the shared experiences of several classroom groups, each representing a single case. Cases were selected from secondary social studies
classrooms in Miami Dade County Public Schools (MDCPS). Miami-Dade offers a large, urban
district environment, within which there is wide variability in classroom composition, not only
in terms of student demographic characteristics but also in terms of ability, of teaching styles,
and of school contexts. MDCPS is the fourth largest school district in the U.S., with nearly 400
schools and 350,000 students. As such, MDCPS provides a useful setting in which to observe a
wide range of classrooms. Teachers were recruited for participation from a subset of teachers
who demonstrated commitment to social studies teaching through regular participation in
professional development and sponsoring social studies extracurriculars, and who were
identified as adept at facilitating classroom discussions in partnership with the district’s
department of social sciences.

Ultimately, four teachers were recruited to participate in the study, as well as one class
each of students to whom they taught a social studies course. These included three high school
teachers and one middle school teacher. Due to the limited scope of this paper, I present data
from the three high school classrooms. Descriptive characteristics of each site are shown in
Table 8. Overall, these schools and classrooms represent a wide range of educational contexts
in terms of student backgrounds, achievement, teacher experience and characteristics, and
curriculum.

Data Collection & Analysis

Data were obtained from three primary sources: classroom observation, teacher
interviews, and student focus groups. These three sources triangulate different aspects of each
classroom case. Because the teachers and students participating in observed lessons were also
interviewed, I was able to gain insight into the actions and activities observed during classroom sessions. All names have been changed to protect the privacy of the participants.

Classroom Observation

I visited each classroom site between two and three times, and observed a total of 7 complete class periods. Because all of the schools operated on block schedules, each class period lasted between 90 and 120 minutes, meaning that teachers were able to engage in long-form lesson plans, and most class periods included a wide variety of instructional practices ranging from lecture and independent work on writing assignments or long-term projects, to collaborative work in small groups and a range of discussion-based activities. Only one of the seven observed periods did not include a discussion of any kind, and most included multiple discussions.

I first visited classrooms in October to introduce myself and the project, answer student questions, and hand out parental consent forms. This also provided an opportunity to familiarize myself with the school environment and students, and to interact with school administrators as necessary. These visits each lasted about 30 minutes and were generally well received by students, who were almost universally excited about the opportunity to participate in a research study and to offer praise and admiration of their teachers, who seemed to be well-liked. Finally, these visits were an opportunity to normalize my presence in the classroom under low-stakes circumstances, in hopes of helping participants feel more comfortable with my presence as an observer in the classroom.
Observations took place in December and February of the same school year. Unfortunately, they did not continue into the spring as planned, due to the COVID-19 pandemic. I observed all four classrooms in December, and three in February, since one of the teachers was out sick that week. My role in the classroom was largely as an observer-as-participant; although my role as a silent observer and the purpose of my observations was known to participants, interactions outside of formal observation did occur (Merriam, 2009). For example, many students greeted me by name at the beginning of the class period, asked about my travels around Miami or for information about attending college, and in the middle school classroom sometimes put on little shows for my recording equipment. These interactions were always secondary to my goal of gathering information, and students, teachers, and other members of the school had control over what they said or did in my presence. In addition to my role as a researcher, some students saw me at social studies extracurricular events outside of the context of the study, which in many cases helped establish to them my presence in the community.

Observations were audio and video recorded, and I also took field notes which attempted to capture detailed descriptions of the interactions and activities that occurred in the classroom, as well as participant reactions to and/or explanations of events. Despite my efforts to serve as a neutral observer, curious about how teachers conduct classroom discussions and not about their content, I do recognize that students may have been less willing to speak up or express controversial ideas in the presence of an unknown outsider, or that they may have performed more engagement with controversy than they would otherwise.
Teacher interviews

Each teacher participated in one or two semi-structured interviews. Teachers participated in an extended interview at the start of the project, prior to the first classroom visit. This interview was designed to explore their overall beliefs about open classroom climate for discussion and the strategies they use to manage student interaction in the classroom. This primary interview took place over the phone in the evening, at a time and place of the interviewees’ choosing. As a result, teachers were generally relaxed during interviews, which lasted about an hour. In addition, teachers took part in shorter, targeted in-person interviews directly following the second observation, which asked specific questions about the lesson and its outcomes. Teacher interviews were audio recorded and transcribed for analysis.

Focus groups

Following the first observation, 6-8 students from each classroom took part in a focus group together. Focus groups lasted about 45 minutes. Focus groups allow for the social construction of data during a group discussion, which mirrors the way in which students participate in and interact with discussions in their classroom (Merriam, 2009). Thus, student focus groups aimed to make explicit many of the tacit and implicit decisions, relationships, and ideas observed in classrooms. Questions focused on students’ perceptions of open classroom climate, their decision making and beliefs about classroom discussion, and relationships within the classroom and with their teacher. Focus groups were audio recorded and transcribed for analysis.
Analysis

These data resulted in more than 20 hours of audio and video recordings, and about 300 pages of transcription. While qualitative design is typically emergent, and data collection and analysis often exist as simultaneous processes, in this case, although recursive analysis took place during the process of data collection, data collection ended before protocols could be deeply refined in order to match emergent themes and findings (Bogdan & Biklen, 2011).

Additionally, I am mindful of the fact that I undertook this study as a single researcher with an individual positionality that, by definition, colors my interpretation of data, the codes developed, and the major findings of the project. As such, I frequently engaged with researchers outside of the project both during data collection and during the analytic period that followed in order to help validate and expand my thinking. I also wrote notes about my thinking and processes as they unfolded, in order to record decisions made and the purposes or intents of developed codes and to reflect on larger ideas and emergent themes during analysis (Merriam, 2009; Saldana, 2009).

First-cycle coding focused on two primary methods of organizing and beginning to make sense of the data. First, structural coding served to connect the same types of data across cases and to label major initial categories for further analysis. Specifically, structural coding connects descriptive, content-based or conceptual phrases to sections of the data so that similar ideas can be linked together for further, more detailed analysis (MacQueen et al., 2008). Structural coding is ideal for studies that have many participants and standardized data collection protocols across cases (Saldana, 2009). I also used descriptive coding during this stage, which is
different from structural coding in that it identifies passages with a word or phrase that focuses on the topic, not on the content, being addressed in the text. (Saldana, 2009; Tesch, 1990). This was the first step in connecting similar topics or major components of the research across different types of data, including interview transcripts, field notes, and other sources, in order to allow for a complete picture of all data related to a single topic and help organize sources for more in-depth analysis at stage two (Saldana, 2009).

The primary coding method for second-cycle analysis was pattern coding. Pattern codes identify emergent themes, explanations or arrangements by grouping a lot of data into a smaller, more parsimonious set of constructs (Miles & Huberman, 1994). Pattern coding is particularly appropriate for an explanatory sequential mixed methods design, because it is best suited to searching for explanations or causes in the data, and for identifying social networks and relational patterns (Creswell, 2014; Creswell & Plano Clark, 2007; Miles & Huberman, 1994; Saldana, 2009; Tashakkori & Teddlie, 2003). Pattern codes are intended to bring together similar or related ideas from the initial coding cycle, and can be used to “develop a statement that describes a major theme, a pattern of action, a network of interrelationships, or a theoretical construct from the data” (Saldana, 2009, p. 153). Overall, the coding process was iterative, and I went back through the data multiple times, refining codes and narrowing constructs with each pass. This took place alongside the quantitative analysis presented in Chapters 2 and 3, which helped to refine my questions and determine areas of focus that aligned with the first part of the study.
*Researcher Positionality*

It is important to note that I entered these classrooms as a White woman from outside of the school community in classrooms of predominantly Latinx students. My accent quickly revealed that I was not from Miami, and students were aware that I was affiliated with Johns Hopkins University, which tended to evoke reactions of respect. Although I was not a regular part of the school communities, each of the teachers had known me for several years prior to the study as a leader of the district’s Model United Nations program and were aware of my outside expertise in social studies extracurriculars and my relationship with the district’s executive director for social studies. I had also interacted with some of the students in this capacity, though we did not have established relationships as I did with the teachers.

In addition, I have been working with social studies educators on facilitating discussion of current events and specific methods of designing and implementing classroom simulations for several years and am deeply invested in the efficacy and quality of these instructional methods. I have never been a full-time classroom teacher, and my educational background includes both affluent public schools and elite private universities. My own beliefs in the value and importance of classroom discussion, the alignment of these practices with my cultural background as an upper-middle-class White American, and my experiences engaging in such conversations in classroom contexts designed to align with my own values and cultural markers, certainly influenced my interpretation of results.
Case studies

From the data and analysis described above, I have extracted three vignettes that I believe are particularly useful for illustrating the primary findings of this study. These are described below alongside explanatory content from interviews and focus groups, and overarching themes that emerge from these cases are discussed in depth in the Findings section. The following case studies highlight three specific classroom activities that employ one of the instructional practices explored in Chapter 2, and how the experience related to students’ perceptions of particular aspects of OCC. The first case study looks at a simulation, the second at reading additional materials not from the textbook, and the third at a structured debate. Although data from only three of the classrooms are presented here, these themes were echoed in data from the fourth group.

Congressional hearing simulation at Central High

Central High is an enormous building surrounded by a maze of fences and security gates, separating the school from the quiet middle-class neighborhood in which it is located. Inside, the walls are decorated with trophies and displays of school pride, and the hallways feel open and spacious – almost cavernous. Ms. Ayodele’s classroom is tucked into a corner on the 3rd floor, a windowless room that she has made more inviting by decorating with wall decals, collaged bulletin boards and fairy lights, which give off a soft glow that creates a contrast to the harsh fluorescent lighting elsewhere in the school. She teaches in a magnet program within the school, and the International Relations class that I observed is part of a dual-enrollment program. On the day I visited, Ms. Ayodele wore a bright pink shirt and black cardigan, with her
hair pulled up in a black crochet wrap. She wore hoop earrings and white-rimmed glasses. The classroom was a comfortable size for the 21-student class and felt open and neat. The desks were arranged in an open square with a row in the center, to facilitate both student discussion and a clear view of the Smart Board at the front of the classroom.

After opening the class with a video news clip and a brief discussion of current events, the class moved into a simulated congressional hearing about 20 minutes into the period. The students were exploring who is to blame for climate change, and were divided into groups of 4 students representing different possible causes, each asked to defend their actions. The activity picked up from a previous lesson, and the two groups I observed represented American consumers and capitalism. Each group made a set of prepared opening statements before opening the floor to questions from Ms. Ayodele and the other students. It was clear that the students were well prepared for the activity, and comfortable presenting to the class. Student body language was relaxed and casual, and their presentations had an even and practiced tone. It was obvious that this was a familiar occurrence for students, and no time was lost explaining procedures for the activity. The students knew who was going first because they were already seated at the center row of seats, ready to present.

After wrapping up the brief opening discussion, Ms. Ayodele let students know they were ready to move into the activity by stating, “Again, we’re going to start, please be respectful to your classmates presenting. That means no side chatter. And one of their team members is not here, so they’re going to handle it because they got this.” With this intro, she both reminded students of their community norms of respect and listening, and also signaled
confidence in the capabilities of her students to overcome challenges and to participate at a high level of competence. This was in keeping with students’ comments during focus groups, where Nathan said, “We always are taught to respect and listen to everyone else’s ideas.” By asking students to be respectful, she reminded students of this expectation, and she held them to it. She did this intentionally, as she told me she had to “…establish rules where if your hand is not up or your classmate hasn't finished talking, you cannot interject while someone hasn't finished their thought, because a lot of them just want to be heard, but they don't want to listen.” Because she recognized this as a challenge in facilitating discussions among her students, she took clear steps to address it and establish classroom norms to counteract disrespect.

