# High School Teachers and Students on Student Academic Outcomes 

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#### Abstract

A thesis submitted to the department of Educational Leadership and Policy Studies, College of Education in partial fulfillment of the requirements for the degree of


## Doctor of Education

in Educational Leadership and Policy Studies

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University of Houston
May 2021

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## Dedication

I would like to dedicate this doctoral thesis to my mother, Margaret Attridge. I have always believed that to whom much is given much is expected. For my mother to have given so much of her time, energy, and sanity in the pursuit of not only raising me and my brother by herself, but also ensuring that nothing stood in the way of us obtaining the best education possible, the dedication of this thesis is truly the very least I could do to show my love, my awe, and my appreciation.

## Acknowledgement

I want to acknowledge the committee chair, Dr. Virginia Rangel, who is, without a doubt, the best quantitative methods teacher. Without her knowledge, guidance, insight, and timely blunt feedback, I may never have completed this dissertation.


#### Abstract

Background: The current American political divide is expanding to levels unseen in previous decades due to a combination of factors such as increased polarization and mass party sorting. The educational system has been unable to escape the effects of these political divisions, which has led to increased politicization of both the curriculum and classroom experiences. Additionally, high school students are becoming more politically aware, vocal, and engaged. With teachers setting a classroom's discourses, rules, values, and reward systems, the teacher's political values and beliefs become an influential variable in curriculum delivery and teacher/student interactions. Purpose: This study analyzed how teachers and students identified in terms of their political party affiliations and ideologies and what differences emerged when disaggregated by race/ethnicity and gender. Additionally, this study investigated whether or not a political party affiliation match/mismatch or ideology match/mismatch between teachers and students had any statistically significant impact on student grades. Methods: This cross-sectional, quantitative study utilized a non-experimental research design and collected data through surveys using nonprobability, purposeful sampling. The sample included high school students who were at least 18 years old at the time of survey administration and their English Language Arts teachers across the five high school campuses in Spring Branch ISD, a suburban school district in Houston, Texas. Descriptive statistical analysis, Pearson Chi-square tests, independent sample $t$-tests, and two-way ANOVA were used to analyze the data. Results: The results indicate that the student and teacher populations overwhelmingly identify with the Democratic party and are overwhelmingly liberal in their ideologies. However, the teaching population is far more liberal and closely


affiliated with the Democratic party than the student population, whereas the student population is far more conservative and closely affiliated with the Republican party than the teaching population. Conclusion: Study findings suggest that political affiliation or ideology match/mismatch evaluations between students and teachers were not significantly related to student grading outcomes. Furthermore, the findings also indicate that the modality of either in-person or online instruction in addition to any political affiliation or ideology match/mismatch were not significantly related to student grading outcomes. These findings support the existing literature in higher education in which a politically motivated grading bias was not found to be a statistically significant factor in academic outcomes. Lastly, as a result of this study, no additional changes are recommended to Spring Branch ISD's policies surrounding teacher or student political expression in the classroom.

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## CHAPTER I

## INTRODUCTION

In Iowa, a female middle school teacher resigned after comments she made while being a color commentator during a boys' basketball game were accidentally broadcast live via an online streaming service. During a commercial break, she mused about the immigration status of the Latino boys on the teams based on their last names and said, "as Trump would say, go back to where you came from" (Bohnel \& Miller, 2017). In Georgia, a school district had to apologize to students and parents when a teacher told students that their MAGA (Make American Great Again) shirts supporting President Donald Trump were in violation of the dress code and banned (Sinclair, 2017). A Fort Worth ISD English teacher was fired for publicly tweeting at President Donald Trump, asking him to rid her school of all the "illegals" (Victor, 2019). In Arizona, the first bill introduced into its legislative session in 2019 was aimed at preventing teachers from expressing their political views in the classroom or risk being fired (Strauss, 2019).

Students have not escaped the increasingly polarized political climate. Students at Royal Oak Middle School were caught on video chanting "build the wall," a catchphrase popularized by President Donald Trump during his campaign rallies supporting the building of a wall between the United States and Mexico (Durr, 2016). Across the nation, high school students of all ages from New York to Santa Monica walked out of schools in protest of gun violence and in support of gun control legislation (Yee \& Blinder, 2018). Virginia's Fairfax Country Public Schools, one of the nation's largest school districts, is now allowing students in $7^{\text {th }}-12^{\text {th }}$ grade one excused absence per year to participate in
"civic engagement activities" such as student activism, protests, marches, sit-ins, or lobbying lawmakers (Natanson, 2019).

All of this and more is what comes up after about two minutes of Googling "politics in the classroom," "high school student activism," "teacher makes inappropriate politically motivated remarks," and other similarly related phrases. Simple internet searches will turn up examples of teachers and students from across the nation, from all corners of the political landscape, bringing their politics into the classroom. With partisan politics now at a fever pitch, does this affect our teachers, our students, and student academic outcomes?

The focus of this thesis is whether a political affiliation or ideology match/mismatch between senior-level English Language Arts teachers and their students leads to differing academic outcomes. According to Merriam-Webster, a bias can be a prejudice inclination or personal and unreasoned judgment against or in favor of a person or thing (n.d.). According to Farkas, Sheehan, Grobe, and Shuan (1990), "teachers grade on much more than coursework mastery" and that both "noncognitive and cognitive characteristics determine school success" (p. 140). Additionally, teachers' practices are inseparably linked to their ideology, and students academically suffer when there is a lack of "congruence" or "fit" between their teachers and themselves (Alexander, Entwisle, \& Thompson, 1978; Bartolome \& Trueba, 2000). Therefore, since teacher grading bias "operates through a subtle, longitudinal process involving multiple feedbacks between both teacher and student behavior as these are embedded within the culture of the school, home, and neighborhood" (Farkas et al., 1990, p. 129), it is paramount that we investigate
the relationship between the social-political interactions between students and teachers and student academic outcomes.

## Background of the Problem

Since the election of Ronald Reagan, the U.S. electorate has been undergoing a process of partisan realignment. During the Reagan era, the policy preferences of the Republican and Democratic parties shifted around tax cuts, military spending, the importance of domestic social programs, and the size of the government (Abramowitz \& Saunders, 1998). As these shifts occurred, more liberal Republicans and more conservative Democrats found themselves under heavy pressure to vote with the rest of their respective congressional caucus (Abramowitz \& Saunders, 1998; Hetherington, 2001). Rather than lose the support of their constituents, many of these liberal Republicans or conservative Democrats either voted with their party's leadership, switched parties, or retired (Rohde, 2010). The changes that followed pushed both parties into more extreme states of political partisanship than had been seen previously (Abramowitz and Saunders, 2005). Since that time, the cause(s) of the deep and growing divisions between Democrats and Republicans continues to be a subject of considerable debate. Some scholars believe that the overall electorate is becoming more polarized (Abramowitz \& Saunders, 1998) or that the public is merely becoming more sorted (Fiorina \& Abrams, 2008), while others believe that affective polarization is to blame (Iyengar et al., 2012). While the drivers of this partisan realignment continue to be hotly debated, the data clearly shows a widening gap in the partisanship of the general public (Pew Research Center, 2019a). So-called red states became redder while blue states became bluer and not because of gerrymandering or redistricting (Abramowitz,

Alexander, \& Gunning, 2006; Oppenheimer, 2005). According to Abramowitz et al. (2006), "between 1992 and 2004, the number of marginal districts fell from 157 to 112 while the number of safe districts rose from 156 to 208" (p.79).

Political partisan realignment has culminated in the current political era and has had several social-political consequences. Increased partisanship has caused many to change how they associate with members of the opposite political party, expressing a strong disinclination towards them, and even going so far as to actively avoid those who disagree with their political viewpoints (Dimock et al., 2014). Additionally, studies have shown that an individual's partisan beliefs influence their economic choices and behaviors, with many indicating that they are willing to work for less money so long as their employers and coworkers share their beliefs (McConnell, Margalit, Malhotra, \& Levendusky, 2018). As a result, partisan antipathy, defined as intense feelings of dislike, have also increased. Both parties harbor more negative views of the opposing party than ever before, with $83 \%$ of Republicans having a cold view of Democrats and $79 \%$ of Democrats having a cold view towards Republicans (Pew Research Center, 2019b). Furthermore, Iyengar et al. (2012) have shown that partisans like their opponents less and less, and that ratings of the out-party have dropped more than 15 points since 1988.

Political realignment has caused political parties to become increasingly polarized in rhetoric, issue stance, and voting outcomes, resulting in the mass sorting of political parties. Party sorting refers to the strengthening of the correlation between a person's policy views and their partisan identification. While no one issue makes someone a liberal or a conservative, the trend on many key issues is that more and more voters have aligned themselves to a greater extent with the general ideology of one political party or
another than they did a generation ago. In other words, both liberal and conservative voters, who in the past may have harbored more diverse, cross-party views, are less and less likely to exist nowadays and instead find that many of their beliefs fall in line with a single party's values (Levendusky, 2004). As a result, party identification is now more strongly aligned with partisan ideology than in the past 50 years (Iyengar et al., 2012). This type of sorting can occur when the politically moderate general public sees the hyper-partisan differences in the Republican and Democratic party elites and begins to sort themselves into a party identification. Mass party sorting has effectively eliminated the moderate voter and emboldened hyper-partisanship within the electorate (Fiorina \& Abrams, 2008). The increases in conformity between party identification and partisan ideology have pushed $94 \%$ of Democrats to the left of the median Republican and $92 \%$ of Republicans to the right of the median Democrat, an increase on both sides from 70\% and 64\%, respectively, from twenty years prior (Pew Research Center, 2014). On issues relating to abortion, health insurance, presidential approval, and jobs/living standards, the correlation between party identification and ideological identification has increased substantially (Abramowitz \& Saunders, 2005). As a result of this partisan realignment, "the average opinion within partisan subgroups is now more extreme" (Baldassarri \& Gelman, 2008, p. 442). Furthermore, current studies show that party identity is a stronger form of identity than race or religion, and partisan cleavages are greater than racial and religious divisions (Iyengar et al., 2012, p. 415).

True political independents are rare and most lean towards one party or another. Research has shown that in congressional and presidential elections, self-identified political independents vote like outright partisans (Keith et al., 1992). Since 1952 the

National Election Survey (NES) has asked respondents to indicated whether they were Democrats, Republicans, or independents. If a respondent indicated that they were an independent, they were then asked if they felt closer to one party or another. If a selfidentified independent indicated a party lean, it was discovered that their voting choices, the stability of their party identifications, and their attitudes towards the two parties resembled outright partisans in alignment with their leaning preference (Keith et al., 1992). Additionally, researchers believe the main reasons people self-identify as independents instead of their true partisan affiliation is due to their preoccupation with how others will perceive them and as a reaction to negative information about associations with political parties (Klar \& Krupnikov, 2016).

Capping off one of the most recent waves of political polarization has been the election and presidency of Donald Trump. President Trump's 2016 campaign and election have exacerbated racial tensions, with $60 \%$ of Americans saying Trump's election victory has led to worse race relations and $86 \%$ saying relations amongst Democrats and Republicans are worse than the conflicts between young and old, rich and poor, Black and White, or rural and urban areas (Pew Research Center, 2017c). As a result, the tone of political discourse in virtually every modality of communication from cable news to social media has become increasingly personal and divisive. Only $25 \%$ of Americans believe the tone of political discourse among our nation's leaders is respectful, and only $47 \%$ feel that the rights and freedoms of all Americans are respected (Pew Research Center, 2018).

Issues of partisan disagreement have increased substantially. The average
difference in opinions across 10 political values questions tracked by the Pew Research

Center since 1994 has widened between Republicans and Democrats. The average partisan gap is now $36 \%$, more than double the $15 \%$ in 1994 (2017b). These questions cover a range of topics like the environment, the social safety net, immigration, business, religiosity, national security, and others. Additionally, a recent Pew Research survey of 5,000 adults nationwide found that the ideological divide between Democrats and Republicans is the largest it has been in the past 20 years and is most significant amongst those that are the most politically engaged and active (2017b).

Polarization and Education. Education is not a politically neutral endeavor. State-mandated curriculum and the various choices teachers make in the delivery of that curriculum, all carry influential political choices. Additionally, the politicization of information has caused the classroom to feel inherently political, whereas it would not have in the past. Issues of settled scientific facts such as those of climate change or evolution have become political hot potatoes (Glanz, 2000; Kagubare, 2019). Politicians have inserted themselves into various states' curriculum writing and approval processes, advocating for revisions in favor of their party's historical worldview (Agarwal, 2019). This politicization of curriculum information might lead to both an increase in tension between teachers and students with countervailing beliefs and an increase in unconscious bias among educators. Additionally, Taber and Lodge (2006) have shown that those with high levels of political knowledge, science knowledge, or cognitive skills, such as teachers, have all shown susceptibility to both confirmation and disconfirmation bias.

While professionals, our teachers are just as susceptible to the effects of political polarization as everyone else. When surveyed, only $21 \%$ of teachers have avoided political activities "a lot" out of concern that they might create issues with their job in
education (Yettick, Lloyd, Harwin, \& Osher, 2017, p. 14). Therefore, an overwhelming majority of teachers do, at some level, bring their politics with them to school. Teachers bringing politics into the workplace are potentially exacerbated by the evidence that both conservatives and liberals are choosing to seek out communities, both socially and geographically, that share their views (Dimock et al., 2014). As a result, a teacher working in a community or school that mostly reflects their own political beliefs might be more comfortable voicing their political opinions, potentially creating classroom tension where there should not be any. This tension, which the teacher may be unaware of, might result in classroom interactions or grading marks detrimental to the education of those students that hold and express countervailing beliefs. While teachers may be able to adjust their movements and socializing work habits to avoid coworkers with whom they might politically disagree, they cannot avoid interacting with their students, including those who have different political opinions. As a result, many educators are not prepared to deal with the results of these complex and often hidden polarizing political-social interactions (Sue, Lin, Torino, Capodilupo, \& Rivera, 2009).

Students are also becoming more politically vocal and active. Students are now more politically aware and engaged than any time since the 1960s, with over 160 protests in the fall of 2014 alone (Johnston, 2014; Wong, 2015). During or at school, student activism has been met with various forms of institutionalized school resistance, with some schools assigning suspensions and others threatening to withhold diplomas from those that participate (Quinlan, 2018). These politically active and vocal students could find themselves at odds with their teachers and school leaders, leading to socially tenuous relationships and detrimental academic outcomes.