Ms. Ayodele was also supportive of students as they were speaking publicly, and they felt it made a difference. Jordan was invested in his peers’ engagement with class discussion, stating, “You can see them progressing through the class. When they do start feeling comfortable and when they do start speaking up, as a class, it means that we encourage them and stuff, and [Ms. Ayodele], of course, she always encourages them.” He felt that it was both the students’ and teacher’s responsibility to encourage others to participate, indicating a collaborative mindset and ownership of learning for the whole group. Ms. Ayodele cared about her students becoming engaged in discussion, but also wanted to meet them where they were and allow that engagement to come naturally, rather than force them into situations they felt uncomfortable with. She told me:
I tell these kids, I was like, “All I want you to do is just do something outside of your comfort zone. If you think I expect perfection from you or that your words are carefully constructed, and when it comes out of your mouth, it's just flowery and beautiful,” I'm like, “No. Being able to speak well, that's practice, as with anything. I just want you to do something different. Try. That's all I expect from you.” And I think that it puts them at ease.

She recognized that her expectations of regular discussion were a departure from most of the classes her students took and that they therefore required an adjustment period, and as such she tried to give students the time and space to find their way into the discussion without undue pressure.

After the first group of students gave a five-minute opening speech, Ms. Ayodele opened questioning, going back and forth with the students for another four minutes. She modeled effective disagreement, pressing students to defend their points and trying to illuminate the core themes and weaknesses in their argument without becoming combative. Engaging in argument without becoming aggressive was a regular practice in the classroom. One of her students, Sydney, pointed out:

We never say, “Oh no, you’re wrong,” straight out. One thing that she’s all about is diplomacy. So, she knows that we can disagree fully, but it has to be respectfully. So, you might go there and he’s like “Yeah, this is wrong.” I’m
going to be like, “Okay, that’s fine. That’s your opinion, but this is why it’s wrong!”

Sydney recognized the importance of making space for different perspectives to coexist while still learning to defend and refine her own ideas.

When Ms. Ayodele then opened the floor to students to ask questions, many of the students’ questions reflected the tone and structure of the teacher’s questions. After she used such phrases as, “You put the blame on everybody else,” and “You mentioned a lot of things that the government wasn’t doing,” students reflected these same sentiments by using similar language such as, “You guys placed the blame on the car manufacturers,” and “You pointed fingers at the US government and the politicians that are voted upon in government.” It took several minutes for students to move forward into new ideas and areas of discussion, rather than echoing their teacher. During this time, the teacher did not interrupt or offer guidance other than to name which student could ask a question next, and the students responded directly to one another. At one point, she did clarify a question and rephrase it with some additional context, but otherwise students drove the discussion for about seven minutes. This is one of her core goals: “To release ownership to [students].”

After this, the students rearranged their seating to move on to the second group. Again, Ms. Ayodele offered reassurance to the group, who were nervous about time, reminding them: “Don’t take too much time. Don’t rush your words.” She then launched right into the next topic and the students gave their opening statement before Ms. Ayodele took over questioning. This time, she cut her own questioning short in order to invite more input from students; the line of
questioning was more diverse; and a larger number of students engaged with the conversation. It is possible that having warmed up into the period now fully 40 minutes into class, students were feeling more engaged, or it is possible that this was the result of more robust interest in the topic. When the issue of major corporations not paying taxes came up, students got heated and conversation moved more rapidly and naturally around the classroom, with students clearly having strong opinions on the issue.

Eventually, Ms. Ayodele called “time” on the discussion and said it was time to start “feedback.” Bringing students into the next phase of the activity, she said, “Let’s just start our debrief, quickly. So, your thoughts, opinions, what went right, what went wrong, things you’d like to improve on... I’m opening up the floor.” At this point, the class moved into a meta-discussion of the activity they just completed. Miguel opened the discussion by saying that the second group set a great foundation for their arguments but could have developed their ideas more completely. “You weren’t really speaking too much to the question. Like, your evidence is really good, but then I wanted to see what you had to say?” Students also gave feedback on the ways their peers engaged with one another, such as Alejandro’s comment, “You guys did well as a team, if only Nathan you had talked a little bit more that would have been better, but you guys did do amazing as a team, the collaboration between all of you was amazing and I appreciate it.” Students were attentive to giving feedback about both the content and the structure of the discussion, recognizing that both were important aspects of their learning. During the focus group, students reported that they generally felt “able to hear out each
other’s opinions and see each other’s reasoning,” and that simulations helped with that. As Bryce said,

I think a lot of that’s due to the structure. So, especially with the simulations, we’ve done three different structures. ... So, the structure is like there’s a lot of time to speak, and then no matter what side, no matter your background, no matter your comfort level, at some point in time you have to just speak. And I really like that there’s a variety. Because we have the debates, and then we’ve had three different types of simulations, and then we have the normal class discussion. So, if you don’t thrive in one, you might have another... and I think that’s really cool.

The teacher also invited feedback on how she ran the class. “Overall, this is the first time that you did a mock congressional hearing over a quiz. Do you like this format?” The students clearly felt free to provide honest answers. For example, William suggested, “I think for the Q&A that when you ask a question you should pause time and give them six minutes of just answers, because, I’m not being mean to you, but when you ask a question, they’re kind of lengthy, because you’re giving a lot of background.” Ms. Ayodele asked a couple of follow-up questions and then said, “Noted, thank you, I got it,” and moved on to wrap up the lesson. Neither she nor the student appeared to harbor any negative feelings about the interaction, and the class was able to move forward without any tension in the room. Tyler suggested in the focus group that this is “one of her main things,” saying, “But she doesn’t hold grudges. She could disagree
with you today, but then by tomorrow, it’s a new day. That’s what she always says. It’s a new
day. She’s not going to hold it against you. She’s not going to hate you for what you said
personally.” This idea of feeling able to express oneself without fear of repercussion was a
central theme that came up repeatedly in student focus groups, and in this case clearly made it
possible for students to ask for what they needed in order to help their discussions become
better and more engaging over time.

**Research and reading roundtable at Global Magnet**

Global Magnet is set just off the highway, across the street from a shopping center in
the southern part of the county. Because there is a lot of open space and no neighborhood
nearby, the school feels somewhat desolate from the outside, especially because it is a classic
bunker-style Miami school layout, designed to double as a hurricane shelter, meaning there is a
lot of thick-walled concrete and few windows. Despite its appearance from the outside, the
school is friendly and welcoming, and the office was always efficient about helping me get to
the classroom. Mr. Castille’s classroom is a windowless rectangle on the second floor, crowded
with desks in a traditional layout of rows, but decorated to be friendly and bright with maps
and flags. On the day I visited, Mr. Castille was dressed in jeans and a dark long-sleeve shirt with
the school logo on it, sporting a beard and short, thick hair. His overall demeanor was casual
and youthful, but his accent was careful and he articulated all of his words in a way that made
him sound more like a newscaster than a 26-year-old from Miami.

The students were learning about German unification and the Zollverein as part of their
European history course. Mr. Castille announced that they would be having a research-based
round table discussion about the unification of Germany and the Zollverein, based on the work
the students had done in an earlier class session and at home. The students moved their desks
into a circle so they could all face each other, and Mr. Castille called up a list of research and
discussion questions on the Smart Board at the front of the room. Students had been working
on gathering independent research in order to answer these questions. He reminded them that
they needed to contribute some substantive input to the discussion in order to receive credit
for their research, so it was important that everyone participate. It was clear that this was a
regular learning format for the class, and students knew what to expect and did not appear
distressed or unsure.

The class then proceeded with Mr. Castille going through the list of questions and
students sharing what they learned from their research, while other students took notes and
added to what they had already found to ensure everyone had complete and shared
knowledge. This communal construction of knowledge pulled from a variety of sources was a
regular component of the class, and students felt it was a helpful component of their learning.
Daniel said,

Instead of what a lot of teachers do, they just go based off the book, and even
if we don’t understand it, they’re like, “Okay that’s the curriculum, that’s the
book.” [Mr. Castille] goes out of his way to make sure that we understand it...
it actually helps me learn a lot more … And, of course, we still go through the
PowerPoint, but doing our research helps build that knowledge.
Although the learning was student-centered in that all of the content knowledge was provided by the students, the discussion followed a very traditional recitation, or initiation-response-feedback (IRF), format, which is the repeated process of teacher initiation, generally asking a closed-ended question that the teacher already knows the answer to, followed by student response, or providing the answer they believe the teacher is looking for, and finally teacher feedback, praising a correct answer, restating and clarifying the student’s response, or asking follow-up questions to get closer to the answer he was looking for (Mehan, 1979; Sinclair & Coulthard, 1975). Despite this, the students were engaged and frequently took initiative to add to their peers’ responses; they made eye contact and offered visual feedback to one another.

As he engaged in extended IRF with students, the teacher payed special attention to inviting alternative explanations or different possible explanations or points of view about events or ideas. For example, he pushed them to give alternative explanations by asking “did anybody have any other definitions for the Zollverein besides what Isaac said, or is that a perfectly universally acceptable definition?” Considering multiple perspectives is a core component of the international diploma program that the school uses, and Mr. Castille took that to heart. It was a regular part of the classwork and students recognized that. Valeria said, “He wants us to understand that that there are always two sides to arguments and they’re always valid.” Mr. Castille was very explicit about this in our interview. He described his approach in the following way:
I want my students to get both sides, and for them to make a decision for themselves based on knowledge of both sides' opinions on a topic, on how they should think for themselves ... One of the good things about teaching with the [international certificate] curriculum is that using their content, their curriculum, their scheme of work as they call it, they always make sure to prioritize the multiple perspectives of different time periods and different events, and different situations. And, I always try to make sure that that they're being given as much of the full stories and as much of the full side of things as possible.

Mr. Castille constantly asked students to synthesize knowledge, pull from different places, and push past the first obvious answer. For example, during this discussion, he asked them to activate prior knowledge about a common currency, saying, “Linking this back to what we learned in last year’s US history class, does anybody remember when we talked about the economic differences between the North and the South?” As they discussed their research and where they found information, they talked also about the quality and validity of their information; another core component of looking for multiple perspectives and synthesizing information from multiple sources is evaluating the bias and purpose of different content, and considering how that might influence the perspectives they have. As Mr. Castille said,

One of the things is the skill of source analysis. Who is this coming from? Why are they saying it? Is it reliable? And then is it useful? So, I try to make sure
that they are being asked those questions, and really analyzing and evaluating
the significance of each of those sources in the context of the information
that we’re trying to go over to make sure that they understand both the
strengths and the shortcomings of sources. And at the end of the day, know
above all else, that there’s no such thing as a truly, utterly neutral source,
unless it’s coming from a robot or whatever. So, just to question them, and
ask them to question why the biases might exist where they do.

Students echoed how this approach to history went along with Mr. Castille’s willingness to
deviate from a proscribed, single stream of knowledge and to consider alternative explanations
and narratives. This came up multiple times during the focus group:

Daniel: There’s more freedom to the idea instead of just what’s in the
book as history.

Brandon: He’ll say, “Remember this was written by a British author, so
obviously there’s going to be a more biased side,” and we usually get both
sides of a story.

Sophia: He’s always like – when we’re writing something, he’s like,
“Guys, remember that you have to write the other side, there’s not only one
side to a story, always remember.”
Valeria: And we always make fun of it, because we always say, “On the other hand,” so when he’s grading our tests, he’ll be like, “I was so excited when I saw ‘on the other hand.’”

Students sometimes differed in their answers but avoided directly disagreeing with one another, instead offering their own responses as an “alternative” or “what I thought,” as opposed to suggesting one idea was right or wrong. Daniel said that “[Mr. Castille] encourages students speaking up when they feel like someone else in the group says something wrong, or something that they feel they should correct.” Mr. Castille modeled the idea of multiple, credible explanations by consistently asking students, “Do you want to back that up?” with credible evidence, and also not explicitly discrediting an answer that wasn’t in line with his own expectations. Sophia described his teaching style by saying, “He doesn’t say, you know, ‘That’s right or wrong.’ He’s like, ‘Okay, back it up by evidence, support it.’” Valeria described it a little differently, saying, “Overall, I feel like he encourages us to see the argument for what it is. This happened because this happened, and not just because of what you think about it. And to use what we’ve learned to make up our minds about historical situations.” Thus, while the environment encouraged students to explore different ideas and accept multiple explanations, they were always expected to have reasonable evidence to support those ideas, which helped conversations remain on track and avoid extreme viewpoints.

While students were encouraged to participate at any point, they also felt safe to withdraw or pass as necessary. For example, at one point Mr. Castille called on Julian, who said, “I don’t want to say anything anymore.” Mr. Castille just accepted this and moved on relatively
quickly, not lingering on the issue or cajoling Julian into speaking. However, he did quickly note that Julian would get another chance later in the discussion, and he deliberately came back to him to comment on the final question of the roundtable. The students in the focus group commented on this afterward, with Valeria noting “He didn’t make a big deal about it. Maybe later he’ll talk to you one on one and be like, ‘Hey, is there something going on,’ and he’s understanding, he’s like, ‘Okay, I’ll give you some more time.’ He’s that type of teacher.”

The students reflected this attitude and made a point to encourage one another. For example, there was a point in the discussion when Mr. Castille called on Sophia, but she instead said, “Wait, I feel like Maya has had her hand up like this entire time,” to which he responded, “You’re right, okay, that’s very nice of you, by the way,” and then invited Maya to speak on the topic. This generosity and camaraderie were consistently present throughout the entire discussion activity. The way in which students supported each other when one of them struggled is exemplified by the following exchange:

*Isabel:* So, I didn’t find much stuff on this topic. I feel like it was too difficult.

*Mr. Castille:* Well, that’s okay. I want to find out what you did find. It’s okay. Don’t be so self-critical. Just explore what you did come up with.

*Isabel:* Well okay, um... [15 seconds of silence] I found, like, the nationalists – um, but it was – anyway, that’s all I have is about Italy.

*Mr. Castille:* Okay. Well, then tell us about the Italian side.
Isabel: But it’s not good, it’s ...

[crosstalk: students make supportive comments]

Mr. Castille: No judgement here.

Brandon: We’re chilling.

Eric: Yeah, we’re all just vibing.

Valeria: We all struggle with this, don’t worry.

Isabel: I just feel like they need to be – what was the question? I just talked a lot about the unification of Italy.

Mr. Castille: It’s okay, [Isabel], you tried.

This incident stuck with the students and stood out to them as an example of how they wanted one another to feel in the classroom and how Mr. Castille made them feel. Sophia said, “You know, [Isabel], today, she was like – she didn’t want to say, she was kind of scared. And he was like, ‘It’s okay, it’s going to be fine, you can be wrong.’” Valeria followed this up directly by saying “He makes you feel safe.” Throughout the lesson, it was clear that students did feel safe in the classroom, to try out ideas, to share their thoughts, and to make mistakes. This appeared to contribute directly to their positive perceptions of classroom climate and was an emergent theme throughout the study across multiple classrooms.
Fishbowl debate at Tech Prep

Tech Prep is a new and modern-feeling school. It is located in downtown Miami in an office building. The high school area has couches and cafe tables, a gym, and open plan classrooms with mobile furniture. The school is intentionally a space without doors and is designed to feel different from other school settings. The walls are painted in bold colors and adorned with school logos and mottos in contemporary fonts. The school is largely paperless, and the Smart Board is really the only instructional space on the wall in Ms. Cohen’s classroom. The room is not decorated with bulletin boards or posters, but there is a large window along one wall and the desks are arranged into six round tables. I observed a class which began at 8am, and Ms. Cohen was upbeat and ready to go, dressed in a comfortable orange sweater and black pants. The students seemed a bit sluggish, but it was early in the morning, and by the middle of the two-hour period they were much more engaged and present.

The plan for the day was to prepare for a debate on the New Deal by conducting document analysis in small groups. Students were divided into six teams that remained stable throughout the year and which they typically used for projects, discussion, and group work. Each group worked together to review a set of primary-source documents, and then one member of each team was randomly selected and assigned to pro or con for a three-on-three debate. Ms. Cohen said she often had students engage in discussion among their small groups before moving into a whole-class activity, because:

Overall, I think they feel more comfortable first talking in small groups. And I circulate around the room, of course, while they’re doing that, and kind of,
you know, a fly on the wall thing, listen to the groups and what they're saying.
And some of the kids who are less willing to speak out in front of everybody,
at least will do it in a small group first. So, that's kind of a good thing. And
then they may not be the spokesperson for their groups, but at least they're
participating in the small groups, you know, and I hear them doing it. So they
are, you know, working through the issue verbally.

Those not participating directly in the debate were expected to complete a writing assignment
instead, and could contribute points or comments to their teammates during the debate via
Google Doc. The students in the “fishbowl” debate group appeared excited and a little jittery.
Before the debate began, some of the students engaged in performative posturing to establish
themselves as play enemies, with Aaliyah saying “I’ll demolish them.”

Each side was invited to make an opening statement, beginning with “pro” arguing that
the New Deal was a success, and then the “con” side arguing that it was a failure. Alyssa
opened the debate for the pro side with a gentle explanation of its positive aspects, but then
Aaliyah responded and leaned into her side’s performative swagger and exaggerated
disagreement with a strong argument against the New Deal, stating plainly, “Thomas Jefferson
once said that ‘government is best which governs least.’ This New Deal, is socialism.” This was
intended to be a joke, and the class laughed in response. After this, the debate took off with a
more direct and responsive back and forth. The students took ownership, with Ms. Cohen
interjecting only once in a while to remind them to use evidence from the sources when
possible. She said afterward that it was important for her “to ensure that they're basing it on
real evidence and the arguments they got from the documents.” The students responded directly to one another’s comments and continued to perform exaggerated disagreement through their tone and vocabulary, while their body language and overall demeanor suggested that they were doing this for show or as a joke, something that was expected during the debate rather than genuine feelings of animosity. The students punctuated their statements with words like “Boom,” or “Wow,” drew upon rhetorical questions to paint their opponents’ arguments as absurd, and frequently used hyperbole to make their points. Some examples of this kind of language are clear from excerpts below:

Luke: The New Deal, nobody is saying that it was completely 100% equal and fair. But the whole point of it is that it made some progressions which led to the future, like a snowball effect. It wasn't 100% fair and equal and it wasn't like purely non-bias or any racism, but it led that movement into the change today. You got to start slowly, small steps before you make big steps. Boom.

Aaliyah: Wow. Okay, let's talk about the South. The backbone of the South is sharecropping. The New Deal just disregarded the sharecropping industry in the South. It caused lack of food which caused people to go hungry all across America. Do you guys know what hunger is like for people?

Kayla: Yes, you portrayed it as a straight line, like, help, help, help, help, help--
Luke: No it...

Kayla: Shh, I’m talking. Employment, employment, employment, employment, employment. However, it’s like most things in that it fluctuated. So, it started off as like a very high rate then went down, then it went back up. It went from 9% all the way back up to 12%, which is a great percentage of people not having a lot of jobs.

Luke: And what did it end with?

Kayla: Ended up with one to 1% in 1945, because of the World War, not because of the New Deal.

The students also appeared somewhat uncomfortable with being selected for the “fishbowl” and watched by the class. Luke shook his leg and wrung his hands throughout the debate, and some of the girls retreated into their hoodies between turns speaking. Students both in the debate and on the perimeter often giggled or blushed when someone said something performatively disagreeable, and the debaters emphasized their performances with dramatic hand gestures to increase the effect and exaggerate the farcical nature of their disagreement. The laughter helped to ease the tension and discomfort of being on display in front of their classmates and especially of the disagreement inherent in debate. As Alyssa said during our focus group, “It’s kind of, you know, you can disagree, it’s just that most people, I would think, don’t really want to try to disagree.” The students are at a small school and know each other
well, and so the fact that a structured debate forced them to disagree led them to seek ways to mitigate that discomfort.

Aaliyah described an unwillingness to disagree more generally, saying, “I also usually agree with what they say. It’s like – it’s weird because usually I can agree. And even when – even if I slightly don’t, it’s never that big of a deal where I think I need to speak up.” Students reported that disagreeing with one another was simply “awkward,” but “not necessarily because the environment is bad.” They used humor as a coping strategy to deal with that awkwardness, but also to signal to their peers that they were all feeling the same way, and that they were still on good terms and not taking things too seriously, so that the disagreement and competition from the debate wouldn’t spill out into their lives outside of the classroom.

Overall, the debate went well, and the students did talk about aspects of the New Deal using a wide variety of evidence. Ms. Cohen spoke only once or twice to point students in the direction of topics they hadn’t yet covered, and to “[make] sure they’re responding to each other, being respectful, being civil.” Generally, though, the students took ownership of the back and forth and continued to engage and offer new arguments and evidence until Ms. Cohen asked them to wrap up two minutes before the end of the period. Each side gave a closing summary statement, and Luke incorporated a Dolly Parton quote in his, again soliciting laughter from the class. Afterward, Ms. Cohen invited the class to vote by show of hands which side they thought won the debate, and the students laughed and cheered on the winning side, and called each other sore losers, amidst laughter and positive energy. The atmosphere in the room
relaxed considerably after the debate and students made jokes and reunited with friends as
they returned to their desks and packed up to move into another class.

Findings

Each of the cases described above highlights a different method for organizing and
facilitating classroom discussion, which prior studies suggest are associated with specific
aspects of open classroom climate. We could expect simulations to occur in an environment
where students are encouraged to discuss political or social issues about which people have
different opinions, conducting research projects and reading multiple sources to take place in
an environment in which teachers present multiple sides of an issue when explaining it in class,
and debate to take place in an environment in which students feel free to openly disagree
about social or political issues. While it does appear that each of these cases provides evidence
for the existence of these relationships, several other themes emerged as shared factors across
cases that contributed to the presence of an open climate in these classrooms.

Consistency of practice

One common theme that emerged was that discussion was consistently a part of
instruction. At Tech Prep, students indicated that they were accustomed to classroom
discussion as a regular and expected component of their classes, saying, “Every class is a
discussion,” and “It’s so normal here... Like at our school, and in this class, discussions happen
all the time.” This expectation that discussion was a natural part of social studies instruction to
the point of being uninteresting suggests a consistency of instructional practice, rather than
using discussion as a pre-planned activity for special occasions that was only relevant for certain topics, units, or subjects.