Previously, most educational literature on grading bias affecting students at the K12 level has focused on the impacts of gender, ethnic, or racial bias. However, with political party identification more closely aligning with partisan ideology, and with partisan ideology varying greatly on social issues of race, ethnicity, feminism, sexism, LGBT rights, gun control, immigration, and more, it seems unlikely that a grading bias based on student/teacher political affiliation or ideology match/mismatch does not exist. The previously described partisan political realignment and mass party sorting have made it necessary to investigate whether and how political affiliation and ideology match/mismatch may create bias in the grading process. While much research has been done on how the current and changing partisan political climate is affecting college students and professors, very little research has looked into how it is explicitly affecting our high school teachers, students, and student academic outcomes.

## Statement of Problem

With the ever-increasing political partisanship that is engulfing our nation, there has been little quantitative research on whether a political affiliation or ideology match/mismatch exists between high school teachers and students, and whether that match/mismatch leads to a positive or negative grading bias. While quantitative and qualitative research exists on secondary teacher grading bias, most focus on biases, whether implicit or otherwise, based on demographic variables such as gender, race, or ethnicity. However, some studies have found grading biases to exist due to various other issues that largely depend on the teacher's values and beliefs (Brookhart et al., 2016; CiZek, 1995; Cox, 2011; Farkas et al., 1990; McMillan and Nash, 2000; Tierney et al., 2011; Quinn, 2020). Since teachers set and determine the class discourses, rules, values,
and reward systems, it becomes critical that these "other" teacher values and beliefs be explored, such as the political affiliation or ideology match/mismatch between teachers and their students. This study represents a critical first step toward investigating how the personal political beliefs of high school teachers and students affect student academic outcomes through grading bias.

## Purpose of The Study

This study had two purposes. First, the purpose of this study was to ascertain the political party affiliations and political ideologies of both students and teachers in a particular population in Spring Branch ISD in Houston, Texas, and to disaggregate these results by race/ethnicity and gender. Second, the purpose of this study was to identify the extent to which there were student/teacher political affiliation and ideology matches/mismatches in high school English Language Arts classrooms and if those matches/mismatches had any effect on student academic outcomes.

## Significance of the Study

This research is significant for both researchers and educators and has implications in two primary main areas. First, for researchers, this study expanded the current body of political bias research that exists in higher education to the high school domain. Second, for educators, students, school leaders, and community members, this study provides evidence that the polarization in our body politic has not led to a political bias in grading outcomes. These findings become increasingly significant as the gaps widen between the ideologies of political parties and the increased political activation of teachers and students. With current political polarization revolving around racial and social issues, the opportunities for instances of bias, intentional or unintentional, could
potentially be on the rise (Sue et al., 2007). Such instances can create challenging learning environments and, when poorly handled, "may result in disastrous consequences such as anger, hostility, silence, complaints, misunderstandings, and blockages of the learning process" (Sue et al., 2009, p.184). Quantitatively evaluating whether a grading bias exists due to a relationship between the political affiliation and ideology match/mismatch of teachers and students and student grades is a significant step toward ensuring and maintaining a healthy and equitable learning environment.

## Research Questions

This study will be guided by the following questions:

1) How do students identify in terms of political ideology and political party affiliation?
a. Subquestion 1A. What differences emerge when disaggregated by race and gender?
2) How do teachers identify in terms of political ideology and political party affiliation?
a. Subquestion $\mathbf{2 A}$. What differences emerge when disaggregated by race and gender?
3) To what extent is there a match/mismatch between teachers' and students' political party affiliation and their political ideology?
a. Subquestion 3A. Is there a relationship between the political party affiliation or ideology match/mismatch and student grades?
b. Subquestion 3B. If a correlation between political party affiliation or ideology match/mismatch and student grades exists, is the correlation moderated by an instructional method such as online, virtual, or mixed?
c. Subquestion 3C. If a correlation between political party affiliation or ideology match/mismatch and student grades exists, is the correlation moderated by the level of political participation on behalf of the student or teacher?

## Summary of Methodology

This quantitative research study used a nonexperimental research design to examine if there was a relationship between student/teacher political affiliation or ideology match/mismatch and student academic outcomes. This cross-sectional, quantitative study collected data through surveys using nonprobability, purposeful sampling of both high school students of consenting age and their English Language Arts teachers in Spring Branch ISD high schools.

Participants. The sample for this study was high school students of consenting age and their English Language Arts teachers in Spring Branch ISD high schools. The demographic breakdown of both the student and teacher samples is covered in-depth in chapter three. The student population sample size was $n=150$ and the teachers population size was $n=13$.

Data Collection. Data was collected through online Qualtrics surveys distributed via emails. The survey contained items designed to assess the personal political party affiliation, political ideology, and political participations of high school English Language Arts teachers and their students. The survey also collected the students' self-
reported semester grades and modality of instruction. Demographic data was also collected from all respondents, including race/ethnicity and gender.

Analysis. This research used descriptive statistics and cross tabulations to analyze and determine the political affiliations and ideologies of both survey populations and to disaggregate them by race/ethnicity and gender (Question $1 \& 2$ ). Pearson Chi-square tests were used to determine if the data collected was statistically different than what would have been expected (Question $1 \& 2$ ). Independent sample $t$-test were used to determine the extent to which a political affiliation or ideology match/mismatch between teachers and students existed, and if a match/mismatch was statistically significant to student academic outcomes (Question 3). Additionally, descriptive statistics and cross tabulations were used to analyze the sample populations by instructional method such as online, virtual, or mixed, and the level of political participation on behalf of the teacher or student (Question 3).

## Limitations of the Study

As with any study, this one had several limitations. First, this study's results relied on students' accurate self-reporting of class grades when filling out the survey. Selfreporting of grades in student surveys has often been used due to the confidentiality limits of the Family Educational Rights and Privacy Act (FERPA), making it difficult for researchers to gain access to actual student grades. However, a meta-analysis of six studies with a total of over 26,000 participants indicated that at the high school level, over $82 \%$ of students accurately self-report their grades (Kuncel, Credé, \& Thomas, 2005). Second, this study also relied on the accurate self-reporting of the political party and ideological identification by students and teachers. However, studies have indicated
that the self-reporting of certain content domains can be more reliably measured than others. For example, Alwin and Krosnick (1991) demonstrate that ideological assessments and measures of party identification are the most reliable when examining various social and political surveys. Third, this research study's sample depended on the response rate of the English Language Arts high school teachers and their students in Spring Branch ISD. Not all English Language Arts teachers who completed their survey had corresponding student respondents. This circumstance led to a low number of student/teacher dyads which in turn lead to a statistically underpowered match/mismatch analysis.

The remaining limitations of this study can be organized into two categories, those that limited this study's ability to draw causal inferences and those that limited this study's ability to generalize its findings.

Causal Inferences. While this study had the potential to identify a relationship between the political affiliation or ideology match/mismatch of instructors and students and the students' grades, it cannot establish true causation. Teaching and learning are complex processes involving a myriad of inputs and outputs that are continually being encoded and decoded by both teachers and students. In this dynamic and complex environment where interactions evolve over time, interactions and conversations are not only negotiated and recreated, but also linked to the historical and sociocultural context of the interpretation's meanings imbedded in the current interactional context. Therefore, the political affiliation or ideology match/mismatch and any relationship it may have, however strong, should still be viewed as just one piece in a multi-input puzzle. A potential match/mismatch correlation is only one of many factors that go into the
teaching and learning process. There will always be other influencing variables impacting student academic outcomes beyond the scope and influence of the teacher/student political affiliation or ideology match/mismatch.

Generalizable Inferences. The political affiliation and ideology variables in this study are dynamic ones. The politically polarized nature of the nation and the beliefs of its citizens are a combination of national as well as local issues. These political beliefs exist within the sociocultural contexts and discourses of the communities in which people reside. Therefore, the communities of both the teacher and student populations in the district generally, and within the various high schools specifically, are a unique and vital characteristic that largely influenced this study's outcomes. Since the samples being used are based in a single school district in Houston, Texas, these samples' specific characteristics may present challenges to the overall transferability of this study's results to other districts throughout the state and nation.

## Summary

This introduction provides a contextual basis for this study's existence and articulates the need that exists to evaluate the effect our nation's political polarization is having on our teachers, students, and student academic outcomes. A brief history of American political polarization was presented, beginning with the election of President Ronald Regan and ending with the presidency of President Donald Trump. Further literature essential to the contextualization and understanding of how politics influences teachers and students, as well as the theoretical framework accounting for how these interactions might lead to a positive or negative grading bias, are reviewed in chapter two of this study.

## CHAPTER II

## LITERATURE REVIEW

In the following chapter, how teacher and student political affiliation and ideology may contribute to a positive or negative grading bias are explored and explained through the relevant research. This review of the literature, while aimed at facilitating an understanding of the hypotheses to be tested, covers much more than the possible grading bias that might occur as a result of a political affiliation and ideology match/mismatch. To explore and explain if, how, and why this type of grading bias might occur, we must also explore student activism, teacher identity, and how political affiliation and ideology match/mismatch operates through social interaction.

First, this literature review focuses on high school students and the recent and drastic rise in high school students' political awareness and political activism. Additionally, this literature review will briefly examine the current educational research on professor/student political interactions in college as a potential corollary to what might be happening in our nation's high schools. The second part of this literature review covers teachers. This includes examining the myth of the singular teacher identity, more recent postmodern approaches to teacher identity, the political partisanship and the overall political demographics of the teaching profession, and how teachers operate as educational gatekeeps through grading. The final section of the literature review presents the cultural capital/social interaction model being used as this study's theoretical framework. This cultural capital/social interaction model will explain how the political affiliations and ideologies of a teacher and student might lead to a politically motivated teacher grading bias.

## Students

High school students are a dynamic and diverse group of individuals who are increasingly becoming more politically aware, creating a new generation of politically active citizens. The following sections provide an overview of how politics influences students in both the school and the classroom. First, as a corollary to what might be happening in our nation's high schools, the educational research examining how college students' political identification impacts the higher education classroom is reviewed. Second, how the current political climate is affecting high school students is explored. Third, a brief overview of how politically active high school students are expressing themselves at school and how schools respond is evaluated. Lastly, a critique of the literature is provided, highlighting the need for this study.

Student/Teacher Politics in The College Classroom. Extensive research has shown how professor/student politics play an active role in higher education classrooms. For example, when professors make concerted efforts to remain politically neutral, students are still able to successfully determine their professors' political affiliations (Woessner \& Kelly-Woessner, 2009). Additionally, students tend to positively project their political ideology upon their professors when they like them and tend to negatively project the opposite political ideology upon their professors when they dislike them (Braidwood \& Ausderan, 2017). When political affiliation mismatches between students and professors occur, students show less engagement in the subject area and record less favorable course ratings (Kelly-Woessner \& Woessner, 2006). Students have also been shown to regularly engage in self-censorship out of concern for the consequences of expressing their political views, especially amongst self-identified conservative students
(Larson et al., 2020). Furthermore, studies have shown that students who have a stronger sense of identity tend to perceive their professors as more likely to have a political bias (Linvill, 2011). Despite the overwhelming number of studies that show how student/professor politics affect higher education classrooms, very little has been done to extend these lines of inquiry to our nation's high schools. Additionally, none of the aforementioned research contains specific limitations that would prohibit them from being explored in a high school setting. Therefore, based on the research in higher education, one may expect that not only are personal political ideologies present in our high school classrooms, but that both political affiliation and ideology matches and mismatches are occurring between our students and teachers and having some form of impact on the academic process.

High School Students and Politics. Although we may be tempted to view political polarization and its effects as an adult/teacher issue, high school students are becoming more politically aware, active, and partisan. Students are now more politically aware and engaged than at any time since the 1960s (Wong, 2015). According to Johnston (2014), over 160 student protests occurred in the fall of 2014 alone. According to the American Psychological Association, more than half (55\%) of Gen Z, those between the ages of 15 and 21 , feel stressed by the current political climate, and $68 \%$ of Gen Z feel very or somewhat significantly stressed about the nation's future (2018). Gen Z reports feeling more significant stress than adults on issues of mass shootings (75\% to $62 \%$ ), climate change and global warming ( $58 \%$ to $51 \%$ ), the separation and deportation of immigrant and migrant families ( $57 \%$ to $45 \%$ ), and others (American Psychological Association, 2018). As a result, "three in five Gen Zs (60\%) say they have taken some
sort of action in the last year, such as signing a petition or speaking with a friend or family member to persuade them about their political or social views" (American Psychological Association, 2018, p.3). Additionally, according to a Kaplan Test Prep Survey of 567 US high school students, $61 \%$ of students said it was important for them to attend a college or university where their fellow students shared their political beliefs, indicating a partisan affinity (Kaplan, 2018). Lastly, $76 \%$ of future college students reported being more politically interested in issues human rights, social justice, and activism than they were just two years prior (Kaplan, 2018). This research supports the conclusion that high school students are not only affected by the current political climate but also take steps to become active participants through increasing interests and advocacy.

Student Politics in The High School Classroom. The political opinions of both students and teachers, when mixed into the dynamic and complex environment of the classroom through social interaction, can lead to disparate educational outcomes. Students voicing their political opinions or taking activist actions, such as protests or school walkouts, may lead to discord between them and their teachers. These perceived political differences, when poorly handled, "may result in disastrous consequences such as anger, hostility, silence, complaints, misunderstandings, and blockages of the learning process" (Sue et al., 2009, p. 184). For example, in response to recent student activism, such as protests and walkouts, some schools and school districts punished students that participated with in-school suspensions and even threatened to withhold diplomas (Quinlan, 2018). In other high schools, both security guards and teachers were assigned to block school doors and sent any protest participants to the auditorium for unspecified
consequences (Singer, 2019). As a result, these differences of opinion may have introduced tension into the school and classroom where there previously may not have been any. A political affiliation mismatch could prevent students from forming a positive connection with their teacher. If this is the case, research has shown that students react by learning the minimal amount of content allowed or disengaging from the educational process altogether (Wallace \& Chhuon, 2014). Additionally, reference groups strongly influence children's ideological self-placement on the left-right political divide, and these effects are most influential in late adolescence and early adulthood (Alwin et al., 1991; Alwin, 1993; Sears \& Leavy, 2003). Therefore, student/teacher interactions become the foundation for positive and negative connections which strongly influence academic outcomes (Davis, 2003). Based on a review of this existing literature, if a political affiliation and ideology match/mismatch occurs between teachers and students that affect their day-to-day interactions, one may substantiate several expectations regarding students' educational outcomes. Specifically, one could expect that a political affiliation or ideology match may lead to higher course grades, while a political affiliation or ideology mismatch may lead to lower course grades.