These regular discussions frequently centered around current events, and students felt able to bring in things that were going on in the world and to use their social studies classes as a place to make sense of what was happening. For example, Nicole at Central High said:

She also encourages us to read the news. And always bring whatever’s going on with current news, so that we always start the class like that. Like, “Oh, did you guys read anything interesting on the weekend?” And if something happened like, for example, the impeachment, then we’ll talk about that, or anything that happened around the world. We always have a discussion on whatever we read.

Nathan elaborated on how this affected their class:

Whenever someone has a topic to bring up, [Ms. Ayodele] has the environment like she wants you to bring it up if we want to debate about it because you don’t know who it’s actually affecting. It could be actually affecting more than one person than your own. So, it’s very important that you – she encourages you to bring it up and see how other people view that type of topic or debate on it.

For students in Ms. Ayodele’s class, discussing current events was also a way for them to feel less alone, and to connect with one another as a community in order to try to understand
things about the world that were challenging, confusing, or upsetting. This could have been a factor in building the positive camaraderie between students that was visible during their class discussions.

Teachers developed methods to improve student relationships and increase students’ comfort with taking part in discussions over the course of the year by building consistent practices into their classroom routines. When it came to helping students feel comfortable being open and exploring ideas together, Ms. Cohen implemented stable small-group teams that students had throughout the year, giving them the chance to get comfortable with one another and smoothing transitions in the classroom because she didn’t need to come up with new groups every time:

[We have] permanent teams. I mean you might shift it around if the kids aren't working well together, you know. If somehow, it's not working out and there are problems, and I do. But I've found that worked, and I was actually worried doing that because what I used to have done before that was, you know, if we'd have a group project, every time it was a new group. And I tried to mix it up all the time, thinking I needed to do that. But honestly, having them work together was, you know, with some variations over the course of the year, I think they really worked pretty well.

In observing her class at Tech Prep several times, students had naturally begun sitting together in their teams throughout each class, and gravitated toward sharing ideas with one another
even when not prompted. This appeared to be an effective method for cultivating a positive student work environment.

Ms. Ayodele talked about how she helped students get comfortable with sharing their ideas and opinions, not just regurgitating the information and arguments present in the content they read, as part of a daily practice of discussing current events:

I start with some daily exercise. So, maybe the news, right? So, in my Law 1 classes, I show CNN 10... and I ask them to write reflections on it. And I'm like, “I don't want you to tell me a summary on what you just read. I want you to connect what you just heard with something else that's happened or something that brings a memory, something that you are really - it brought some emotion out of you. Tell me your thoughts about what it is that you just saw, questions that you still have.” And then, have a conversation. Ask them. “So, what do you guys want to talk about?” If nobody is saying anything, then maybe guide them by offering your own perspective on what it is that they - we all viewed together. And ask probing questions. Somebody will start talking. And then, there are some days that there is something that they all want to talk about. And then, some days that it's dry and nobody has anything to say. But you have to start small. And I think it starts with what's going on around them.
Here, she is not only describing the importance of regularity, but also her methods for helping students bridge from classroom activities with which they may be more comfortable, like a writing assignment, to actively sharing their thoughts verbally with the class. She is also giving explicit instructions for how she wants them to engage in conversation, not just offering a summary but incorporating ideas from other sources and their own personal feelings. This consistency of practice really shone through in her classroom, where students appeared comfortable and confident and expressed that they knew what was expected of them and could find the right time to share their thoughts with the class.

Preventing in advance

When it came to more complex or controversial conversations than those that occurred regularly, all of the classrooms I observed placed an emphasis on advance preparation. This theme echoed Hess’s (2009) assertion that skillful teaching of controversial issues required teaching both with and for discussion, and that teachers who successfully implemented these discussions understood the importance and centrality of preparation. Mr. Castille described one example of his approach:

I try to make sure that they're informed before we have a conversation of that nature [referring to controversial issues]. Sometimes, I'll have them conduct a research task where they’ll look up information or I'll lecture about it a little bit, then I'll have them research further and then I'll say, “We're going to have a discussion on this next class and be prepared to answer the
questions that I’ve come up with using your information that you’ve researched.”

He felt strongly that by ensuring his students had a lot of preparation and content to draw from, he could help the discussion stay on topic and keep the focus on discussing interpretation of factual sources rather than veering too far into a purely theoretical conversation or relying on conjecture.

Both teachers and students emphasized the importance of preparing in advance as a tool to mitigate fear and apprehension about public speaking and to help encourage participation among students who might otherwise be hesitant to share. As Valeria from Global Magnet shared, “He makes sure to give us time to research because then we always have something to say.” Teachers differed in their approaches to how they encouraged participation, but saw preparation as an important part of that. Ms. Cohen, for example, did not believe in forcing students to participate in whole-class discussions unless she was sure they were adequately prepared:

So, I really, you know, I don't try to push anyone. I will call on kids sometimes if it's just because it’s stuff I know that I've asked them to prepare for. Sometimes I'll do that to get kids out of their shell. But it's not that productive, I find, because I can't force them to do something unnatural for them, unfortunately.
In contrast, both Mr. Castille and Ms. Ayodele made verbal participation a requirement of some of their activities, and as we saw in the Global Magnet and Central High cases above, they made it very clear to students what those expectations were and gave them the opportunity to gather information and write out what they wanted to say in advance, so they could be prepared. In her typical style that was warm and encouraging, Ms. Ayodele described her reasoning as follows:

So, even the student that's like shy about speaking, my - all you're doing is telling me what you know and telling the class - this is just a conversation. Don't overthink it because I want you to imagine, like, tell me - I want you to imagine like you're talking to your friend about, I don't know, the latest video game or the Youtuber that you watch, right? And you can narrate that with no problem. Think of it like this, the more you know about something, the easier it is for you to talk about it. So, if you prep, you have something to offer.

She emphasized to students that they could gain confidence in speaking through confidence in their knowledge of the content, and she tried to enable them to develop that knowledge and a passion for the topics of the class, while also having the space to bring in topics or issues that they were already passionate about.
Safety, forgiveness and humility

By far the most important theme that emerged from the data, and which participants referred to over and over, was students’ feelings in the classroom that they were safe, that they could make mistakes without fear of repercussion, and their teachers attitudes of humility, grace and reciprocity. These aspects of classroom climate did not appear tied to any specific teaching practices, and students did not refer to them in relation to specific classroom activities or elements of their learning. Instead, this aspect of OCC appears to be the “secret sauce” of how teachers foster a positive learning environment in which students feel heard and respected. This is in line with findings from the previous chapters of this dissertation, in which the OCC item “Teachers respect our opinions and encourage us to express them during class” was not strongly associated with unique teaching practices beyond discussion of current events.

Safety

Students described feelings of safety primarily as a function of teacher attitudes of non-judgement, and comfort level with their peers. Teacher non-judgement was important to students’ feeling as though they could take risks and that those risks were welcomed and encouraged. This was especially important to students at Central High, which helped lower the stakes when they were participating in simulations. For example, Eva said of Ms. Ayodele:

Another thing that she does a really good job of is making kids feel like safe, and that they could interject in things. ... So, she makes kids feel very okay to
make mistakes. ... She does a really good job of telling them that it’s okay to make mistakes, like it’s fine, especially in this environment.

In addition to telling her students that it was okay to make mistakes, and “not holding grudges,” as Tyler described in the case above, she also modeled this for students by being upfront and honest about her own mistakes or lack of knowledge. Sydney emphasized that this helped increase comfort with peers as well, by creating a shared history of overcoming challenges as a group. She said, “I think we’ve all messed up at one point... in front of each other, and that just makes you feel more comfortable because it’s okay to make mistakes. And [Ms. Ayodele,] she makes a lot of mistakes too!”

At Global Magnet, there was also a sense that students followed suit by mimicking their teacher’s non-judgmental attitude. Sophia said, “We’re comfortable with each other while we’re talking with each other, and like, if sometimes one of us starts to feeling bad, [Mr. Castille] he reminds us, he’s like, ‘It’s okay, you’re not going to be judged or anything.’” His commitment to non-judgement also seemed to help mitigate the high-pressure social world that teenagers operated in. As Carlos described:

During debates I’m usually quiet during class. But like in this class, I know basically everyone, so I don’t mind like speaking up and not feeling judged. Because sometimes I know I speak up and I’ll say something wrong, and I’ll look around and like I see everyone’s faces looking like, “Oh, he said
something wrong... oh, he’s dumb.” But in this class [Mr. Castille] just makes us feel safe.

At Tech Prep, which is a very small school, students also felt that comfort with their peers was an important part of feeling safe in their classrooms, and compared their environment with other, less close-knit settings. Haley said:

It’s kind of interesting at this school because we’re a class of 36, our entire general class. So, we’re all pretty good. And our grade is like really friendly to everybody. So, we’re at least acquaintances. ... I take an enrolment class by myself, it’s harder for me to speak up in that kind of situation. One, because I don’t know the people in the class. Like I have no idea who any of them are. ...They’re all strangers.

She was used to being in an environment in which she could trust that the students knew her well enough that any one comment or mistake would not define their impressions of her. However, this comfort with one another and the closeness students felt within their classrooms was complicated, and did not always have a positive effect on OCC. When it came to talking about current, instead of historical, events, or about controversial public issues, students at Tech Prep reported that they felt less able to engage and to disagree with one another. Haley continued:

I don’t feel like it’s like because we’re so close-knit that we don’t want to have these discussions. It’s just because we’re so close-knit we generally do think
alike, so we never – we never really have that situation where we have to have a big argument. And if we do, because we’re such close friends, it’s not an argument really, more as a debate and let me show you my side and let me see your side.

Some students, though, felt that their closeness with other students was an impediment to public disagreement about politics or social issues. When asked about disagreeing with her peers during a discussion, Alyssa said:

No one will initiate it, even just in normal conversation. Like I know I don’t really try to with politics. Because I think about it a lot, I’ll listen to the news a lot, but I don’t really like to do it with at least like friends. Because I know sometimes it’s important, and I’ll do it when it’s important or if someone else brings it up. But in general, I feel like people can get so mad about that. Or I’m kind of scared. I don’t want people to get mad about that. Because it’s just one part of everyone’s life, like it’s not everything.

Alyssa recognized that the small, tight-knit social environment of the school meant that the stakes were high for conflict with her peers, likely because it would be impossible to avoid or create space away from those you disagreed with, and that issues were likely to spread quickly and create tension across the entire class. She felt that it was often preferable not to engage about current issues, because preserving the peace and friendliness of the school climate was more important than making sure she expressed her opinion.
Forgiveness

Beyond feeling safe to make mistakes, students also reported feeling that they were able to move on from mistakes effectively and that their slip-ups did not negatively impact the relationships within the classroom. As Anthony from Central High said, whenever they made a mistake, Ms. Ayodele would tell them, “When you mess up, breathe, and keep going.” She wanted them to learn to stay calm and move past their challenges, not hold onto them and allow them to break down their confidence. Gabriel shared how important it was that they had a chance at redemption and that they saw failure as a learning opportunity, saying, “Even though I make mistakes in what I say, [Ms. Ayodele] never wants to discourage me from speaking. She always wants me to keep making these type[s] of remarks, because it actually helps me learn, and it helps the people around me learn as well.”

It was not just Ms. Ayodele for whom not holding a grudge was “one of her main things.” This same sentiment came up at Global Magnet, where students praised Mr. Castille for being willing to maintain a positive relationship with students even when they erred in some way, typically by being disrespectful. Daniel described his willingness to forgive in the following way:

Some teachers, when you cross that line with them, they’ll stop treating you like they used to, like they’ll treat you different now. When you cross a line with [Mr. Castille], he will like make a note of like, “You don’t do this in my class, it’s is not what we do.” But he doesn’t hold a grudge. Like the next sentence, he will start joking with you like nothing happened. He doesn’t
make you feel like outcast or that you’ve screwed up, you know. It’s a new
day. It’s new. You learn from it. And you don’t resent him for that. Like you
learn from it and you’re like I’ll be okay, I screwed up, I was not supposed to
do that, but like he accepts it and now we’ve moved on from it and we’ve
learned from it.

This is indicative of a growth mindset present in these classrooms that helps make openness
possible. Students feel safe enough to take risks, and when those risks don’t pan out, they view
that as an opportunity to try again and do better, rather than a referendum on their ineptitude
or an excuse to shut down and retreat into themselves.

Situations without forgiveness can have negative consequences for students and affect
their feelings of comfort and safety. Alyssa at Tech Prep told the following story:

So, I made a grievous mistake in one my essays when I wrote that Africa was a
country... I just had a total brain slip... And I have never lived it down... People
that weren’t even there still find a way to make fun of me. Like it’s not that it
affects me or anything, I don’t care. But I just think, I can understand the fear
of being wrong, you know what I mean? But it’s also like interesting at this
school because it’s so small that you know everyone. So you’re also
sometimes not afraid to be wrong because it’s going to turn into a joke and
you can all laugh about it. But it depends, if you think about it, these are
mistakes – no offence – since we’re such an advanced school... we’re
expected to like know. So when some people don’t know I can see why they would feel less comfortable.

In this case, the way that her classmates used humor to respond to discomfort meant that she was not able to quickly move on from her mistake, and that instead it came to define her among her peers and even her teachers. This only fed into the pressure students were under in a high-achieving atmosphere. When expectations were high and the consequences of failure were severe, students became less willing to take risks and to put themselves out there, a sentiment reflected above by their apprehension about openly disagreeing with peers.

**Humility**

The final important component of this theme was a sense of humility on the part of the teacher. As William described Ms. Ayodele, “She isn’t like a dictator and she doesn’t go like, ‘Oh, oh believe this, believe this, believe that.’” Instead, she was willing to be circumspect about what she did and did not know, and to accept that students’ opinions and beliefs were valid in their own right. This was very important to her students and allowed them to feel respected as whole people. Sydney said:

She also treats us more as like adults than children, right... She has never said, “Oh, no, you’re wrong and you don’t know what you’re talking about...” because she sees it as, “You know what, you’re in high school. You’ve already made up your mind. You know what you’re talking about.” So, that’s another way of respecting. She doesn’t treat us like we’re always wrong or we don’t
know what we’re talking about... Yeah, she’s never like one of those adults that say, “Oh, you’re just a kid, you don’t know it all.”

This transition to treating students as adults with valid opinions was also in line with the idea that she was preparing them to be active and engaged citizens, a point which both Ms. Ayodele and her students brought up as a primary goal of her teaching.

It was also important that students felt they had a say in the learning process, and that their teachers were willing to adjust their instructional technique to meet the needs of the students. This was the case at Central High, where Ms. Ayodele invited feedback from students on her discussion facilitation, but this was also echoed by the students at Global Magnet, such as Maya, who said, “The fact that he actually asks us, like what can I do to get you going and to engage the class.” This was an important part of students feeling that he cared about their opinions and “always makes time” to invite their input about what they need from the class.

**Care & Trust**

Finally, students reported across the board that they wanted to feel and be reassured that their teachers actually cared about them as people. Haley at Tech Prep put it most succinctly, saying, “I feel like the teacher also makes a difference. Like if you have a better relationship with the teacher, then you will feel more comfortable speaking up.” Students expressed deep appreciation for the positive presence of a kind, caring, and respectful adult at school, and in many cases focus groups ended with students feeling emotional about how much they respected, admired, and were grateful for their teachers. This appears to reflect the
quantitative literature, which has found that positive student-teacher relationships are predictive of more open classrooms (Quintelier & Hooghe, 2013).

Teachers expressed this care in a variety of ways. For example, Ms. Ayodele had a bulletin board covered in photos of her students past and present, that took up most of one wall in her classroom. Bryce said about her:

It is just in general, but I have a lot of respect for [Ms. Ayodele] and all her work. Not just because of me being in her class, or all the clubs that she does, being just one person in all the things I described to you she does, but also how she’s probably one of the few teachers in this school, or just in general compared to other schools, that actually cares about her students, and you can clearly tell. If you see the wall behind you, she – she loves us. She’s like our school mom.

It was not only that Ms. Ayodele put in a lot of visible time and energy to be with her students, but also that she treated them as individuals. Sydney pointed out, “She knows our backgrounds or what’s happening, and she gives us a time to do assignments. It’s not like, oh, I’ll see you in two days, here’s your project. She knows what we have on plates and she gives us reasonable timing.” She took the time to understand what was happening in her students’ lives outside of her classroom and she respected that they had competing priorities, which also helped them feel seen and cared for.
Students in Mr. Castille’s class also appreciated that he tried to relate to them and to show that he was interested in their lives outside of class. He told me that he played a lot of the same games, watched many of the same television shows, and was familiar with some of the same internet memes as his students. They appreciated this and looked to him as more of a near-peer mentor and someone they could trust. Valeria said:

And I feel like it’s very important and it’s a very specific aspect with this class, the fact that he relates to us on a different level because sometimes teachers are older and they are of a different generation. They might have had different input on certain things, but it’s not relatable. But since [Mr. Castille] is not extremely older than us it makes it fun because he relates to us but at the same time he can put in input from an older perspective.

Overall, students in these open classrooms felt that their positive relationships with their teachers made it easier for them to engage in discussion that was open and authentic.

Discussion

This paper casts a fine lens on how teachers create open classroom climates for discussion using a variety of instructional practices, and also how some of the elements that enable an open classroom are unrelated to the teachers’ actions and are much more about how they make students feel. I find, based on my data, that specific instructional practices do lend themselves to some of the sub-aspects of open classroom climate.
In this case, simulations appeared to help students feel comfortable discussing topics about which people had different opinions, and that they were encouraged to make up their own minds. Second, reading multiple sources and deviating from the textbook appeared in a classroom where presenting multiple sides of an issue was a core value held by the teacher, and where students felt strongly about supporting one another. Third, debate highlighted the discomfort students felt about open disagreement and conflict in their classroom, and how their peer-to-peer relationships influenced their engagement in classroom discussions. Finally, all of these open classrooms shared the characteristics of an environment in which students felt respected, safe, and cared for, and where teachers worked consistently to implement discussion in a way that students could learn to engage with over the course of the school year.

This makes an important contribution to the literature by shining a light on what open classroom environments look like in practice, and what challenges might make it difficult to maintain an open climate in light of the complex and dynamic relationships students have with one another, with their teacher, and with their social role within the classroom group. This study reinforces many of the findings in the quantitative literature that consider the predictors of an open classroom climate. It also raises new questions that merit further consideration, such as what makes students recognize and feel respected within a classroom, and how the social dynamics of the school environment that dictate so much of students’ lives translate into the reduced social environment of the classroom.

While the scope of this study is somewhat limited, and while the classrooms observed here do not represent a complete cross-section of American secondary social studies learning
environments, they do help to highlight some of the important considerations for teachers who wish to implement classroom discussion in a way that will be most conducive to student learning and civic outcomes. Importantly, my findings suggest that all students can benefit from teachers who care deeply about their wellbeing and who strive to create classroom environments in which they can feel safe, supported, and able to take calculated risks.
Chapter 5: Conclusion

The findings presented in this dissertation enhance our understanding of how teachers are able to foster an open climate for discussion within their classrooms through the use of various instructional practices. While decades of research have pointed to the association between an open classroom climate for discussion and important civic outcomes including knowledge, tolerance, and intended participation, it is only in recent years that researchers have begun to explore the factors that are predictive of such a climate (Alivernini & Manganelli, 2011; Campbell, 2007, 2008; Edwards, 2012; Kennedy, 2012; Knowles & McCafferty-Wright, 2015; Maiello et al., 2003; Quintelier & Hooghe, 2013; Torney-Purta et al., 2008; Torney-Purta, Lehmans, et al., 2001; Torney-Purta & Barber, 2005; Treviño et al., 2017; Zhang et al., 2012). As we see in Chapter 1, the majority of this research has focused on school factors and individual characteristics that are associated with open classroom climate. The research has most notably found that OCC is strongly associated with schools with a strong democratic climate and positive student/teacher relationships, and that girls, students of higher socioeconomic status, and students with high self-efficacy are also more likely to perceive their classrooms as more open (Claes et al., 2017; Kuang et al., 2018; Maurissen et al., 2018; Quintelier & Hooghe, 2013; Reichert et al., 2018).

While some literature suggests that OCC is in and of itself a teaching practice, I instead define “climate” and “pedagogy” as separate constructs, and begin to tease out the relationships between them (Godfrey & Grayman, 2014; Martens & Gainous, 2013). This decision is supported by the findings in Chapter 4, which make it clear that while some
instructional methods may expand opportunities for an open climate to manifest, the most
core components of OCC - students’ feelings of respect, safety, and trust - must be cultivated in
tandem with discussion-based teaching practices in order for students to engage meaningfully
in authentic conversations.

As such, this dissertation makes a contribution to the field by expanding our
understanding of the classroom-level conditions that lend themselves to an open climate for
discussion; by casting a finer lens on discussion by considering the individual factors that make
up OCC and how they might separately be influenced by instructional practice; and finally by
refining our understanding of classroom climate and pedagogy as different but related concepts
and the ways in which they co-vary.

Taken together, these three studies constitute a modified explanatory sequential mixed
methods design. The first two studies of this dissertation take a quantitative approach, using
hierarchical linear modeling to describe relationships between classroom-level measures of
instruction and individual-level perceptions of OCC. The third study builds on these findings by
using qualitative analysis to help explain the mechanisms at play in the associations uncovered
by the quantitative findings. However, unlike a traditional explanatory sequential design, this
study uses data from two separate samples, collected many years apart, as a result of the
temporal and resource constraints of the dissertation project. Nevertheless, the findings from
these two sets of data complement and reinforce one another, raising new questions and
directions for further research.
Teaching for Citizenship: Instructional Practices and Open Classroom Climate

As one of the most consistent predictors of positive civic development outcomes, OCC is an important component of effective civic education. Better understanding how teachers might create an open climate could have considerable implications for policy and practice. Although there exists little previous research which examines the classroom-level relationships between teaching and OCC, there is considerable reason to believe that student-centered and discussion-based practices may be more suited to creating classroom environments in which OCC can thrive, as both these types of practices and OCC itself have been shown to be associated with a number of positive civic development outcomes (Barton & Avery, 2016; Hess, 2009; Lo, 2017, p. 201; Niemi & Junn, 1998; Winkler, 2011). Specifically, the paper considers four common instructional techniques that appear most promising: debate, simulation, collaborative group work, and inquiry-based design.