Critique of the Literature. One of the main critiques facing the existing literature is that most, if not all, of the literature on student/teacher political affiliation and ideology match/mismatch has been conducted at the college level. While using research performed in higher education classrooms as a corollary can provide potential insights into what may already be happening in high school classrooms, it nevertheless remains inferential. Therefore, the possibility of a political affiliation or ideology match/mismatch between high school students and teachers remains entirely unstudied and ripe for
investigation. As a result, the lack of research in this area also ignores the potential existence of a politically motivated grading bias at the high school level. This lack of academic literature is unfortunate since both the partisanship of our politics and the level of political awareness and activism by American high school students is at an all-time high. The complex interactions that occur in the classroom, especially with a politically engaged student body, can lead to unseen and unintended consequences. Based on corollary research conducted in higher education, evidence of increased student political engagement and activism, and research into student perceptions of the learning environment, it is expected that the results of the current study will show that a political affiliation or ideology match/mismatch exists between high school students and teachers and that this match/mismatch leads to differentially awarded student grades. Students whose political affiliation and ideology matches that of their teacher's will see a positive grading bias whereas students whose political affiliation and ideology mismatches with their teacher's will see a negative grading bias.

## Teachers

Teachers occupy a special place in the hearts and minds of many Americans since they are entrusted with the safe-keeping and education of our children. In America specifically, teachers enjoy a 78\% approval rating from the public overall, ranking just behind the military's $83 \%$ (Pew Research Center, 2017a). According to a 2018 Gallup poll that has measured the public's view on the honesty and ethical standards of a variety of jobs since 1976, high school teachers rank fourth overall and number one outside of the medical profession (Brenan, 2018).

The following sections provide an overview of teachers and how teacher identity formation and emotions are linked to teacher ideology. First, the essentialist myth of the singular teacher identity is refuted, and new ways of conceptualizing teacher identity are discussed. Second, a brief introduction to how contemporary postmodern research lays the groundwork for new approaches to teacher identity is explored. Third, how teacher identity formation and emotions are linked to teacher ideology, which is socially and culturally situated, are examined. Lastly, teaching is presented as an inherently political act. Therefore, the political demographics and the political partisanship of teachers are reviewed.

The Myth of The Singular Teacher Identity. The cultural myth of the singular teacher identity is one in which all teachers are politically neutral, highly professional, and unemotional, leaving little space for "abnormal" identities (Britzman, 1986; Zembylas, 2003a). However, unlike the myth of the singular teacher identity, a teacher's identity is a unique conglomeration of the professional and the personal, which includes their personal histories, emotions, identities, biases, and politics. When viewed in this more diverse yet accurate way, the myth of a singular teacher identity disappears. Teaching utilizes a plethora of an instructor's talents and skills, draws upon personal interests that in any other profession might have been reserved for non-work activities, and leaves little time for the cultivation of an expansive life outside of school (Nias, 1993). Teaching is such a vastly "inclusive" occupation that the school and classroom become the leading source of teachers' self-esteem, fulfillment, and vulnerability (Nias, 1996). Therefore, since teaching is highly personal and teacher identities are not singular and fixed, a postmodern examination of teacher identity, emotions, and personal
ideologies is necessary to understand how they influence our students' educational outcomes.

Postmodern Approach to Teacher Identity. Postmodern and poststructural research has challenged how scholars previously looked at teacher identity and identity formation (Clarke, 2009; Nias 1996; Zembylas, 2003a; Akkerman \& Meijer, 2011). Teachers and their role in the educational equation, when evaluating a student's successes or failures, have long been viewed as a monolithic neutral factor facilitating a specifically prescribed educational function. This essentialist perspective viewed teacher identity as a fixed object, leading to the myth of a singular teacher identity mentioned earlier (Britzman, 1986). However, postmodern perspectives have begun to investigate the role teacher identity plays in the educational process by exploring the emotional components of teacher identity formation and ideology. These investigations reveal that teacher identity, emotions, and ideology plays a crucial role in their development and pedological practice. This new movement moves away from the previous "assets" approach in which a teacher acquired knowledge, competencies, and professional development that followed a linear path from novice to expert, to one in which a teacher is an agent utilizing their perspective in understanding their professional work (Akkerman \& Meijer, 2011). This shift in perspective from viewing teaching as a profession based on methods and techniques to one based on identity, emotions, and agency makes teachers an active and influential variable in determining student academic outcomes.

Teacher Identity, Emotions, and Ideology. Teachers' identities, emotions, and ideologies should be a matter of collective interest and evaluation since they affect everyone in the educational milieu. Beyond education and safety, the impact a teacher
has on a student's life is vast. The experience, influence, and socialization they provide in addition to the grades they give will follow and impact students for the rest of their lives. Therefore, before considering a teacher's academic impact on students, evaluation of what contributes to a teacher's identity and ideology is necessary.

A teacher's identity is more than an aftermath of classroom experiences, pedagogical knowledge, and skills (Zembylas, 2003a). According to Clark (2009), "the processes of identity formation are intimately related to the discourses and communities that we work within" (p. 187). Political preferences, or exposure to discourses or communities that harbor given political preferences, have strong socializing effects on those within that community (Marsh, 2003). While an instructor is not destined to carry on the exact political preference of the community or circumstance in which they were raised or currently work, the process of creating and growing an identity is a constant remixing of the social and individual discourses they are exposed to (Clark, 2009). Additionally, various discourses in a school setting determine which aspects of both a student's and teacher's identities are acceptable and which aspects must be suppressed. These discourses of acceptability are influenced by cultural inputs such as the partisan political climate. At the school level, students and teachers then participate in these discourses by either accepting or rejecting them. However, in the classroom, due to their power and relative autonomy, teachers set their own discourses and implicit rules, reflecting their values, culture, norms, and politics, which students are then expected to follow (Delpit, 1995).

A teacher's attitudes and emotions are socially grounded, and their acquisition of knowledge is socially, culturally, and politically based (Nias, 1996). A teacher's
emotions are regulated by various inputs such as school culture, school rules and norms, and other social influences (Zembylas, 2003b). These influences are then reciprocated by teachers when their actions, taken in response to what they feel, affect the social and political contexts in which they work (Nias, 1996). Additionally, with studies indicating that an individual's partisan ideologies vary widely based on their emotions, the ideological component of teacher identity formation is of particular relevance (Garrett \& Weeks, 2013; Kim, 2017; Zollo et al., 2015). The educational practices of teachers are inextricably linked to their ideologies, and these ideologies, however strong or weak, cannot be separated from their professional selves. These ideologies act as a "framework of thought that is used by members of society to justify or rationalize an existing social(dis)order" (Bartolome \& Trueba, 2000, p. 279). Additionally, research has shown that these ideologies need not be based on an in-depth and specific understanding of political issues. Instead, researchers have shown that even amongst those uninterested or uninformed about politics, people still have an understanding of liberal-conservative differences leading them to develop a set of emotionally charged political beliefs, values, and rationalizations (Lane, 1962; Jost 2006). Furthermore, the differences between political ideologies and intergroup attitudes are evident in implicit measures, indicating they are not derivative of socially desirable responding (Jost et al., 2009). Since many of these attitudes are implicit and nonconscious:
people may behave in ideologically meaningful ways (or be affected by their own ideological proclivities) without necessarily being consciously or fully aware of the role of ideology in their lives, much as native speakers are generally capable
of following grammatical or syntactical rules without being able to fully articulate them (Jost et al., 2009, p. 325).

Therefore, a teacher's ideology permeates every interaction they have. Their "identity is increasingly being seen as a crucial component determining how teaching and learning are played out in schools and classrooms" (Clark, 2009, p. 186).

Teaching is Political. Education in general and teaching specifically is not a politically neutral endeavor, even when teachers strive to remain politically neutral. Generally, teacher neutrality is viewed "as the idea that teachers should not express their views to their students or weigh in on any particular side during class discussions or debates of social issues" (Kelly \& Brandes, 2001, p. 452). However, teaching is a political act, and schools are inherently biased. The information presented to students through the mandated curriculum is cherrypicked from a much larger universe of historical, cultural, and social knowledge (Apple, 2004). The information presented in schools is a form of cultural capital that often reinforces the perspective, beliefs, and power relationships of the dominant social class. Even if teachers were genuinely able to present themselves as politically neutral, teaching has become a political endeavor since the information underlying a teacher's pedagogy has been politicized. According to a survey of 1,500 people by the People For The American Way Foundation, a liberal civil rights group, "an overwhelming majority of Americans think that creationism should be taught along with Darwin's theory of evolution in public schools" (Glanz, 2000). In 2018, in Texas where this study will be conducted, the State Board of Education proposed recommendations to its history standards that removes Helen Keller and Hillary Clinton, downplays slavery as the underlying cause of the Civil War, and leaves in references to

Moses as an individual whose ideas informed the founding documents of America (Agarwal, 2019). Additionally, States like Texas might exacerbate the politicization of classroom information since according to Scientific American:

Texas is among 10 states that haven't adopted new science education standards, meaning schools in the Lone Star State are not formally required to teach about climate change - even as scientific reports increasingly warn of the risks of a warming planet. Climate education is left to the discretion of teachers (Kagubare, 2019, p. 2).

When teachers write their lesson plans, choose textbooks, films, materials, and other forms of knowledge, teachers make nonneutral choices and are thus determining which ideologies to encourage and discourage (Kincheloe \& Steinberg, 1997). Even if a teacher strives to maintain as much political neutrality as possible, this too is a political choice since, in remaining "neutral," teachers are choosing to perpetuate the status quo that marginalizes members of various non-dominant groups (Dunn, Sondel, \& Baggett, 2019). As a result, teacher political neutrality can be viewed as a "trap," allowing teachers to conceal, consciously or unconsciously, harmful politically influenced ideologies and practices (Bartolomé, 2008). Understanding that teaching is a politically situated occupation, looking at teachers' political demographics is an essential next step in determining if a politically motivated grading bias exists in schools.

Political Demographics of Teachers. No one political affiliation dominates the teaching profession. According to a national survey on educator political perceptions, 41\% identified themselves as Democrats, 27\% identified themselves Republicans, 30\%
identified themselves as Independents, and $1 \%$ identified themselves belonging to a third party (Yettick et al., 2017).

Political Partisanship of Teachers. The views of liberal and conservative teachers, while drastically different, show a high degree of conformity between party identification and partisan ideology. As a result, teachers' political opinions can generally be used to infer which party they identify with and vice versa. When asked if immigration is a good thing for schools in this country today, $63 \%$ of teachers who voted for Clinton said yes, while only $14 \%$ of teachers who voted for Trump said the same thing (Yettick et al., 2017). On DACA, the numbers were similar, with $91 \%$ of teachers who voted for Clinton supporting DACA versus just $37 \%$ of teachers who voted for Trump (Yettick et al., 2017). When it comes to which bathroom transgender students should be allowed to use, $85 \%$ of teachers who voted for Trump said they should use the bathroom that corresponds to their birth gender while $78 \%$ of teachers who voted for Clinton said that transgender students should be able to use the bathroom that conforms with their gender identity (Yettick et al., 2017). When it comes to supporting whether or not gay, lesbian, or bisexual teachers teach while being "out" to their students, $78 \%$ of teachers who voted for Clinton supported this position vs. only $26 \%$ of teachers who voted for Trump (Yettick et al., 2017). Lastly, when asked to what extent teachers agree or disagree that students of color have the same educational opportunities as Whites in this country, 76\% of teachers who voted for Trump said yes while $59 \%$ of teachers who voted for Clinton said no (Yettick et al., 2017).

Teachers' political partisanship has also activated their political behavior in both the school and the community. Only $21 \%$ of educators have avoided political activities "a
lot" out of a concern they might create problems with their job, while $34 \%$ of educators said "not at all" (Yettick et al., 2017). Of those teachers who did engage in some form of political activity, $61 \%$ said they did so by trying to persuade friends/colleagues to change their minds on a particular topic, $66 \%$ contacted an elected official, $23 \%$ contributed money to a political cause, and $16 \%$ attended a protest (Yettick et al., 2017). Since teachers participate, knowingly or unknowingly, in the reproduction of inequality that exists in the educational system depending on their ideologies, there seems little room to doubt that the political affiliation and biases of teachers are not affecting student academic outcomes (Hyland, 2005).

Teachers are especially susceptible to being partisan due to their higher levels of general knowledge. Taber and Lodge (2006) have shown that individuals with higher levels of general knowledge, cognitive skills, science knowledge, or political knowledge fail to evaluate policy arguments in an even-handed and fair-minded way. These sophisticates have all shown greater susceptibility to confirmation bias, disconfirmation bias, and prior attitude effects than those with weak or uninformed attitudes (Taber \& Lodge, 2006). Additionally, research has shown that the ability to evaluate liberal and conservative political objects reflects unidimensionality for those with higher education (Jost, Federico, \& Napier, 2009). Furthermore, even if teachers were not considered sophisticates, Jost (2006) revisited the idea that ordinary people are not particularly influenced by ideology and found that ideological self-placement on the American National Election Studies surveys, conducted between 1972 and 2004, was a statistically significant predictor of voting intentions. This ideological self-placement is also a strong predictor of intergroup attitudes. These liberal and conservative political attitudes are
clearly delineated and generally not disputed in social science research with conservatives expressing "less-favorable attitudes than liberals express toward disadvantaged or stigmatized groups" (Jost, Federico, \& Napier, 2009, p. 325). This is especially concerning since the differences in intergroup attitudes between conservatives and liberals are evident in implicit measures, suggesting that these attitude responses are not the result of socially desirable responding (Jost, Federico, \& Napier, 2009). The potential consequences these studies have on academic achievement, especially in Texas, where a large majority of students are minorities and economically disadvantaged, cannot go understated.

## Teachers As Gatekeepers

Teachers act as educational gatekeepers by controlling or greatly influencing various critical aspects of the educational process. Gatekeeping depends on a teacher's beliefs and operates through student/teacher social interaction. The results of these interactions can have drastic impacts on a student's grades. When considering student outcomes, we tend to think of pupil inputs leading to school outputs. However, this fails to take into account teacher gatekeeping and the interpersonal nature of the classroom itself.

Teachers' perceptions of their students influence both their expectations and evaluations of their students' work. These perceptions can most clearly be seen in studies of the model student concept. The concept of the model student "entails those components which allow the teacher to exert the least amount of effort and incur a low degree of conflict and frustration" (Wong, 1980, p. 244). Therefore, a model student may not only be someone who has a high degree of academic and intellectual ability, but also
someone who does not socially and politically conflict with their teacher. As the partisan antipathy between Democrats and Republicans increases, and with student activism at its highest levels in recent memory, the possibility exists that students and teachers with a high degree of political affiliation and ideology match have less interpersonal conflict than those teachers and students with a high degree of political affiliation and ideology mismatch. Additionally, with abundant research showing that people seek out and are preferential to individuals that reflect their world view and established beliefs, teacher/student political affiliation and ideology match/mismatch can have drastic gatekeeping consequences (Garrett \& Weeks, 2013; Kim, 2017; Zollo et al., 2015; Zuiderveen Borgesius et al., 2016).

Studies have shown that student behaviors elicit different responses from teachers, and a teacher's reactions to their students play an integral role in the microtransactional interactions in the classroom that lead to improved or detrimental academic achievement. (Alexander, Entwisle, \& Thompson, 1987; Calarco, 2011). Alexander et al. have shown that "teachers' reactions depend on their personal circumstances," and that students suffer academically when there is lack of "congruence" or "fit" between their teachers and themselves (1987, p. 680). Numerous studies have shown that positive teacher-student relationships increase student engagement with school behaviorally, emotionally, and cognitively and increase student academic outcomes while negative teacher-student relationships have the opposite effect (Crosnoe, Johnson, \& Elder, 2004;

Klem \& Connell, 2004; Martin \& Collie, 2018). How teachers react to their students depends largely on the instructor's social and political origins, and these origins impair their effectiveness with different kinds of students (Alexander et al., 1987, p. 679).

According to Alexander et al., "pupil performance is driven down where teachers are distant and disaffected...but the conditions that give rise to such sentiment are themselves socially structured, and this transforms what otherwise would be simply a personal problem into a social one" (1987, p. 681).

Through gatekeeping, teachers differentially reward students for exhibiting "appropriate" classroom skills and behaviors such as "student skills, habits, and styles which figure in student/teacher interaction" (Farkas et al., 1990, p.129). This "appropriateness" and its impact on student grades have been studied and attributed to various things such as cultural capital mismatch (Calarco, 2011), teacher bias (Downey \& Pribesh, 2004), and oppositional culture (Harris, 2011). Regardless of the reason, when students in these studies meet the noncognitive characteristics of what the teacher deems "appropriate," their grades are not subject to penalty. However, each teacher is different and has their own definition of "appropriateness," formed by their backgrounds and beliefs. Also, the cultural and social interaction between students and teachers is of great importance since not only do teachers assign course grades, but their judgments also help define reward systems within the classrooms and schools (Farkas et al., 1990). In the following section, we will look at teachers' grading practices, how various biases influence the grading process, and provide a critique of the existing literature, highlighting the need for this study.

Grading Bias. Grading bias is when teachers illegitimately assign higher or lower grades to some students than others based on one or more external factors. Teachers differentially reward student grades based on a "hodgepodge" of criteria. For example, various studies have shown that teachers emphasize different evaluation criteria when
grading students and that within-school variance is even greater than between-school variance (McMillan, Myran, \& Workman, 2002; Farkas et al., 1990; Kozlowski, 2015). Additionally, CiZek et al. found that "grades appear to consist of a potpourri of elements that vary from district to district, from teacher to teacher within a district, and even from student to student within a classroom" (1995, p. 174). Furthermore, Zhang and BurryStock (2003), found that grading practices significantly differed across content areas.

Research has shown that teachers assign grades on far more than just coursework mastery and that many teachers' grading practices are highly personalized to the teacher's individual beliefs. According to McMillan and Nash, when asked to provide a rationale or justification for their decision making and evaluation process, teachers "found it difficult to provide an explanation, particularly if they had been teaching for many years" and that "it was apparent from the interviews that teacher decision making was a highly individualized, idiosyncratic process" (2000, p. 19). Additionally, McMillan and Nash found that teachers selected and implemented their specific assessment practices based on their beliefs and values, the reality of their classroom environments, and other external influences (2000). Furthermore, McMillan et al. (2002) found that "teachers who awarded more A's use fewer objective assessments, fewer publisher-provided tests, less homework, and more assessments that measure reasoning and application" (p. 213).

Teacher grading is a unique and personal practice. It is mostly a private matter, rarely if ever discussed with other teachers, school administrators, or even students. McMillan and Nash found that "teachers desire autonomy and need to adapt instruction and assessment to their personal styles and the needs of the individual students" (2000, p. 34). Furthermore, CiZek et al. found that teachers admitted to not knowing how their
colleagues graded assessments and preferred it that way (1995, p. 175). Greater consistency among grading would exist if teachers graded solely on academic performance and allowed for increased transparency, providing students with a greater understanding of what is essential, but they do not.

Formal grading polices do little to influence teacher grading assessments. CiZek et al. discovered that "even in districts that reportedly have a formal grading policy, a majority of teachers surveyed indicated that they are unaware of or deliberately ignore those policies" (1995, p. 175). McMillan and Nash (2000) also found evidence that teachers ignored their district's grading policies, preferring to apply their own, which they viewed as much more critical. Such levels of independence in determining grading assessments, coupled with a lack of oversight, make grading highly susceptible to bias.

Critique of the Literature. Grading relies on various micro-processes constructed through the day-to-day interactions between teachers and students. Generally, the literature on K-12 grading bias has primarily focused on biasing variables such as race, gender/ethnicity, nationality, and income (Gershenson et al., 2015; Malouff et al., 2013; Quinn, 2020). However, the current K-12 literature on grading bias, while vast, has failed to explore the biasing effect a political affiliation and ideology match/mismatch between students and teachers might have on grading outcomes. With teachers assigning grades based more and more on subjective evaluations, with almost complete autonomy, with little to no transparency, and perceiving and reacting to students based on their social origins and personal circumstances, the opportunities for political bias to influence a teacher's subjective grading is extensive. This gap in the research, contrasted with the
abundance of political/social teacher/student research at the college level, further reinforces the need for this study.

## Theoretical Framework

Cultural capital and social interaction theories provide the theoretical framework necessary to understand how teachers' biases might affect how they grade their students. Cultural capital theory posits that individuals possess both cognitive and noncognitive traits as well as cultural background characteristics and resources that they can activate to access social and institutional benefits (Bourdieu, 1973; DiMaggio 1982; Lamont \& Lareau, 1988). These cultural resources are then operationalized through social interaction theory. Social interaction theory posits that an individual's interaction with another individual communicates rich and vital information to the receiver during interpersonal interactions. These signals, once processed by the receiver, then influence the receiver's responses to the original sender. This interaction results in a feedback loop of emotional displays that serve as a form of communication between senders and receivers, or in this case, teachers and students (Rafaeli \& Sutton, 1989). Based on cultural capital theory, social interaction theory, and the relevant research, it is expected that students with the same cultural capital as their teachers, like matching political affiliations and beliefs, will experience a positive grading bias as a result of positive political-social interactions that occur between them in the classroom. Conversely, it is expected that students who have differing cultural capital than that of their teachers, like opposing political affiliations and beliefs, will experience a negative grading bias as a result of negative political-social interactions that occur between them in the classroom.

Cultural Capital Theory. Cultural capital theory analyzes how education and culture influence social reproduction. Cultural capital theory was first developed by the French sociologists Pierre Bourdieu and Jean-Claude Passeron. Their primary concern was with the effect the education system had on power relationships between social and economic classes by reproducing the stratified structure of cultural capital (Bourdieu, 1973). They believed that schools reflect the dominant class's culture rather than act as a socially neutral institution. Over time researchers have come to define cultural capital in various ways. Some researchers view cultural capital as the ideas and perceptions acquired through previous experience (Collins, 1987). Others view cultural capital as the recognition of cultural symbols that correspond to specific class interests (Dubin, 1986). Still, other researchers define cultural capital as the ability to perform one's work in culturally desirable ways (Gouldner, 1979). Regardless of the definition used, students from the dominant class possess critical social and cultural capital necessary to access various benefits in the educational system increasing the likelihood of their success. In contrast, students from the minority class must struggle to obtain these forms of capital to navigate and negotiate their educational experiences. This concern is of particular importance since the difference in academic achievement amongst students is typically attributed to a lack of ability and not cultural capital. This oversight, coupled with the notion that baseline academic standards are not typically viewed as handicapping children in the minority class, legitimizes the continued reproduction of the stratified power relationships mentioned above.

Underlying Bourdieu and Passeron's work on cultural capital theory are various power relationships, particularly the powers of exclusion and symbolic imposition.

Exclusion and symbolic imposition are two of the main ways in which cultural capital theory distinguishes between those individuals who can access benefits (positive grading bias) due to their cultural capital (political affiliation match) versus those that cannot. This exclusion and symbolic imposition, according to Bourdieu, operates through unconsciously sent signals that are derived from both family socialization, which is then turned into ingrained habits and dispositions (habitus), as well as cultural codes (1988). These cultural codes operate through "elective affinities," in which exclusion is based on similarities in taste (Lamont \& Lareau, 1988, p.158). These elective affinities and tastes, while diverse, include students' and teachers' political affiliations and ideologies. Symbolic imposition allows a class of individuals, such as teachers, "to make its particular preferences and practices seem natural and authoritative" and "become standard through society while shrouded in a cloak of neutrality, and the educational system adopts them to evaluate students" (Lamont \& Lareau, 1988, p.159). An example of this symbolic imposition would be the reciting of the pledge of allegiance each morning. Instances where students were wishing to express their 1st Amendment right by opting out of reciting the pledge, typically for politically motivated reasons, have resulted in a wide spectrum of results. Teachers whose politics support this form of legal passive protest might not be affected. However, teachers whose politics oppose protesting the pledge of allegiance might allow their personal political beliefs to influence their interactions with those students and even use the authoritative position the educational system affords them to impose their own views. This was the case when a sixth-grader in Florida was arrested for what officials labeled as disruptive behavior when he refused to recite the pledge of allegiance leading to a confrontation with his teacher who felt
differently (Phillips, 2019). Variations of this same instance have happened all over the United States in which students have been arrested, suspended, and even expelled for legally exercising their $1^{\text {st }}$ Amendment right. Teachers use symbolic imposition and the authoritative nature of their positions to normalize their classroom cultural preferences. If the students' cultural capital, such as political beliefs, does not match that of the instructor, they risk being excluded from various aspects of the learning process or removed from the classroom altogether. Therefore, through exclusion and symbolic imposition, cultural capital theory has the potential power to influence student academic outcomes.

Cultural capital theory also relies upon the agency of the individual in determining how they use their cultural capital to access benefits. By allowing for individual agency, cultural capital theory can be utilized to understand the day-to-day process and micro-interactions in school settings. This agency, in part, stems from both a teacher and students' political emotions. According to DiMaggio (1982), "teachers, it is argued, communicate more easily with students who participate in elite status cultures, give them more attention and special assistance, and perceive them as more intelligent or gifted than students who lack cultural capital" (190). However, one issue is the lack of a cohesive understanding or consensus of what "elite, high-status cultural signals" are in American society (Lamont \& Lareau, 1988). Since status cultures are more diffuse and less defined in American culture than their European counterparts, individuals rely more on shared status culture, which are cultural cues that demonstrate ingroup membership (DiMaggio, 1982). Among these shared cultural cues are student and teacher political affiliations. These political affiliations are then drawn upon by the individual during daily
interactions, making this a cultural process of status participation. These microinteractions based on status culture participation, have been shown to have a significant impact on the grades of high school students when controlling for family background characteristics and measured ability (DiMaggio, 1982). Therefore, based on cultural capital theory, it is expected that a political affiliation and ideology mismatch between teachers and students will be related to lower student academic outcomes.

Social Interaction Theory. Social interaction theory relies on the interactions between individuals and their processing of signals during interpersonal interactions. Sociocultural views on social interaction and learning were first developed in the 1920s by the Soviet psychologist Lev Vygotsky. The sociocultural perspective on social interaction theory does not separate the learning environment from social interaction and context, as we will explore below. Instead, any mental activity must be studied as an interaction between social agents such as teachers and students and the physical learning environment such as the classroom and school. This can become an issue when the cultural capital that both students and teachers bring with them into the classroom conflicts. Social interactions between teachers and students, interactions in which there may be a cultural capital match or mismatch, such as that of political affiliation or ideology, may result in positive or negative academic outcomes. As mentioned above, these classroom interactions involve two domains, the social and the contextual, which might lead to positive or negative social interactions affecting student academic outcomes. The positive social interactions between teachers and students, when there is a political affiliation and ideology match, may lead students to feel that a teacher "knows me", signaling "that the identities being ascribed to the student via experiencing the
classroom environment are coherent with the deeply personal, evolving identities that students hold" (Wallace \& Chhuon, 2014, p. 942). Conversely, if negative social interactions between teachers and students occur due to political affiliation and ideology mismatch, students may feel that the teacher "doesn't know me", signifying "a lack of teacher care and opportunities for engagement and learning" (Wallace \& Chhuon, 2014, p. 942).

The social domain refers to the social relationships that are created between students and teachers during classroom interactions. Each classroom contains its ways of being and discourses. Learning and mastering these discourses are paramount to participating in what would be considered appropriate classroom behaviors since what is deemed as appropriate is often fluid, varied, and typically reflects the various personal and political values and beliefs of the instructor (Kumpulainen \& Wray, 2003). Additionally, the social cues that hint at a particular way of speaking and acting are also primarily based on the presence of the teacher's political ideology. However, students possess their own political ideology, which has only grown more intense as the United States' political partisanship has increased. Therefore, the social domain has the potential to be significantly influenced by the political affiliation and ideology match/mismatch between teachers and students, resulting in skewed academic outcomes.