Using nationally representative data from the US sample of the 1999 IEA Civic Education study, I begin by asking to what extent various instructional practices are associated with open classroom climate, what the magnitude and direction of these relationships might be, and how they compare to one another. I find that discussion of current events is strongly positively associated with OCC after adjusting for a variety of confounding individual and contextual factors. I then examine whether individual aspects of OCC are related to instructional practice, and find that, intuitively, practices such as debate and simulation are positively associated with feeling free to disagree and being encouraged to discuss issues about which people have different opinions and reading multiple sources and research projects are positively associated.
with teachers’ presenting multiple sides of an issue. Recitation and lecture appear to be negatively associated with students feeling respected.

Although the age of the data limits the scope of generalizability and despite the descriptive and not causal nature of the results, these findings suggest overall that while regular discussion of current events is likely the most effective thing teachers can do to try to foster an open classroom climate, other discussion-based practices may be effective at improving certain aspects of OCC. As such, further research might consider whether and to what extent measures of instructional variety predict OCC or use cluster analysis to assess whether certain combinations of instructional methods might be promising for improving OCC overall.

Open for whom? Equity and identity in fostering an open classroom climate

Because students’ comfort and efficacy in the classroom are important components of the OCC scale, prior research has shown that students’ individual characteristics, especially their backgrounds and identities, are strongly associated with their perceptions of OCC (Claes et al., 2017; Kelly, 2008; Kuang et al., 2018; Reichert et al., 2018). In addition, literature on classroom discussion and pedagogy has suggested that students may experience classroom activities differently based on their personal backgrounds and their social standing within the classroom (Cohen, 1986; Hemmings, 2000; McFarland, 2001; Subedi, 2008; Uekawa et al., 2007). As such, this study considers whether and to what extent the associations identified in the previous chapter are moderated by students’ socioeconomic status by examining the interaction effects between instructional practices and students’ access to home educational resources (HER).
I find that some of these relationships do differ significantly for different types of students, which may have consequences for the efficacy of certain instructional practices for fostering OCC for different students and in different classroom contexts. Specifically, discussion of current events is most strongly positive for students of the lowest socioeconomic status, although it remains positive across all students. This is in keeping with a compensatory model of civic education and results dating back to work as early as Langton and Jennings’ (1968) landmark study. In addition, while debates and panel discussions appear to be positively associated with feeling able to disagree for students of average and above-average HER, these effects are negative for students who fall below the national average in terms of HER. Similarly, reading additional material not from the textbook is strongly positively related to teachers presenting multiple sides of an issue for average and above-average HER students, but null-to-negative for less-resourced students. Finally, while recitation appears to be a neutral activity in terms of highly-resourced students feeling respected in the classroom, it has negative effects for average and below-average HER students.

These findings suggest that teachers need to be aware of how different students in their classroom may perceive their instructional practices as supporting, or not, an open climate, and should think about tailoring their instruction to meet the specific needs and demographic make-up of their classes. Further research in this area could also tease out variation in these effects by race, gender, and other characteristics, and the intersectional nature of these identities, which is beyond the scope of the current study. It also raises the question of how students’ relationships with peers within classroom groups influences the saliency of different
identities, and social network analysis might help identify the role of within-classroom relations in how different student perceive levels of openness.

“Conversation is everything”: How teachers and students create environments where open discussion can thrive

Lastly, in an effort to help explain the complex mechanisms underlying the relationship between pedagogy and open classroom climate, the final study of this dissertation takes a qualitative approach and asks how the specific pedagogical choices teachers make through designing classroom instructional activities influence OCC. Classroom environment is just as crucial as is teacher practice to successful discussion; it is important that teachers work to develop positive student relations and a culture of trust and respect (Barton & Avery, 2016; Hadjioannou, 2007; Hemmings, 2000; Henning, 2008; Hess & Posselt, 2002; Ho et al., 2017; Levinson, 2012; W. C. Parker, 2010; Washington & Humphries, 2011). Thus, I considered how the instructional practices teachers used interacted with students’ relationships, beliefs, and roles in the classroom in order to influence their perceptions of open classroom climate for discussion.

In order to explore these questions, I conducted a multiple-case phenomenological study using data collected in the Miami-Dade County Public Schools across the 2019-2020 school year. The data in this study came from three 11th-grade social studies classrooms from three very different schools spread geographically around the county. I conducted close examination of how discussion activities illustrate the function of OCC within the classroom.
The three cases examined include a congressional simulation, a roundtable discussion, and a fishbowl debate.

After describing in detail these three classroom vignettes, I identified a number of cross-cutting themes that emerged, including teachers’ consistency of practice and student preparation as tools for increasing students’ comfort and willingness to participate. These findings echoed much of the prior literature on how teachers might effectively facilitate controversial issues discussions in the classroom (Hess, 2002, 2009; Hess & McAvoy, 2014). Students also spoke about the importance of positive student-teacher relationships and feeling cared for, which was in line with earlier quantitative literature (Quintelier & Hooghe, 2013).

Finally, and most importantly, students identified feelings of safety, a belief that they could take risks without disastrous consequences of their mistakes, and their teachers’ humility with regard to valuing their input and inviting them to explore new ideas.

These three cases highlighted the importance of relationships within classrooms, both between teachers and their students as well as among peers, in order to create an environment in which students are able to engage in meaningful and authentic discussions. While some practices emerged that helped make such environments possible, and there was evidence that the instructional methods explored did in some ways encourage open discussion, it was also clear that these associations rested on a foundation of strong positive relationships. Further research might conduct a robust ethnographic study of how classroom relationships form over time, how they are both similar and different to the broader social dynamics of the school, and how they shape the nature of discussions as they shift dynamically throughout the year.
Conclusions

The work presented in these three studies helps paint a picture of how pedagogy, group membership and dynamics, and climate interact within secondary social studies classrooms in the United States. At a moment in which the importance of civic education for promoting a just, tolerant, and democratic society appears to be at a peak, better understanding how teachers can foster environments which lead to positive civic outcomes for students is crucial to ensuring the future health of our polity. Teachers should incorporate discussion of current events into their teaching in a regular and intentional way and should also remain open to exploring other discussion-based and inquiry-based instructional models that meet the needs of, and are tailored to, the demographics of their students. They should seek to develop positive relationships with their students and to create a classroom environment in which students feel safe and supported among their peers. Finally, school administrators, parents, and other stakeholders should enact policies and foster environments in which teachers are empowered, encouraged and enabled to undertake such projects, and where student voices are valued and their opinions welcomed. By continuing to explore the interactions between pedagogy, climate, and people within classrooms, we can help support teachers and schools in fostering open classroom climates in order to secure a robust democratic future.
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### Table 1. Descriptive Statistics

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| **n**                                     | n=2811, j=124 | n=2562, j=115 **indicates statistically significant difference using t-tests at the 0.01 level.**
Table 2. Description of measures.

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<th>Variable</th>
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<th>Std. Dev.</th>
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<th>Max</th>
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<td>Open Classroom Climate Index</td>
<td>A measure of the extent to which the classroom environment encourages free and controversial discussions and respects diverging opinions</td>
<td>10.32</td>
<td>2.27</td>
<td>2.58</td>
<td>15.54</td>
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<td>Student response to how frequently “Students feel free to disagree openly with their teachers about political and social issues during class.”</td>
<td>2.92</td>
<td>0.94</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>OCC2 – Own Mind</td>
<td>Student response to how frequently “Students are encouraged to make up their own minds about issues.”</td>
<td>3.22</td>
<td>0.87</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>OCC3 – Respect</td>
<td>Student response to how frequently “Teachers respect our opinions and encourage us to express them during class.”</td>
<td>3.07</td>
<td>0.93</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>OCC4 – Express</td>
<td>Student response to how frequently “Students feel free to express opinions in class even when their opinions are different from most of the other students.”</td>
<td>3.03</td>
<td>0.90</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>OCC5 – Discuss</td>
<td>Student response to how frequently “Teachers encourage us to discuss political or social issues about which people have different opinions.”</td>
<td>2.79</td>
<td>0.90</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>OCC6 – All Sides</td>
<td>Student response to how frequently “Teachers present several sides of an issue when explaining it in class.”</td>
<td>3.03</td>
<td>0.89</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Teacher Practices