The contextual domain refers to the community's particular discourses and how students and teachers "participate in the communicative events they have constructed" (Kumpulainen \& Wray, 2003, p. 44). The classroom is a dynamic and complex environment where interactions evolve. This evolution happens as interactions and conversations are not only negotiated and recreated but also linked to the historical and
sociocultural context of the interpretation's meanings imbedded in the current interactional context. Kumpulainen and Wray explain:

To investigate the dynamics and meanings of classroom interaction is extremely complex. On the one hand, there is the sociohistorical, macro-level context in which the social activity is embedded. On the other hand, there is the immediate, micro-level context, which is more fluid and evolving in nature (2003, p. 44-45).

While we might assume that the classroom or the school is no place for political discourse, the highly partisan and politically charged era we live in makes these conversations much more likely.

Social interactions between teachers and students can happen in an infinite number of ways. However, the grades a student receives are limited in number and organized along an ordinal scale. Therefore, the results of these interactions, however complex, dynamic, and biased, have finite real-world consequences. Therefore, based on social interaction theory, the current study expects that the political-social interactions between teachers and students will lead to either positive or negative exchanges that will result in a corresponding positive or negative academic outcome.

A Cultural Capital/Social Interaction Model. The social interactions between teachers and students are influenced by each participant's cultural capital, such as political affiliation and ideology, and may cause teachers to differentially award students' grades, particularly on subjectively graded assignments. The research being conducted herein, and the data that will be collected will allow us to estimate whether teacher and student political affiliation and ideology match/mismatch influences student academic outcomes. This cultural capital/social interaction model can be expressed along a
spectrum of complete political agreement, leading to a positive grading bias, to complete disagreement, leading to a negative grading bias. Figure 1 illustrates the political affiliation and ideology match/mismatch between students and teachers, leading to a potential grading bias on the final teacher assigned course grade.

## Figure 1

## Theoretical Framework: Student/Teacher Political Affiliation and Ideology Match/Mismatch

| Student Conservative/Republican <br> Teacher Liberal/Democrat | Student Liberal/Democrat <br> Teacher Liberal/Democrat |
| :---: | :---: |
| Political Mismatch | Cultural Capital/Social Interaction |

There are two categories of teacher/student political affiliation match/mismatch. The first category, called "political match," is comprised of four types in which students and teachers agree politically. The second category, called "political mismatch" is also comprise of four type types in which students and teacher disagree politically. The "political match" category represents a positive teacher grading bias and a higher final course grade. The "political mismatch" category represents a negative teacher grading bias and a lower final course grade.

This model, and the research reviewed throughout this chapter, illustrates that a politically motivated grading bias can be the result of dynamic and unpredictable student/teacher social interactions that are situated within the discourses of both the classroom, the school, and the community. If teacher grading bias, as a result of teacher/student political affiliation and ideology match/mismatch, is shown to influence
course grades, then the cultural capital/social interaction model will have been proven valid.

## Chapter Summary

Research in the areas of politics and education abound. However, there is little research at the intersection of the two that specifically addresses the impact the political affiliation or ideology match/mismatch of high school teachers and students has on student academic outcomes. Given this lack of research, the purpose of this study was to examine if a match or mismatch of teacher and students' personal political beliefs was evident in student academic outcomes. The following chapter will outline the research methodology used to determine the political affiliation, ideology, and political participations of teachers and students, the grades those students receive, and whether or not any relationship exists.

## CHAPTER III

## METHODOLOGY

This chapter's purpose is to lay out the methodology used in this study. This chapter contains a description of how and why the survey data was collected, strategies used to ensure the validity of the data, as well as an analysis of how the data was evaluated. This chapter is organized into the following sections: Purpose of the Study, Research Problem, Research Design, Instrument, Measures, Data Collection and Procedures, Data Analysis, and Limitations.

## Purpose of the Study

This research study addresses two gaps in the existing research literature. First, the purpose of this study was to ascertain the political party affiliations and political ideologies of both students and teachers in a particular population in Spring Branch ISD in Houston, Texas, and to disaggregate these results by race/ethnicity and gender. Second, the purpose of this study was to identify the extent to which there were student/teacher political affiliation or ideology matches/mismatches in high school English Language Arts classrooms and if those matches/mismatches had any effect on student academic outcomes. This study explored these effects in a high school setting in Spring Branch ISD in Houston, Texas.

## Research Problem

Research Questions, Subquestions, and Hypotheses. This study was guided by the following research questions:

1) How do students identify in terms of political ideology and political party affiliation?
a. Subquestion 1A. What differences emerge when disaggregated by race and gender?
2) How do teachers identify in terms of political ideology and political party affiliation?
a. Subquestion $\mathbf{2 A}$. What differences emerge when disaggregated by race and gender?
3) To what extent is there a match/mismatch between teachers' and students' political party affiliation and their political ideology?
a. Subquestion 3A. Is there a relationship between the political party affiliation or ideology match/mismatch and student grades?
b. Subquestion 3B. If a correlation between political party affiliation or ideology match/mismatch and student grades exists, is the correlation moderated by an instructional method such as online, virtual, or mixed?
c. Subquestion 3C. If a correlation between political party affiliation or ideology match/mismatch and student grades exists, is the correlation moderated by the level of political participation on behalf of the student or teacher?

Hypotheses. While research questions 1 and 2 are descriptive, and thus do not require formal hypotheses, a review of the theoretical and empirical work addressed in the previous chapter suggested the following hypotheses for question 3 :

1) Question 3 Hypothesis -
a. $\mathrm{H1}_{0}$ : There is no statistically significant difference between the teacher/student political affiliation or ideology match/mismatch in English Language Arts classrooms.
b. $\mathrm{H} 1_{\mathrm{a}}$ : There is a statistically significant difference between the teacher/student political affiliation or ideology match/mismatch in English Language Arts classrooms.
2) Question 3A Hypothesis -
a. $\mathrm{H} 2{ }_{0}$ : There is no statistically significant correlation between the political affiliation or ideology match/mismatch of teachers and students in English Language Arts classrooms and student academic outcomes.
b. $\mathrm{H} 2_{\mathrm{a}}$ : A match in political affiliation or ideology is positively related to student achievement and a mismatch in political affiliation and ideology is negatively related to student achievement.
3) Subquestion 3B Hypothesis -
a. $\mathrm{H} 2 \mathrm{~A}_{0}$ : There is no statistically significant difference between the teacher/student political affiliation or ideology match/mismatch and student academic outcomes in English Language Arts classrooms compared to method of instruction such as online, in-person, or mixed.
b. $\mathrm{H}_{2} \mathrm{~A}_{\mathrm{a}}$ : There is a statistically significant difference between the teacher/student political affiliation or ideology match/mismatch in English Language Arts classrooms and student academic outcomes, which increases with in-person instruction and decreases with online instruction.
4) Subquestion 3C Hypothesis -
a. $\mathrm{H} 2 \mathrm{~B}_{0}$ : There is no statistically significant difference between the teacher/student political affiliation or ideology match/mismatch in English Language Arts classrooms and student academic outcomes compared to the level of political participation on behalf of the student or teacher?
a. $\quad \mathrm{H}_{2} \mathrm{~B}_{\mathrm{a}}$ : There is a statistically significant difference between the teacher/student political affiliation or ideology match/mismatch in English Language Arts classrooms and student academic outcomes, which increases with higher levels of student and teacher political participation and decrease with lower levels of student and teacher political participation.

## Research Design

This quantitative study was cross-sectional and utilized a non-experimental research design and nonprobability purposeful sampling to answer the research questions. A non-experimental, causal-comparative, quantitative approach was chosen since there was no manipulation of predictor variables or subjects. Additionally, a non-experimental research design typically yields higher levels of external and ecological validity as they are conducted in the "real world" with "real people" rather than using subjects in a laboratory (Salkind, 2010, p. 914).

Setting. This research study was carried out in senior level English Language Arts classrooms across the five high school campuses in Spring Branch ISD. Spring Branch ISD is a suburban school district that "encompasses about 44 square miles of wooded suburbs and vibrant business and retail districts located west of downtown Houston in Harris County along I-10, the Katy Freeway" (Spring Branch ISD, n.d.a).

Overall, Spring Branch ISD has an enrollment of approximately 35,000 students. Spring Branch ISD is 59\% Hispanic, 27\% White, 7\% Asian, 5\% African American, and 2\% Other (Spring Branch ISD, n.d.a). Fifty-nine percent of its students are economically disadvantaged according to the Texas Education Agency, and 34\% are English language learners (Spring Branch ISD, n.d.a).

Student Body. The sample for this study was students, age 18 and older, and their English Language Arts teachers in Spring Branch ISD in Houston, Texas. The core of the new Texas high school diploma comprises a foundational plan requiring a minimum of 22 credits (Texas Education Agency, 2019). Four of the 22 credits must be English courses, which are listed as English 1, English 2, English 3, and an advanced English course (Texas Education Agency, 2019). Therefore, all students must take a senior level English class prior to graduation. This allowed the entire high school population of Spring Branch ISD that were age 18 or older to be participants.

Teacher Sample. There are no publicly available data outlining precisely how many teachers in Spring Branch ISD teach senior level English Language Arts and their demographics. Additionally, some teachers do not exclusively teach senior level English Language Arts and might teach other subjects such as journalism and yearbook. Therefore, the actual potential teacher population of senior level English Language Arts teachers and their respective racial/ethnic demographics in Spring Branch ISD high schools are, at this moment, unknown. However, results from informal assessments of the English Language Arts Department section on each high school's website has revealed an approximate sample of $N=36$ teachers.

Sample. This study used a nonprobability sampling technique known as purposeful sampling. Purposeful sampling is used when it is necessary to identify and select a sample based on predetermined criteria to yield "information rich" cases (Palinkas et al., 2015). These "information rich" cases include those individuals that experience the circumstances of interest, are available to participate, and possess the ability to reflect on and communicate their opinions (Palinkas et al., 2015). The sample in this study is purposely drawn from senior level English Language Arts teachers and their students of consenting age.

Since the hypothetical population of interest is English Language Arts high school students, age 18 and up, and their teachers, the implications and limitations of the sample's similarity to the hypothetical population will be discussed in the limitations section of chapter five.

## Inclusions/Exclusion Criteria.

Teachers. To be included in this study, teachers had to be the primary teacher of record in a senior level English Language Arts class at any of the five comprehensive Spring Branch ISD high schools: Memorial, Stratford, Spring Woods, Northbrook, or Westchester. Teachers who work in specialty campuses such as those teaching in YesPrep at Northbrook or Academy of Choice were not included in the sample. While occupying physical building space at Northbrook high school, YesPrep at Northbrook is a charter school program that sets its own academic calendar, its own longer school day hours, implements its own student policies, and provides its students with additional instructional time in math and reading (Northbrook High School | YES Prep Charter Schools, n.d.). Academy of Choice is an intentionally small school for students that want
or need delivery of their educational curriculum in nonstandard, personalized ways (Spring Branch ISD, n.d.b). Due to their unique and different educational environments, teacher inclusion from any of these campuses could introduce a confounding spurious variable. Additionally, teachers in alternative learning programs such as those who teach in DEAP (Disciplinary Alternative Education Program) or Virtual High School were not included in the sample. Both the Virtual High School program and DAEP preclude much of the social interaction upon which this study's theoretical assumptions are based since both remove students from their regular classroom settings and take place off a regular school campus (Spring Branch ISD, 2019; Spring Branch ISD, n.d.c). Support staff, coteach, or in-class support teachers were not included in this research study's dataset. The final teacher sample for the teacher population was $n=13$. The final teacher sample was $30.8 \%$ male and $69.2 \%$ female, and $15.4 \%$ Hispanic, $69.2 \%$ white, and $15.4 \%$ two of more races. There were no Black or African American, Asian, or Pacific Islander teacher participants.

Students. In order to be included in this research study, students had to be 18 and up, and enrolled in a senior level English Language Arts class. Students enrolled in specialty campuses such as those enrolled in YesPrep at Northbrook, Academy of Choice, DAEP, or Virtual High School were not included in the sample for the same reasons as stated above. The final student sample was $n=150$. The final student sample was $43.3 \%$ male and $56.7 \%$ female, and $2.7 \%$ Black or African American, 41.9\% Hispanic, $37.8 \%$ white, $9.5 \%$ Asian, $0.7 \%$ Pacific Islander, and $7.4 \%$ two of more races. Two students did not indicate a race/ethnicity when prompted.

Power and Sample Size. Before determining the size of a study's sample, the level of significance, effect size, and statistical power must first be considered. When evaluating the statistical significance of a test, a researcher must set the alpha level ( $\alpha$ ), which is the probability of committing a Type I error. A Type I error occurs when the researcher rejects the null hypothesis $\left(\mathrm{H}_{0}\right)$, but the null hypothesis $\left(\mathrm{H}_{0}\right)$ is correct. An alpha level of .05 is conventional, leading to a $5 \%$ risk of a Type 1 error. Setting an alpha level of .05 allows a researcher to conclude that their results drawn from the data are accurate at least $95 \%$ of the time (Warner, 2012, p. 115).

According to Cohen (1992), the effect size is the discrepancy between the null hypothesis $\left(\mathrm{H}_{0}\right)$ and the alternate hypothesis $\left(\mathrm{H}_{1}\right)$. In evaluating the effect sizes in multiple regression and correlation analysis, Cohen (1992) categorizes the effect sizes as follows: $.1=$ small effect size, $.3=$ medium effect size, and $.5=$ large effect size (p. 99). For Cohen (1992), the small effect size was meant to be any effect that was noticeably smaller than the medium effect size while still not being trivial. In contrast, the medium effect size is meant to demonstrate an effect noticeable to the naked eye by a careful observer. The large effect size represents a change above medium that is equal to the change in the small to medium effect size.