<p>| Teacher picks topic       | Teacher report of how frequently “the teacher chooses the issues to be discussed in class” | 3.10  | 0.72      | 2   | 4   |
| Research projects         | Teacher report of how frequently “Students work on projects that involve gathering information outside of school” | 2.60  | 0.80      | 1   | 4   |
| Textbooks                 | Teacher report of how frequently “Students study textbooks” | 2.96  | 0.83      | 2   | 4   |
| Worksheets                | Teacher report of how frequently “Students work on drill sheets or work sheets” | 2.48  | 0.81      | 1   | 4   |
| Group Presentations       | Teacher report of how frequently “Students work in groups on different topics and prepare presentations” | 2.75  | 0.89      | 1   | 4   |</p>
<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roleplay &amp; simulations</td>
<td>Teacher report of how frequently “Students participate in role play and simulations”</td>
<td>2.34</td>
<td>0.91</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Socratic method</td>
<td>Teacher report of how frequently “The teacher asks questions and the students answer”</td>
<td>3.17</td>
<td>0.72</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lecture</td>
<td>Teacher report of how frequently “The teacher lectures and the students take notes”</td>
<td>2.56</td>
<td>0.89</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Community events/activities</td>
<td>Teacher report of how frequently “Students participate in events or activities in the community”</td>
<td>1.99</td>
<td>0.83</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Classroom discussion</td>
<td>Teacher report of how frequently “The teacher includes discussion on controversial issues in class”</td>
<td>2.94</td>
<td>0.72</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Class Student textbook</td>
<td>The proportion of students in a class who said they “read from your textbook” while studying social studies</td>
<td>0.86</td>
<td>0.13</td>
<td>0.24</td>
<td>1</td>
</tr>
<tr>
<td>Class Student memorization</td>
<td>The proportion of students in a class who said they “memorize material you have read” while studying social studies</td>
<td>0.74</td>
<td>0.14</td>
<td>0.31</td>
<td>1</td>
</tr>
<tr>
<td>Class Student extra reading</td>
<td>The proportion of students in a class who said they “read extra material not in your textbook” while studying social studies</td>
<td>0.61</td>
<td>0.14</td>
<td>0.25</td>
<td>0.94</td>
</tr>
<tr>
<td>Class Student worksheets</td>
<td>The proportion of students in a class who said they “fill out worksheets” while studying social studies</td>
<td>0.86</td>
<td>0.14</td>
<td>0.08</td>
<td>1</td>
</tr>
<tr>
<td>Class Student reports</td>
<td>The proportion of students in a class who said they “write reports” while studying social studies</td>
<td>0.75</td>
<td>0.15</td>
<td>0.17</td>
<td>1</td>
</tr>
<tr>
<td>Class Student discussion</td>
<td>The proportion of students in a class who said they “discuss current events” while studying social studies</td>
<td>0.77</td>
<td>0.13</td>
<td>0.32</td>
<td>1</td>
</tr>
<tr>
<td>Class Students watch TV</td>
<td>The proportion of students in a class who said they “watch television shows, videos, or filmstrips in class” while studying social studies</td>
<td>0.77</td>
<td>0.16</td>
<td>0.11</td>
<td>1</td>
</tr>
<tr>
<td>Class Students discuss TV</td>
<td>The proportion of students in a class who said they “discuss television shows, videos, or filmstrips” while studying social studies</td>
<td>0.71</td>
<td>0.15</td>
<td>0.16</td>
<td>1</td>
</tr>
<tr>
<td>Class Student debates</td>
<td>The proportion of students in a class who said they “take part in debates or panel discussions” while studying social studies</td>
<td>0.48</td>
<td>0.18</td>
<td>0</td>
<td>0.97</td>
</tr>
<tr>
<td>Class Student role play/simulation</td>
<td>The proportion of students in a class who said they “take part in role-playing, mock trials, or dramas” while studying social studies</td>
<td>0.41</td>
<td>0.17</td>
<td>0</td>
<td>0.85</td>
</tr>
<tr>
<td>Class Student write letters</td>
<td>The proportion of students in a class who said they “write a letter to give your opinion or help solve a community problem” while studying social studies</td>
<td>0.30</td>
<td>0.13</td>
<td>0</td>
<td>0.80</td>
</tr>
<tr>
<td>Class Student visitors</td>
<td>The proportion of students in a class who said they “have visits from people in your community to learn about important ideas or events” while studying social studies</td>
<td>0.36</td>
<td>0.14</td>
<td>0</td>
<td>0.79</td>
</tr>
<tr>
<td>Student characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Indicator for student self-identifying as male</td>
<td>0.51</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Black</td>
<td>Indicator for student self-identifying as black or African American, non-Hispanic (reference category is white non-Hispanic)</td>
<td>0.16</td>
<td>0.37</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>Indicator for student self-identifying as Hispanic (reference category is white non-Hispanic)</td>
<td>0.14</td>
<td>0.35</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other race</td>
<td>Indicator for student self-identifying as Asian, Native Hawaii or Pacific Islander, or American Indian or Alaska Native (reference category is white non-Hispanic)</td>
<td>0.06</td>
<td>0.25</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Immigrant</td>
<td>Indicator for a student born outside of the United States</td>
<td>0.11</td>
<td>0.31</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Non-English Home Language</td>
<td>Indicator for a student who speaks a language other than English at home, at least some of the time</td>
<td>0.09</td>
<td>0.29</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Educational Aspirations</td>
<td>Amount of education student intends to continue beyond current year (5 is equivalent to a 4 year college degree).</td>
<td>4.76</td>
<td>1.27</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Home resources</td>
<td>Composite index of mother’s education, number of books in the home, and daily newspaper subscription, standardized across the entire sample.</td>
<td>0</td>
<td>0.71</td>
<td>-1.99</td>
<td>1.12</td>
</tr>
<tr>
<td>Civic knowledge</td>
<td>Score on civic knowledge test, measuring content knowledge and skill in interpreting political communication</td>
<td>105.03</td>
<td>22.17</td>
<td>9.78</td>
<td>162.56</td>
</tr>
<tr>
<td>Political ideology</td>
<td>Composite index of 11 items asking students what role government should have, standardized to range from 0 to 1, with higher numbers indicating more liberal students.</td>
<td>0.59</td>
<td>0.11</td>
<td>0.24</td>
<td>0.85</td>
</tr>
<tr>
<td>Teacher characteristics</td>
<td>Number of years teacher has been teaching</td>
<td>Male teacher</td>
<td>Teacher age</td>
<td>MA+</td>
<td>Civics PD</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------------------------------------------</td>
<td>--------------</td>
<td>-------------</td>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td>Teacher tenure</td>
<td>15.22</td>
<td>11.06</td>
<td>1</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Male teacher</td>
<td>0.66</td>
<td>0.47</td>
<td>0</td>
<td>1</td>
<td></td>
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<tr>
<td>Teacher age</td>
<td>3.64</td>
<td>1.26</td>
<td>1</td>
<td>6</td>
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<tr>
<td>MA+</td>
<td>0.59</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Civics PD</td>
<td>0.75</td>
<td>0.44</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Teacher political Ideology</td>
<td>0.55</td>
<td>0.10</td>
<td>0.29</td>
<td>0.96</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School characteristics</th>
<th>Indicator for school in the NAEP Southeast region (reference category is Northeast)</th>
<th>Central</th>
<th>West</th>
<th>Urban</th>
<th>Rural</th>
<th>Private school</th>
<th>Choice school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>0.25</td>
<td>0.26</td>
<td>0.27</td>
<td>0.35</td>
<td>0.10</td>
<td>0.10</td>
<td>0.31</td>
</tr>
<tr>
<td>Urban</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>0.48</td>
<td>0.29</td>
<td>0.30</td>
<td>0.46</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Private school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom-level student home resources</td>
<td>Average home resources score for students in the classroom, grand mean centered.</td>
<td>0.02</td>
<td>0.36</td>
<td>-1.03</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: unweighted sample statistics, n=2562*
Table 3. Hierarchical linear models estimating OCC as a function of individual and contextual covariates.

<table>
<thead>
<tr>
<th>Fixed effects</th>
<th>Model 1: Null Model</th>
<th>Model 2: School, Teacher &amp; Individual Effects</th>
<th>Model 3: Reduced school effects</th>
<th>Model 4: Reduced teacher effects</th>
<th>Model 5: Reduced individual effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept ($\beta_0$)</td>
<td>10.33*** (0.07)</td>
<td>8.26*** (0.54)</td>
<td>8.11*** (0.52)</td>
<td>8.25*** (0.41)</td>
<td>8.22*** (0.40)</td>
</tr>
<tr>
<td>Instructional Practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom HER†</td>
<td>0.26 (0.18)</td>
<td>0.27 (0.17)</td>
<td>0.26 (0.17)</td>
<td>0.29 (0.16)</td>
<td>0.27 (0.17)</td>
</tr>
<tr>
<td>Southeast Region</td>
<td>-0.54** (0.16)</td>
<td>-0.56** (0.16)</td>
<td>-0.57*** (0.16)</td>
<td>-0.55*** (0.16)</td>
<td>-0.56** (0.16)</td>
</tr>
<tr>
<td>Central Region</td>
<td>-0.41* (0.16)</td>
<td>-0.46** (0.16)</td>
<td>-0.45** (0.16)</td>
<td>-0.44** (0.15)</td>
<td>-0.46** (0.16)</td>
</tr>
<tr>
<td>West Region</td>
<td>-0.68*** (0.16)</td>
<td>-0.65*** (0.16)</td>
<td>-0.67*** (0.16)</td>
<td>-0.69*** (0.15)</td>
<td>-0.68*** (0.16)</td>
</tr>
<tr>
<td>Private School</td>
<td>-0.13 (0.20)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Rural</td>
<td>-0.30 (0.19)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>0.13 (0.12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Choice</td>
<td>0.13 (0.13)</td>
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<td></td>
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</tr>
<tr>
<td>Teacher age</td>
<td>-0.12 (0.07)</td>
<td>-0.12 (0.07)</td>
<td>-0.08 (0.04)</td>
<td>-0.08 (0.04)</td>
<td>-0.09 (0.07)</td>
</tr>
<tr>
<td>Teacher Tenure</td>
<td>0.01 (0.01)</td>
<td>0.01 (0.01)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Civics PD</td>
<td>-0.13 (0.12)</td>
<td>-0.13 (0.13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male teacher</td>
<td>0.01 (0.11)</td>
<td>-0.001 (0.12)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MA or higher</td>
<td>-0.09 (0.12)</td>
<td>-0.09 (0.12)</td>
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<tr>
<td>Teacher politics</td>
<td>0.42 (0.52)</td>
<td>0.56 (0.54)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male ($\beta_1$)</td>
<td>-0.48*** (0.09)</td>
<td>-0.47*** (0.09)</td>
<td>-0.46** (0.09)</td>
<td>-0.47*** (0.09)</td>
<td>-0.47*** (0.09)</td>
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<tr>
<td>Black ($\beta_2$)</td>
<td>-0.09 (0.14)</td>
<td>-0.02 (0.13)</td>
<td>-0.004 (0.13)</td>
<td>-0.02 (0.13)</td>
<td>-0.02 (0.13)</td>
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<tr>
<td>Hispanic ($\beta_3$)</td>
<td>-0.17 (0.15)</td>
<td>-0.13 (0.15)</td>
<td>-0.12 (0.15)</td>
<td>-0.13 (0.15)</td>
<td>-0.12 (0.15)</td>
</tr>
<tr>
<td>Other Race ($\beta_4$)</td>
<td>-0.21 (0.19)</td>
<td>-0.19 (0.19)</td>
<td>-0.19 (0.19)</td>
<td>-0.19 (0.19)</td>
<td>-0.19 (0.19)</td>
</tr>
<tr>
<td>Within-class HER† ($\beta_5$)</td>
<td>0.23** (0.07)</td>
<td>0.24** (0.07)</td>
<td>0.24** (0.07)</td>
<td>0.24** (0.07)</td>
<td>0.24** (0.07)</td>
</tr>
<tr>
<td>Educational Aspirations ($\beta_6$)</td>
<td>0.10** (0.04)</td>
<td>0.10** (0.04)</td>
<td>0.10** (0.04)</td>
<td>0.10** (0.04)</td>
<td>0.10** (0.04)</td>
</tr>
<tr>
<td>Civic Knowledge ($\beta_7$)</td>
<td>0.01*** (0.00)</td>
<td>0.01*** (0.00)</td>
<td>0.01*** (0.00)</td>
<td>0.01*** (0.00)</td>
<td>0.01*** (0.00)</td>
</tr>
<tr>
<td>Liberal Political beliefs ($\beta_8$)</td>
<td>1.87*** (0.41)</td>
<td>1.85*** (0.41)</td>
<td>1.87*** (0.41)</td>
<td>1.87*** (0.40)</td>
<td>1.87*** (0.40)</td>
</tr>
<tr>
<td>Immigrant student ($\beta_9$)</td>
<td>-0.04 (0.15)</td>
<td>-0.02 (0.15)</td>
<td>-0.02 (0.15)</td>
<td>-0.02 (0.15)</td>
<td>-0.02 (0.15)</td>
</tr>
<tr>
<td>Non-English home lang ($\beta_{10}$)</td>
<td>-0.37* (0.17)</td>
<td>-0.37* (0.17)</td>
<td>-0.38* (0.17)</td>
<td>-0.45** (0.16)</td>
<td>-0.46** (0.16)</td>
</tr>
</tbody>
</table>

Variance Components

<table>
<thead>
<tr>
<th>Variance Components</th>
<th>Model 1: Null Model</th>
<th>Model 2: School, Teacher &amp; Individual Effects</th>
<th>Model 3: Reduced school effects</th>
<th>Model 4: Reduced teacher effects</th>
<th>Model 5: Reduced individual effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept ($\tau_{00}$)</td>
<td>0.33 (0.07)</td>
<td>0.08 (0.04)</td>
<td>0.10 (0.04)</td>
<td>0.11 (0.04)</td>
<td>0.11 (0.04)</td>
</tr>
<tr>
<td>Residual $\sigma^2$</td>
<td>4.84 (0.14)</td>
<td>4.55 (0.13)</td>
<td>4.54 (0.13)</td>
<td>4.54 (0.13)</td>
<td>4.54 (0.13)</td>
</tr>
<tr>
<td>No. parameters</td>
<td>3</td>
<td>27</td>
<td>23</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>PRE level-1</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
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<tr>
<td>PRE level-2</td>
<td>0.86</td>
<td>0.70</td>
<td>0.67</td>
<td>0.67</td>
<td>0.67</td>
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<tr>
<td>Deviance</td>
<td>11413.40</td>
<td>11187.86</td>
<td>11193.54</td>
<td>11197.24</td>
<td>11198.74</td>
</tr>
<tr>
<td>AIC</td>
<td>11419.40</td>
<td>11241.86</td>
<td>11239.54</td>
<td>11233.24</td>
<td>11226.74</td>
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<tr>
<td>BIC ($n=$number of level-2 units)</td>
<td>11427.63</td>
<td>11315.97</td>
<td>11302.67</td>
<td>11282.65</td>
<td>11265.17</td>
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<tr>
<td>CAIC ($n=$number of level-2 units)</td>
<td>11430.63</td>
<td>11342.97</td>
<td>11325.67</td>
<td>11300.65</td>
<td>11279.17</td>
</tr>
</tbody>
</table>

Note: FEML estimation. *p < .05. **p < .01. ***p < .001 (two-tailed tests). n=2562, j=115

Coefficients shown for each independent variable, standard errors listed in parentheses.