Power is the probability of successfully rejecting the null hypothesis $\left(\mathrm{H}_{0}\right)$ when it is false (Cohen 1992). A Type II error occurs when we accept the null hypothesis $\left(\mathrm{H}_{0}\right)$ as true when the null hypothesis $\left(\mathrm{H}_{0}\right)$ is false. Cohen (1988) suggests that a 4 to 1 ratio demonstrates the relative difference from a Type I error to a Type II error and that the equation for calculating the power of a statistical test is $1-\beta$ in which $\beta$ represents the probability of committing a Type II error or in this case 4 x the alpha level ( $\alpha$ ).

Therefore, if our alpha level is .05 , the probability of committing a Type II error would be $.05 \times 4=.20$. This probability would make the power of our statistical test $1-.20=$ . 80.

According to Warner (2012), the recommended minimum sample size to be used in multiple regression research can be found using the formula $N>50+8 \mathrm{k}$, where k is the number of predictor variables in the regression (p. 460). For both the teacher and student respondents, the maximum number of predictor variables is four, including race/ethnicity match/mismatch, gender match/mismatch, party identification match/mismatch, political ideology match/mismatch, and level of political participation. Since students are nested in a teacher's classes, and the unit of measurement is the teacher/student relationship dyad, the teacher's responses will be matched to their corresponding individual students' responses. The responses of party identification and political ideology will function as dichotomous variables for the various forms of match/mismatch evaluation. The teacher and student responses regarding their level of political participation will be compared to one another and result in a variable with four possible conditions. Therefore, according to Warner's formula of $N>50+8 \mathrm{k}$, this study will require a minimum of $N=98$ teacher/student relationship dyads. Additionally, Warner (2012) suggests the formula of $N>104+\mathrm{k}$ for testing the statistical significance of any one individual predictor (p.460). According to the equation of $N>104+\mathrm{k}$, an $n$ of greater than 110 teacher/student relationship dyads will be required. Finally, G*Power 3.1.9.4 was used to conduct an a priori sample size analysis for a linear multiple regression fixed model $\mathrm{R}^{2}$ increase. With two tested predictors out of six total predictor variables, a small effect size of .1 , a significance of $\alpha \leq .05$, and a power of .80 , the
minimum required sample size for this study is $N=100$ student/teacher relationship dyads. Despite the various ways to calculate a potential sample size, this study will use G*Power's sample size calculation and use the small effect size of .1 to detect the smallest possible effect of a match/mismatch grading bias at a statistically significant ( $p<0.05$ ) level. Therefore, this study will require a sample size of at least $N=100$ student/teacher relationship dyads.

While this study's student and teacher samples were $n=150$ and $n=13$, respectively, this survey was only able to generate $N=27$ student-teacher dyads. Therefore, using G*Power's Post hoc compute achieved power function, this study achieved a statistical power of approximately . 246 . As a result, this study has a $24 \%$ chance of detecting a statistically significant difference in match/mismatch variables and student grades, if a real difference exists. This limitation is discussed in greater detail in the limitations section of chapter five.

## Instrument

The study utilized a survey instrument with various multiple-choice questions aimed at collecting demographic and attitudinal data. According to Alwin and Krosnick (1991), "an attitude is a latent, unobservable predisposition to respond along a positive or negative dimension (e.g., approval vs. disapproval, approach vs. avoidance, satisfaction vs. dissatisfaction, etc.) toward an attitude object" (p. 139). Most Likert-scale responses were four to six-scale points, and the "unfolding approach makes it very easy for respondents to understand the meaning conveyed by the responses they provide to each question, so they end up being highly reliable" (Alwin \& Krosnick, 1991, p. 163).

American National Election Studies Questionnaire. Survey questions
addressing a respondent's political party identifications and political ideology are adapted from the American National Election Studies (ANES) Questionnaire. The ANES "is a collaboration of Stanford University and the University of Michigan, with funding from the National Science Foundation" (American National Election Studies, n.d.). The ANES serves the research needs of social scientists, teachers, students, policymakers and journalists, by producing high-quality data from its surveys on voting, public opinion, and political participation (American National Election Studies, n.d.). The ANES seeks to:
inform explanations of election outcomes by providing data that support rich hypothesis testing, maximize methodological excellence, measure many variables, and promote comparisons across people, contexts, and time. The ANES serves this mission by providing researchers with a view of the political world through the eyes of ordinary citizens (American National Election Studies, n.d.). The ANES is a national survey of American voters and has been conducted before and after every presidential election since 1948, and every midterm election since 1958 (Lavrakas, 2008). Due to its longevity and consistency, the ANES is considered the standard-bearer for election studies, so much so that many international election studies have modeled their question formats after the ANES (Lavrakas, 2008). The core time series questions, upon which this study's political questions are based, have rarely changed over time and, as such, have "allowed researchers to develop innovative hypothesis testing through the examination of many variables, which has permitted analysis across people, contexts, and time" (Lavrakas, 2008, p. 499). The ANES core
time-series questions, upon which this study's questions are based, were explicitly chosen because:

They are consistently relevant to national elections, public opinion, and civic participation. These questions are included in the NES to serve two purposes. First, it allows the NES to measure the impact of exogenous shocks to the political system. Second, these time-series allow scholarship to examine the nature and causes of political change more closely (Lavrakas, 2008, p. 499). Teacher Survey. Teachers were given a five to six-question, multiple-choice survey aimed at collecting demographic and attitudinal data. The teacher survey comprised between five to six total questions spread across four sections. The four sections of the teacher survey are demographic info, party ID, ideology, and participations. The first of the four sections, demographic info, included two multiplechoice questions about the teacher respondent's race/ethnicity and gender. The second section, party ID, included two questions displayed using an unfolding approach in which the second question varied depending upon the answer to the first question. If a teacher respondent indicated a Democratic or Republican party affiliation, then they would not see a subsequent unfolding second question. If the respondent labeled themselves as "independent" or "something else," then the unfolding second question would ask which party they feel closer to, Democratic or Republican. This second question is essential to those claiming to be independents or "something else" since research shows that most independents are strongly align with Democrats or Republicans (Keith et al., 1992). Once a respondent answered this second unfolding question, they were coded as either a Democrat or Republican and compared against their students for match/mismatch
evaluation. The third section, ideology, used a six-point Likert scale to ascertain the respondents' ideological placement. The six choices on this scale were very liberal, somewhat liberal, closer to liberals, closer to conservatives, somewhat conservative, and very conservative. The last of the four sections, participations, asked respondents about their level of political participation. The initial five to six-question teacher survey instrument is included in Appendix A.

Student Survey. Students were given an eight to nine-question, multiple-choice survey aimed at collecting demographic and attitude data. The student survey was comprised of the same original five to six teacher questions, plus an additional three questions; all spread across five sections. The first four sections of the student survey were the same as the teacher survey. The additional fifth section, class, consisted of three, multiple-choice questions: self-reported teacher of record, self-reported method of instruction (all online, all in-person, online then in-person, or in-person then online) and self-reported $1^{\text {st }}$-semester class grade. The initial student survey instrument contains eight to nine questions and is included in Appendix B.

## Measures

The following section explains the rationale behind this study's measures and outlines how the study's key constructs were operationalized.

Dependent Variable. The dependent variable in this study was the self-reported class grade of the student. Maxey and Ormsby (1971) found that of students who selfreported grades, only $2 \%$ deviated from their school-reported grade by an entire letter grade. Additionally, a meta-analysis of over 60,926 subjects has shown self-reported grades to be reasonably good reflections of actual grades (Kuncel et al., 2005). Of the
results, the meta-analysis found the sample size weighted mean observed correlation of self-reported grades to school records to be .84 for math, .85 for social science, .82 for science, .84 for English, .79 for physical sciences, .67 for art/music, .84 for foreign language, and .80 for natural science (Kuncel et al., 2005). Of those results, the metaanalysis found both the observed standard deviation of correlations and the standard deviation of true score correlations to be anywhere between .02 and .05 depending on the subject area. Furthermore, this meta-analysis found no significant difference in the sample size weighted mean observed correlation in self-reporting of grades between males (.79) and females (.82) (Kuncel et al., 2005). Lastly, in the meta-analysis, $12.3 \%$ of high school students over-reported their grades, while $3.5 \%$ under-reported their grades, with $82.4 \%$ accurately reporting (Kuncel et al., 2005). The data will be coded into SPSS using the following numerical values:

- Self-Reported Class Grade (Students Only): 0-100.

Independent Variables. The independent variables of interest are party identification match/mismatch and political ideology match/mismatch. These questions measured their responses in Likert scale forms. The teacher data from party identification and political ideology was entered into SPSS and, when compared against their student responses, coded into a dichotomous match/mismatch variable. For example, if both a teacher and student indicate matching Democratic or Republican political party affiliations, they were coded as " 0 ," indicating a match. The SPSS coding used the following numerical values:

- Party Identification/Lean: Match $=0$, Mismatch $=1$.

Regarding political ideology, "Very Liberal," "Somewhat Liberal," and "Closer to Liberals" were all considered a liberal ideological identifier. Likewise, if a respondent indicated an ideology of "Very Conservative," "Somewhat Conservative," and "Closer to Conservatives," then they were considered as having a conservative ideological identifier. If both a teacher and student indicate matching ideological identifiers, they were coded as " 0, ," indicating a match. The SPSS coding used the following numerical values:

- Personal Political Ideology: Match $=0$, Mismatch $=1$.

While political party identification and political ideology are strongly correlated, they are not the same thing. This study asked respondents to identify both since many people have a much clearer understanding of partisanship than of ideology (Kinder \& Kalmoe, 2017).

Moderator Variables. The two moderating variables were level of political participation and modality of instruction. The participations variable of both the teacher and the student was a continuous variable which were then compared against one another. The modality of instruction variable was used to represent subgroups in the sample. Due to COVID-19, families had the choice to send their children to school in-person, remain $100 \%$ online, send their children to school to start the semester then switch them to online for the second half of the first semester, or start their children online then switch them to in-person for the second half of the first semester. The SPPS coding used the following numerical values:

- Modality of Instruction (Students): All in-person= $0 / 1$, All virtual $=0 / 1$, in-person then virtual $=0 / 1$, virtual then in-person $=0 / 1$.

The political participation variable question presented teachers and students with eight options in which to indicate various forms of political participation they had engaged in in the past 12 months. The options were attended a meeting to talk about political or social concerns, given money to an organization concerned with a political or social issue, joined in a protest march, rally, or demonstration, posted a message or comment online about a political issue or campaign, tried to persuade anyone to vote one way or another, worn a campaign button, put a sticker on your car, or placed a sign in your window or in front of your house, given money to any candidate running for public office, any political party, or any other group that supported or opposed candidates, gotten into a political argument with someone, or none of these. The SPPS coding used the following numerical values:

- Political Participations: 0-8

These moderating variables are control variables included in the survey to increase outcome validity by allowing this study's analysis to account for any effect that these variables may have through the use of ANOVA.

## Data Collection and Procedures

This research study was administered online and sent independently to both survey populations. Participants that met the inclusion criteria were sent an email containing a Qualtrics survey link. From there, participants were directed to a page that informed them of their rights as participants, the purpose of the research study, and the group level criteria (teachers or students) that must be met. At the bottom of this informed consent page, there was a checkmark box that, when clicked, indicated the participant's consent to participate in the research. Once the participants consented to be
a part of the research study, they proceeded to the next page where the demographic and research data was collected. Each English Language Arts teacher had a unique survey URL linked to a researcher-generated key indicating which survey belonged to which specific teacher. This allowed the researcher to determine which anonymous student responses were associated with which specific teacher's responses.

These survey emails followed a three-phase administration process. The first email that was sent to teachers and students included an introduction, an explanation of the survey, and the survey link. A second follow-up email was sent 5 to 10 days after the initial email. A third email was sent approximately two weeks after the second follow-up email. The teacher and student survey administration and data collection phase concluded approximately one month after it started. The initial teacher and student surveys were sent out in early January and closed in early February.

Protection of Participants. While the researcher did not know the student participants, the researcher was himself a high school teacher in the district in which he was conducting research. Therefore, the possibility existed that any students who participated in this study may also have come in contact with the researcher. Additionally, while the student participants might have known the researcher, since no identifying information about the students was collected, such as name, student ID number, and social security number, the researcher had no way of knowing which students participated. Furthermore, since there was no identifying data collected by the researcher that might allow for the identification of the study's student participants, there was no need for any resources or accommodations to protect the student participant's confidentiality.

Concerning the potential population of teacher participants, accommodations were made to protect these teachers' identities and their social-political data. For this research study to be successful, students' anonymous response data must be connected to their teachers'. Therefore, a key was developed that linked the high school teachers' names to their corresponding survey links. When entered into the SPSS data set, the teachers were coded by their ID numbers and not their names. The teacher ID key is stored in a separate, password-protected file. Only the researcher has access to this key and is able to determine which responses belong to which specific teacher. Like the student surveys, other than demographic information, no personal identifying information was asked in the online survey that the teachers completed.

The researcher did, however, provide to those participating in the survey his university email address if a participant had any questions or concerns as a result of participating in the research.

Storage and Protection. The researcher stored the dataset in a password/TouchID protected personal laptop. The SPSS dataset itself contained no personal identifying information of any of the study's teacher or student participants. A copy of the data will be stored in the researcher's University of Houston's secure One Drive server for a period of at least three years and shared with the committee chair, Dr. Virginia Rangel.

## Data Analysis

Once the response window closed, the survey data were downloaded from Qualtrics and uploaded into the SPSS Statistics Premium Grad Pack 26 software package. SPSS is a computer-based statistics program used for statistical analysis.

Descriptive statistics were used to analyze and describe each sample and the independent and dependent variables. Additionally, the results were displayed in graphical forms (e.g., tables and bar graphs) in order to illustrate the differences between demographic groups. The descriptive statistical calculations were used in answering all applicable research questions and in drawing conclusion about any effect political party ID match/mismatch or ideology match/mismatch might have on student academic outcomes. The data for any participant that did not complete the full survey were still entered into SPSS and used for descriptive analysis where applicable.

Moreover, in analyzing the political party ID and ideologies of both student and teacher populations and their disaggregation by race/ethnicity and gender, Pearson chisquare tests were calculated for each applicable survey question and subquestion. This was done to determine if the responses collected by the research study were statistically different than what we would expect in a sample with normal distribution and to provide additional context should the observed frequencies differ from what was expected. Chisquare tests are nonparametric tests used to analyze the statistical significance of categorical data in the form of frequency counts to compare what is observed against what is expected (Fraenkel \& Wallen, 2009). If the Pearson chi-square tests indicated a statistical difference in what was observed in the study compared to what would have been expected, then a post hoc Cramer's V was also calculated to determine the effect size between the variables.