†Home educational resources
Table 4. Estimated effects of instructional practices on open classroom climate for discussion.

<table>
<thead>
<tr>
<th>Fixed effects</th>
<th>Naïve Estimate</th>
<th>Estimate with Covariates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher-reported practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom discussion</td>
<td>-0.05 (0.09)</td>
<td>-0.06 (0.07)</td>
</tr>
<tr>
<td>Teach. picks topic</td>
<td>-0.10 (0.10)</td>
<td>-0.08 (0.08)</td>
</tr>
<tr>
<td>Research projects</td>
<td>0.13 (0.09)</td>
<td>0.04 (0.07)</td>
</tr>
<tr>
<td>Textbooks</td>
<td>0.01 (0.08)</td>
<td>0.07 (0.07)</td>
</tr>
<tr>
<td>Worksheets</td>
<td>-0.01 (0.09)</td>
<td>-0.01 (0.07)</td>
</tr>
<tr>
<td>Group presentations</td>
<td>0.00 (0.08)</td>
<td>0.00 (0.06)</td>
</tr>
<tr>
<td>Roleplay &amp; simulations</td>
<td>0.07 (0.08)</td>
<td>0.06 (0.06)</td>
</tr>
<tr>
<td>Teachers ask/students answer</td>
<td>-0.07 (0.10)</td>
<td>-0.04 (0.08)</td>
</tr>
<tr>
<td>Lecture</td>
<td>-0.11 (0.08)</td>
<td>-0.05 (0.06)</td>
</tr>
<tr>
<td>Community events/activities</td>
<td>-0.09 (0.08)</td>
<td>-0.02 (0.07)</td>
</tr>
<tr>
<td><strong>Student-reported Practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss current events</td>
<td>2.19*** (0.50)</td>
<td>1.55*** (0.40)</td>
</tr>
<tr>
<td>Read from your textbook</td>
<td>1.69** (0.49)</td>
<td>0.29 (0.42)</td>
</tr>
<tr>
<td>Memorize material</td>
<td>0.66 (0.49)</td>
<td>-0.34 (0.41)</td>
</tr>
<tr>
<td>Read extra material</td>
<td>1.95*** (0.46)</td>
<td>0.75° (0.42)</td>
</tr>
<tr>
<td>Fill out worksheets</td>
<td>1.97*** (0.46)</td>
<td>0.62 (0.41)</td>
</tr>
<tr>
<td>Write reports</td>
<td>1.79*** (0.44)</td>
<td>0.59 (0.39)</td>
</tr>
<tr>
<td>Watch TV/film/video</td>
<td>0.66 (0.41)</td>
<td>-0.22 (0.35)</td>
</tr>
<tr>
<td>Discuss TV/film/video</td>
<td>0.53 (0.44)</td>
<td>-0.49 (0.36)</td>
</tr>
<tr>
<td>Debates/panel discussions</td>
<td>1.08** (0.37)</td>
<td>0.41 (0.32)</td>
</tr>
<tr>
<td>Roleplay/simulation</td>
<td>0.54 (0.39)</td>
<td>0.19 (0.32)</td>
</tr>
<tr>
<td>Write letters</td>
<td>0.03 (0.53)</td>
<td>0.50 (0.43)</td>
</tr>
<tr>
<td>Community visitors</td>
<td>-0.15 (0.48)</td>
<td>0.08 (0.38)</td>
</tr>
</tbody>
</table>

Note: HLM FEML estimates. Covariates include student gender, home resources, educational aspirations, civic knowledge, home language and political ideology; teacher age; classroom composite home resources, and school region. Student-reported practices are averages estimated at the classroom level.

° p < .10  ** p < .01  *** p < .001 (two-tailed tests). n=2562, j=115
Table 5. Estimated effects of instructional practices on individual items of open classroom climate for discussion.

<table>
<thead>
<tr>
<th>Instructional Practice</th>
<th>Discussion</th>
<th>Community</th>
<th>Own Mind</th>
<th>OCC Approve</th>
<th>OCC Respect</th>
<th>OCC Express</th>
<th>OCC Discuss</th>
<th>OCC All Sides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>-0.08</td>
<td>-0.09</td>
<td>0.00</td>
<td>-0.03</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.04</td>
<td>0.00</td>
</tr>
<tr>
<td>Teachers ask students answer</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Group activities</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Workshops</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Textbooks</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Research projects</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Class discussion</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Peer discussion</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Table 6. Hierarchical linear model predicting the relationship between discussion of current events and OCC, moderated by home educational resources.

Table 7. Hierarchical linear model predicting the relationship between discussion of current events and OCC, moderated by home educational resources.

<table>
<thead>
<tr>
<th>Fixed effects</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept ( (\beta_0) )</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>7.12*** (0.49)</td>
</tr>
<tr>
<td>Instructional Practice</td>
<td>1.62*** (0.40)</td>
</tr>
<tr>
<td>Southeast Region</td>
<td>-0.64*** (0.15)</td>
</tr>
<tr>
<td>Central Region</td>
<td>-0.48** (0.15)</td>
</tr>
<tr>
<td>West Region</td>
<td>-0.71*** (0.15)</td>
</tr>
<tr>
<td>Teacher age</td>
<td>-0.07° (0.04)</td>
</tr>
<tr>
<td>HER</td>
<td>0.99** (0.38)</td>
</tr>
<tr>
<td>HER X Instructional Practice</td>
<td>-0.96° (0.49)</td>
</tr>
<tr>
<td>Male</td>
<td>-0.46*** (0.09)</td>
</tr>
<tr>
<td>Educational Aspirations ( (\beta_1) )</td>
<td>0.09* (0.04)</td>
</tr>
<tr>
<td>Civic Knowledge</td>
<td>0.01*** (0.00)</td>
</tr>
<tr>
<td>Liberal political beliefs</td>
<td>1.82*** (0.40)</td>
</tr>
<tr>
<td>Non-English home lang</td>
<td>-0.46** (0.16)</td>
</tr>
</tbody>
</table>

Variance Components

<table>
<thead>
<tr>
<th></th>
<th>( \tau_{00} )</th>
<th>( \sigma^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.08 (0.04)</td>
<td>4.53 (0.13)</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td></td>
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</tbody>
</table>

Note: FEML estimation. \( \circ p < .10 \) \( \ast p < .05 \) \( \ast\ast p < .01 \) \( \ast\ast\ast p < .001 \) (two-tailed tests).

n=2562, j=115

Coefficients shown for each independent variable, standard errors listed in parentheses.
Table 8: Hierarchical linear models showing interactions between home resources and instructional practices.

<table>
<thead>
<tr>
<th>No. Parameters</th>
<th>Residual Error</th>
<th>Intercept</th>
<th>Textbook</th>
<th>Discussion</th>
<th>Simulation</th>
<th>Reports</th>
<th>Debate</th>
<th>Questions</th>
<th>Lecture</th>
<th>Debate</th>
<th>Multiple Regression Model 7:</th>
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<tbody>
<tr>
<td>0.74 (0.02)</td>
<td>0.90 (0.02)</td>
<td>0.78 (0.02)</td>
<td>0.78 (0.02)</td>
<td>0.75 (0.02)</td>
<td>0.77 (0.02)</td>
<td>0.80 (0.02)</td>
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<td>0.77 (0.02)</td>
<td>0.80 (0.02)</td>
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<td>0.80 (0.02)</td>
<td>0.77 (0.02)</td>
</tr>
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<td>0.77 (0.02)</td>
<td>0.80 (0.02)</td>
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<tr>
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<td>0.77 (0.02)</td>
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<td>0.77 (0.02)</td>
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<tr>
<td>0.74 (0.02)</td>
<td>0.90 (0.02)</td>
<td>0.78 (0.02)</td>
<td>0.78 (0.02)</td>
<td>0.75 (0.02)</td>
<td>0.77 (0.02)</td>
<td>0.80 (0.02)</td>
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<td>0.80 (0.02)</td>
<td>0.77 (0.02)</td>
<td>0.80 (0.02)</td>
<td>0.77 (0.02)</td>
</tr>
</tbody>
</table>

Coefficients shown for each independent variable, standard errors listed in parentheses.
Table 9. Qualitative sample characteristics.

### Table 8. Qualitative sample characteristics.

<table>
<thead>
<tr>
<th>School Characteristics</th>
<th>Central High</th>
<th>Tech Prep</th>
<th>Global Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>1600</td>
<td>800 (K-12)</td>
<td>300</td>
</tr>
<tr>
<td>ELA % Proficient</td>
<td>45</td>
<td>92</td>
<td>87</td>
</tr>
<tr>
<td>Algebra 1 % proficient</td>
<td>37</td>
<td>90</td>
<td>43</td>
</tr>
<tr>
<td>% eligible for free/reduced lunch</td>
<td>90</td>
<td>44</td>
<td>84</td>
</tr>
<tr>
<td>% ELL</td>
<td>13</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>77</td>
<td>53</td>
<td>78</td>
</tr>
<tr>
<td>% White</td>
<td>3</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>% Black</td>
<td>20</td>
<td>20</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classroom Characteristics</th>
<th>Ms. Ayodele</th>
<th>Ms. Cohen</th>
<th>Mr. Castille</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>International Relations</td>
<td>AP US History</td>
<td>European History</td>
</tr>
<tr>
<td>Grade level</td>
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<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Class size</td>
<td>21</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Teacher tenure</td>
<td>12 years</td>
<td>16 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Teacher cert</td>
<td>Alternative</td>
<td>Alternative</td>
<td>Traditional</td>
</tr>
</tbody>
</table>

| Open Classroom Scores from Focus Group Students | | | |
| Disagree openly                  | 4.00 | 3.67 | 3.75 |
| Make up own mind                 | 3.86 | 3.83 | 3.75 |
| Teacher respect                   | 4.00 | 3.83 | 3.88 |
| Express difference                | 3.71 | 3.50 | 3.00 |
| Discussion encouraged             | 4.00 | 3.83 | 2.88 |
| Multiple sides                    | 3.57 | 3.83 | 3.88 |
Figure 1. OCC and discussion of current events by HER.
Figure 2. OC1 and debates/panel discussions by HER.
Figure 3. OC3 and teacher asks questions by HER.
Figure 4. OC6 and reading additional materials by HER.