When comparing the student-teacher match/mismatch of party ID or ideology and its effects on student grades, an independent sample t-test was used. Independent sample t -test are used to compare the means between two groups. In this study, the independent
sample $t$-test was used to compare the course grade means of the match group to the course grade means of the mismatch group for both political party ID and ideology. The results of the independent sample t-test were evaluated in three ways. First the $t$ value was compared against the critical value on a $t$-table for the appropriate degrees of freedom. Second the $p$-value was evaluated to determine if it was less than .05 . Third, the upper and lower values for the confidence interval was looked at to determine if they crossed zero (null value).

## Limitations

No research study is perfect, and this study is no exception. Despite the researcher's best attempts, several limitations continued to exist regarding this study, such as the truthfulness of the respondents and the complex nature of teachers' and students' social interactions.

Threats to Validity. One issue of concern regarding the validity of the data involves the reliability of survey attitude measurement in sample surveys. The main concern with this domain-specific measurement involves an inaccurate self-reporting of ideological assessments and party identification. However, studies have indicated that self-reporting of certain content domains can be more reliably measured than others. For example, Alwin and Krosnick (1991) demonstrate that ideological assessments and measures of party identification are the most reliable when examining three National Election Panel Studies from the University of Michigan's Institute for Social Research and two General Social Surveys from the National Opinion Research Center. Additionally, studies have found that questions with more response options produce greater reliability (Alwin \& Krosnick, 1991) and recommend Likert scale responses
between four and seven choices for optimum reliability and validity (Lozano, GarcíaCueto, \& Muñiz, 2008). The Likert scale question in this study had between four and six responses.

A second issue involves the generation of student-teacher dyads for match/mismatch analysis. Since both populations were administered the survey independently, some student participants did not have accompanying teacher responses and some teacher participants did not have any accompanying student responses. This resulted in small number of student-teacher dyads and an underpowered study.

A third issue involves generalizing the results of the match/mismatch evaluations of students and teachers and student grades to other districts due to the underpowered nature of this study. Also, the responses of English Language Arts teachers and consenting age students may differ significantly from teachers of other disciplines and students and teachers in other grade levels such as those in elementary or middle school. Furthermore, Texas's political, social, racial, ethnic, and educational dynamics are unique to each geographic area.

Additionally, due to the causal-comparative nature of the independent variable (political affiliation and ideology match/mismatch), internal validity cannot be fully guaranteed since correlation does not equal causation. While relationships can be discovered, it is unlikely that causation can be fully identified. A potential match/mismatch correlation is only one of many factors that go into the teaching and learning process. There will always be other influencing variables impacting student academic outcomes that are beyond the scope and influence of the teacher/student
interaction. Other variables could contribute to student academic outcomes outside of student/teacher political affiliation or ideology match/mismatch.

## CHAPTER IV

## ANALYSIS AND RESULTS

The purpose of this research study was to discern the political party affiliations and ideologies of a particular sample of students and teachers, determine if a match/mismatch of party affiliation or ideology existed, and test whether this match/mismatch had any relationship with student grades. These correlations, if they existed, were also examined through the moderating effects of classroom interaction, either in-person, online, or a combination of both, and political participation. Chapter four presents a detailed description of the sample, an analysis of the data, the answers to this study's research questions, research implications, limitations and recommendations, implications for practice and policy, and a conclusion summarizing the results. The following research questions and their results are presented in the order discussed in the previous chapters.

## Description of the Sample

This study included two sample populations. The student sample population had 150 total student participants out of a possible 1,104 students for a response rate of $13.58 \%$. The teacher sample population had 13 total teacher participants out of a possible 36 for a response rate of $36.11 \%$. Of those 150 students, 31 students did not complete the full survey. These 31 students and their corresponding data are used in this study's analysis where applicable. Table 1 displays the gender demographics for the students that did not complete the full survey compared to the students that did complete the full survey.

## Table 1

Gender - Complete Student Surveys vs. Incomplete

| Gender |  | Student Survey Status |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Incomplete | Complete | Total $n$ |
| Male | Count | 11 | 54 | 65 |
|  | $\%$ | $16.9 \%$ | $83.1 \%$ | $100.0 \%$ |
| Female | Count |  | 20 | 65 |
|  | Total $n$ | Count | $23.5 \%$ | $76.5 \%$ |
|  | $\%$ | 31 | 119 | $100.0 \%$ |
|  | $\%$ | $20.7 \%$ | $79.3 \%$ | 150 |
|  |  |  |  | $100.0 \%$ |

When comparing the gender demographics of students who completed the survey vs. those that did not, males comprised $35.5 \%$ of those that did not finish vs. $45.4 \%$ of males that did finish and females that did not finish comprised $64.5 \%$ vs. $54.6 \%$ that did finish. In both instances, women had higher percentages of both completed and incomplete surveys than men, however, a larger percentage of women did not finish the survey than men compared to the percentage of women who did complete the survey compared to men. However, the chi-square shows that the statistical significance of these differences was not greater than what we would have expected, $x^{2}(1, N=150)=.980, p=$ .322, and a Phi of -.081 (small effect size). For example, we expected 51.6 males to complete the survey, but we observed slightly more - 54. Similarly, we expected 67.4 females to complete the survey, but we observed slightly less -65 . Overall, of the total student sample of $n=150,31$ students (20.7\%) indicated a gender but did not complete the full survey.

Table 2 displays the race/ethnicity demographics for the students who did not complete the full survey compared to the students who did complete the full survey.

## Table 2

Race/Ethnicity - Complete Student Surveys vs. Incomplete

| Race/Ethnicity |  | Student Survey Status |  | Total $n$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Incomplete | Complete |  |
| Black or African American | Count | 2 | 2 | 4 |
|  | \% | 50.0\% | 50.0\% | 100.0\% |
| Hispanic | Count | 18 | 44 | 62 |
|  | \% | 29.0\% | 71.0\% | 100.0\% |
| White | Count | 7 | 49 | 56 |
|  | \% | 12.5\% | 87.5\% | 100.0\% |
| Asian | Count | 2 | 12 | 14 |
|  | \% | 14.3\% | 85.7\% | 100.0\% |
| Pacific Islander | Count | 0 | 1 | 1 |
|  | \% | 0.0\% | 100.0\% | 100.0\% |
| Two or More Races | Count | 0 | 11 | 11 |
|  | \% | 0.0\% | 100.0\% | 100.0\% |
| Total $n$ | Count | 29 | 119 | 148 |
|  | \% | 19.6\% | 80.4\% | 100.0\% |

When comparing the percentages of students who completed the survey vs. those who did not, within their respective race/ethnicity demographics, an equal percentage of Black or African Americans competed the survey vs. did not complete the survey, $29 \%$ of Hispanics did not complete the survey vs. $71 \%$ of Hispanics, $12.5 \%$ of whites did not complete the survey vs. $87.5 \%$ of whites, $14.3 \%$ of Asians did not complete the survey vs. $85.7 \%$ Asians, and all Pacific Islander students and those of two or more races complete the full survey. Overall, of the total student sample of $n=150,29$ students (19.6\%) indicated a race/ethnicity but did not complete the full survey.

Table 3 displays the political demographics for the students who did not complete the full survey compared to the students who did complete the full survey.

## Table 3

Political Demographics - Complete Student Survey vs. Incomplete


When comparing the percentages of students who completed the survey vs. those that did not, within their respective political party ID demographics, $22.4 \%$ of Democrats did not complete the survey vs. $77.6 \%$ of Democrats that did, compared to $12.5 \%$ of Republicans did not complete the survey vs. $87.5 \%$ of Republicans that did. Overall, of the 146 students that indicated a party ID, 28 (19.2) did not complete the full survey. When comparing the percentages of students who completed the survey vs. those that did not, within their respective political ideology demographics, $19.8 \%$ of liberals did not complete the survey vs. $80.2 \%$ of liberals that did, compared to $4.8 \%$ of conservatives did not complete the survey vs. $84.8 \%$ of conservatives that did. Overall, of the 138 students that indicated an ideology, 21 (15.2\%) did not complete the full survey.

Missing student data and the resulting population sample size are indicated for each question. The teacher sample population included 13 teacher participants and all teacher participants completed the full survey.

Gender. Table 4 displays the frequencies of the student participants categorized by gender, with $43.3 \%$ male and $56.7 \%$ female.

## Table 4

Student Participants by Gender

| Gender | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Male | 65 | 43.3 |
| Female | 85 | 56.7 |
| Total $n$ | 150 | 100.0 |

Table 5 displays the frequencies of the teacher participants categorized by gender, with $30.8 \%$ male and $69.2 \%$ female.

## Table 5

Teacher Participants by Gender

| Gender | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Male | 4 | 30.8 |
| Female | 9 | 69.2 |
| Total $n$ | 13 | 100.0 |

Race/Ethnicity. Table 6 displays the frequencies of the student participants categorized by race/ethnicity, with $2.7 \%$ Black or African American, 41.9\% Hispanic, $37.8 \%$ white, $9.5 \%$ Asian, $0.7 \%$ Pacific Islander, and $7.4 \%$ two of more races. Two students did not indicate a race/ethnicity when prompted.

Table 6

Student Participants by Race/Ethnicity

| Race/Ethnicity | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Black or African American | 4 | 2.7 |
| Hispanic | 62 | 41.9 |
| White | 56 | 37.8 |
| Asian | 14 | 9.5 |
| Pacific Islander | 1 | 0.7 |
| Two of More Races | 11 | 7.4 |
| Total $n$ | 148 | 100.0 |

${ }^{\text {a }}$ Two participants did not indicate a race/ethnicity.

Table 7 displays the frequencies of the teacher participants categorized by race/ethnicity, with $15.4 \%$ Hispanic, $69.2 \%$ white, and $15.4 \%$ two of more races. There were no Black or African American, Asian, or Pacific Islander teacher participants.

## Table 7

Teacher Participants by Race/Ethnicity

| Race/Ethnicity | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Black or African American | 0 | 0.0 |
| Hispanic | 2 | 15.4 |
| White | 9 | 69.2 |
| Asian | 0 | 0.0 |
| Pacific Islander | 0 | 0.0 |
| Two of More Races | 2 | 15.4 |
| Total $n$ | 13 | 100.0 |

## Description of the Variables

Independent Variables. The independent variables were created using student and teacher party identification and student and teacher ideology questions. Table 8 displays the descriptive statistics for teacher and student party ID. Since party ID was consolidated into a dichotomous variable, " 0 " represents a $100 \%$ Democratic party affiliation and " 1 " represents a 100\% Republican party affiliation. Based on the descriptive statistics, the mean score for student party affiliation was .33 whereas the mean score for teacher party affiliation was .15 . This indicated that the average teacher was more than twice as likely to be affiliated with the Democratic party than the average student and that both populations were closer to the Democratic party than the Republican party.

## Table 8

Party ID - Descriptive Statistics

| Party ID | $N$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Student | 146 | 0.33 | 0.471 |
| Teacher | 13 | 0.15 | 0.376 |

Table 9 displays the descriptive statistics for teacher and student ideology. The ideology question was a Likert scale question with six choices ranging from "very liberal" to "very conservative". In these descriptive statistics " 1 " was "very liberal" and " 6 " was "very conservative". Based on the descriptive statistics, the mean score for student ideology was 2.78 whereas the mean score for teacher ideology was 2.0 . This indicated that the average teacher was slightly more liberal than the average student, and both populations were on the liberal side of the ideological spectrum.

## Table 9

## Ideology - Descriptive Statistics

|  | Ideology | $N$ | $M$ |
| :--- | :---: | :---: | :---: |
| Student | 138 | 2.78 | $S D$ |
| Teacher | 13 | 2.00 | 1.362 |
|  |  | 1.155 |  |

When the student and teacher populations are compared against each using party ID and ideology, this study was able to generate $N=27$ student-teacher dyads for match/mismatch analysis. Table 10 displays the descriptive statistics for party ID and ideology match/mismatch between students and teachers. In this variable, "0" was a $100 \%$ match and " 1 " was a $100 \%$ mismatch. On average the party ID match/mismatch mean was .44 , indicating that there were slightly more party ID matches than mismatches. Additionally, on average the ideology match/mismatch mean was .33 , indicating that there were slightly more ideology matches than mismatches. When
compared against each other, students matched their teachers slightly more on ideology than on party ID.

Table 10
Independent Variables - Descriptive Statistics

| Independent Variable | $M$ | $S D$ | $N$ |
| :--- | :---: | :---: | :---: |
| Match/Mismatch Party ID | 0.44 | 0.506 | 27 |
| Match/Mismatch Ideology | 0.33 | 0.480 | 27 |

Dependent Variable. The dependent variable in this study was the self-reported class grade of the student. Table 11 displays the descriptive statistics for self-reported student grades.

## Table 11

Dependent Variable - Descriptive Statistics

| Dependent Variable | $N$ | Min | Max | $M$ | $S D$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Student Grades | 115 | 40 | 100 | 86.70 | 9.625 |

## Research Questions

This study was guided by the following questions:

1) How do students identify in terms of political ideology and political party affiliation?
a. Subquestion 1A. What differences emerge when disaggregated by race/ethnicity and gender?
2) How do teachers identify in terms of political ideology and political party affiliation?
a. Subquestion 2A. What differences emerge when disaggregated by race/ethnicity and gender?
3) To what extent is there a match/mismatch between teachers' and students' political party identity and their political ideology?
a. Subquestion 3A. Is there a relationship between the political party or ideology match/mismatch and student grades?
b. Subquestion 3B. If a correlation between political party or ideology match/mismatch and student grades exists, is the correlation moderated by an instructional method such as online, virtual, or mixed?
c. Subquestion 3C. If a correlation between political party or ideology match/mismatch and student grades exists, is the correlation moderated by the level of political participation on behalf of the student or teacher?

## Results for Research Question 1

How do students identify in terms of political ideology and political party affiliation? What differences emerge when disaggregated by racelethnicity and gender? To address these questions, descriptive statistics, Pearson chi-square tests, and post hoc Cramer's V tests were used. Of the 150 students who consented to this study, three did not fully indicate a political party affiliation and 12 did not indicate an ideology. Therefore, the student sample population for the full party ID question is $n=147$ and $n=$ 138 for ideology.

The political party affiliation question presented the student participants with four choices: Republican, Democrat, independent, or something else. Table 12 displays the frequencies of the students' self-reported political affiliations, with $44.2 \%$ Democrats, $23.1 \%$ Republicans, $21.1 \%$ independents, and $11.6 \%$ something else. Three student
participants did not indicate a response. Therefore, the total number of student responses for the student political party ID question is $n=147$.

Table 12

Student - Party ID

| Party ID | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Democrat | 65 | 44.2 |
| Republican | 34 | 23.1 |
| Independent | 31 | 21.1 |
| Something else | 17 | 11.6 |
| Total $n$ | 147 | 100.0 |

Any participants who labeled themselves as "independent" or "something else," received an unfolding second question asking which party they feel closer to, Democratic or Republican. This second question was essential in determining the political affiliation of those claiming to be independents or "something else" since research shows that true independents are rare and most lean strongly toward one of the two parties (Keith et al., 1992). With the second unfolding question now eliciting a party preference, Table 13 shows the simplified breakdown of party affiliation within the student population with 67.1\% Democrats and 32.9\% Republicans. One student, who indicated a response of "something else", did not select a party affiliation when prompted by the second unfolding question. Therefore, the total number of student responses for the aggregated form of student political party ID is $n=146$.

## Table 13

Student - Simple Aggregation of Party ID

| Party ID | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Democrat | 98 | 67.1 |
| Republican | 48 | 32.9 |
| Total $n$ | 146 | 100.0 |

Of the 47 students who chose independent or "something else", only 14 chose a Republican preference whereas the other 33 chose a Democrat one. Overall, a little more than two-thirds (67.1\%) of the students surveyed indicated that they were affiliated with, or felt closer to, the Democratic party while $32.9 \%$ were affiliated with, or felt closer to, the Republican party.

The political ideology question was presented to the student participants with six choices: very liberal, somewhat liberal, closer to liberals, closer to conservatives, somewhat conservative, and very conservative. Table 14 displays the frequencies of the students' self-reported ideologies with $19.6 \%$ very liberal, $29 \%$ somewhat liberal, $21 \%$ closer to liberals, $18.1 \%$ closer to conservatives, $9.4 \%$ somewhat conservative, and $2.9 \%$ very conservative. Several students did not indicate an ideological leaning when prompted. Therefore, the total number of student responses for the student ideology question is $n=138$.

Table 14
Student - Ideology

| Ideology | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Very Liberal | 27 | 19.6 |
| Somewhat Liberal | 40 | 29.0 |
| Closer to Liberals | 29 | 21.0 |
| Closer to Conservatives | 25 | 18.1 |
| Somewhat Conservative | 13 | 9.4 |
| Very Conservative | 4 | 2.9 |
| Total | 138 | 100.0 |

When both the three liberal categories and three conservative categories are simplified into one category, Table 15 shows the simplified breakdown of student body ideology with $69.6 \%$ liberals and $30.4 \%$ conservatives.

## Table 15

Student - Simple Aggregation of Ideology

| Ideology | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Liberal | 96 | 69.6 |
| Conservative | 42 | 30.4 |
| Total $n$ | 138 | 100.0 |

These descriptive statistics show that more than two-thirds of students (67.3\%) unreservedly identify with one of the two major political parties. Furthermore, the data indicate that the student population is overwhelmingly liberal and more closely affiliated with the Democratic party. However, while political affiliation and ideology are highly correlated, they are not the same. The ideological leanings within each of the political party affiliations vary significantly. Of the $67.1 \%$ of students that indicated they were, or felt closer to, the Democratic party, $19.6 \%$ identified as "very liberal". Conversely, of the $32.9 \%$ of students that indicated they were, or felt closer to, the Republican party, only $2.9 \%$ identified as "very conservative". In the student population, the most liberal of the Democratic students dwarfed the most conservative of the Republican students, 27.55\% to $8.33 \%$, respectively. Alternatively, of the $32.9 \%$ of students that indicated they were, or felt closer to, the Republican party, $18.1 \%$ of them selected the most moderate form of a conservatism, representing $53 \%$. This is in stark contrast to the $67.1 \%$ of Democrat students, of which $21 \%$ selected the most moderate for of liberalism, representing $30 \%$.

Therefore, Republican students are much more moderate in their conservative views whereas Democrat students are much more partisan in their liberal views.

Results for Research Question 1A. When disaggregated by gender, Table 16 shows a cross tabulation of the differences in the student body population with the original four political party survey choices, as well as the political party affiliation percentages within each gender. Figure 2 shows a visual representation of the differences in student responses. Of the 150 students that consented to this study, three chose not to indicate a response and could not be included in the cross tabulation. Therefore, the student sample for this subquestion is $n=147$. In this study, $55.8 \%$ of the student respondents were women, and $44.2 \%$ were men.

Table 16
Student by Gender - Party ID

| Party ID |  | Gender |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Male | Female | Total $n$ |
| Democrat | Count | 23 | 42 | 65 |
|  | $\%$ | $35.4 \%$ | $64.6 \%$ | $100.0 \%$ |
| Republican | Count |  | 18 | 16 |
|  | \% | $52.9 \%$ | $47.1 \%$ | 34 |
| Independent | Count | 18 | 13 | $100.0 \%$ |
|  | $\%$ | $58.1 \%$ | $41.9 \%$ | 31 |
| Something else | Count | 6 | 11 | $100.0 \%$ |
|  | $\%$ | $35.3 \%$ | $64.7 \%$ | 17 |
| Total $n$ | Count | 65 | 82 | $100.0 \%$ |
|  | \% of Total | $44.2 \%$ | $55.8 \%$ | 147 |
|  |  |  |  | $100.0 \%$ |

Of the students who identified as Democrats, women were nearly twice the number of men, $64.6 \%$ to $35.4 \%$. Of the students who identified as Republican, men outnumbered women $52.9 \%$ to $47.1 \%$. Of the students who identified as independents, men outnumbered women $58.1 \%$ to $41.9 \%$. Lastly, of the students who identified as
"something else", women also nearly doubled the number of men, $64.7 \%$ to $35.3 \%$. A Pearson chi-square test and a post hoc Cramer's V were also calculated to see if these political affiliation differences by gender were statistically significant and they were not, $x^{2}(3, N=147)=6.06, p=.109$ and Cramer's V of .20.

## Figure 2

Students by Gender - Party ID


After being presented with the unfolding second question asking which political party they feel closer to, Democrat or Republican, Table 17 and Figure 3 shows the simplified breakdown of party affiliation, as well as the political party affiliation percentages, within each gender. The results show that $38.8 \%$ of men and $61.2 \%$ of women identified as Democrats and $56.3 \%$ of men and $43.8 \%$ of women identified as Republicans. One participant who indicated a response of "something else", did not select a party lean when prompted by the second unfolding questions. Therefore, the student
sample for this subquestion is $n=146$. A Pearson chi-square test and a post hoc Cramer's V were also calculated to see if this simplified form of political affiliation differences by gender were statistically significant and they were, $x^{2}(1, N=146)=3.983, p=.046$ and Cramer's V of .165 (small effect size). When simplified, the Pearson chi-square test showed that the association between gender and political party affiliation was significant, however, the Cramer's V test showed that the effect size of that significance was small. Overall, within a Democratic affiliation, women were shown to be more affiliated with the Democratic party than men and within a Republican affiliation, men were shown to be more affiliated with the Republican party than women.

## Table 17

Student by Gender - Aggregated Party ID

| Party ID |  |  | Gender |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Total $n$ |  |  |
| Democrat | Count | 38 | 60 | 98 |  |  |
|  | Republican | Count | $38.8 \%$ | $61.2 \%$ |  |  |
|  |  |  |  |  |  |  |
|  | \% | 27 | 21 | $100.0 \%$ |  |  |
| Total $n$ | Count | $56.3 \%$ | $43.8 \%$ | $100.0 \%$ |  |  |
|  | \% of Total | 65 | 81 | 146 |  |  |
|  | $44.5 \%$ | $55.5 \%$ | $100.0 \%$ |  |  |  |

## Figure 3

Student by Gender - Aggregated Party ID


When looking at political ideology disaggregated by gender, a similar result emerges to that of political party affiliation. Table 18 shows the differences in the student body population with the original six survey choices, as well as the ideological percentages within each gender. The results show "very liberal" students were comprised of $66.7 \%$ women compared to $33.3 \%$ of men, "somewhat liberal" students were comprised of $65 \%$ of women compared to $35 \%$ of men, "closer to liberal" students were comprised of $51.7 \%$ women compared to $48.3 \%$ of men, "closer to conservatives" students were comprised of $40 \%$ women compared to $60 \%$ of men, "somewhat conservative" students were comprised of $46.2 \%$ women compared to $53.8 \%$ of men, and "very conservative" students were comprised of $50 \%$ women and $50 \%$ of men. Several student participants chose not to indicate an ideological preference when prompted, therefore the student sample for this subquestion is $n=138$. A Pearson chi-square test and a post hoc Cramer's V were also calculated to see if these ideological differences by gender were statistically significant and they were not, $x^{2}(5, N=138)=5.94, p=.312$ and Cramer's V of .207.

Table 18
Student by Gender - Ideology

| Ideology |  |  | Gender |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Total $n$ |  |
| Very Liberal | Count | 9 | 18 | 27 |  |
|  | $\%$ | $33.3 \%$ | $66.7 \%$ | $100.0 \%$ |  |
| Somewhat Liberal | Count | 14 | 26 | 40 |  |
|  | $\%$ | $35.0 \%$ | $65.0 \%$ | $100.0 \%$ |  |
| Closer to Liberals | Count | 14 | 15 | 29 |  |
|  | $\%$ | $48.3 \%$ | $51.7 \%$ | $100.0 \%$ |  |
| Closer to Conservatives | Count | 15 | 10 | 25 |  |
|  | $\%$ | $60.0 \%$ | $40.0 \%$ | $100.0 \%$ |  |
| Somewhat Conservative | Count | 7 | 6 | 13 |  |
|  | $\%$ | $53.8 \%$ | $46.2 \%$ | $100.0 \%$ |  |
| Very Conservative | Count | 2 | 2 | 4 |  |
|  | \% | $50.0 \%$ | $50.0 \%$ | $100.0 \%$ |  |
| Total $n$ | Count | 61 | 77 | 138 |  |
|  | $\%$ of Total | $44.2 \%$ | $55.8 \%$ | $100.0 \%$ |  |

When both the three liberal categories and three conservative categories are simplified into one category, Table 19 shows the simplified breakdown of student body ideology by gender, as well as the ideological percentages within each gender. The results show $38.5 \%$ of men and $61.5 \%$ of women as liberals, and $57.1 \%$ of men and $42.9 \%$ of women as conservatives. A Pearson chi-square test and a post hoc Cramer's V were also calculated to see if this simplified form of ideological differences by gender were statistically significant and they were, $x^{2}(1, N=138)=4.1, p=.043$ and Cramer's V of .172 (small effect size). When simplified, the Pearson chi-square test showed that the association between gender and ideology was significant, however, the Cramer's V test showed that the effect size of that significance was small. Similar to political party affiliation and gender, when it comes to ideology and gender, women were shown to be
the more liberal of the sexes and men were shown to be the more conservative of the sexes.

## Table 19

Student by Gender - Aggregated Ideology

| Ideology |  |  | Gender |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Total $n$ |  |
| Liberal | Count | 37 | 59 | 96 |  |
|  | $\%$ | $38.5 \%$ | $61.5 \%$ | $100.0 \%$ |  |
| Conservative | Count | 24 | 18 | 42 |  |
|  | $\%$ | $57.1 \%$ | $42.9 \%$ | $100.0 \%$ |  |
| Total $n$ | Count | 61 | 77 | 138 |  |
|  | \% of Total | $44.2 \%$ | $55.8 \%$ | $100.0 \%$ |  |

When disaggregated by race/ethnicity, Table 20 shows the student body population's differences with the original four survey choices, as well as the political party affiliation percentages within each race/ethnicity. When viewing the sample data as a whole, the results show Hispanics students comprised the largest share of Democrat responses with $23.4 \%$, followed by white students with $15.2 \%$, Asian students with $3.4 \%$, Black/African Americans with 2.1\%, and students of two or more races with $0.7 \%$. This trend was reversed at the top of the order when it came to Republican affiliated responses with white students comprising $11 \%$ and Hispanic students comprising $7.6 \%$, followed by students of two or more races with $2.1 \%$, Asian students with $1.4 \%$, and both Pacific Islander and Black/African Americans with $0.7 \%$. Of all the students that participated, some did not indicate either a race/ethnicity or party affiliation. Therefore, the student sample for this subquestion is $n=145$. However, since several of the race/ethnicity categories contained less than five respondents, any chi-square test performed would lack the statistical power necessary to produce reliable results. Therefore, a chi-square test was run in which the race/ethnicity categories were consolidated into white students vs.
minority students so as not to violate the assumptions of the chi-square test. The results of this test showed that political party affiliation differences by white/minority students were not statistically significant, $x^{2}(3, N=145)=3.658, p=.301$ and Cramer's V of .159 (moderate effect size).

## Table 20

Student by Race/Ethnicity - Party ID

| Race/Ethnicity |  |  | Political Party Affiliation |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Democrat | Republican | Independent | Something else | Total $n$ |  |  |
| Black or African American | Count |  | 3 | 1 | 0 | 0 |  |  |
| Hispanic | $\%$ | $75.0 \%$ | $25.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |  |
|  | Count | 34 | 11 | 8 | 9 | 62 |  |  |
| White | $\%$ | $54.8 \%$ | $17.7 \%$ | $12.9 \%$ | $14.5 \%$ | $100.0 \%$ |  |  |
|  | Count | 22 | 16 | 12 | 3 | 53 |  |  |
| Asian | $\%$ | $41.5 \%$ | $30.2 \%$ | $22.6 \%$ | $5.7 \%$ | $100.0 \%$ |  |  |
|  | Count | 5 | 2 | 6 | 1 | 14 |  |  |
| Pacific Islander | $\%$ | $35.7 \%$ | $14.3 \%$ | $42.9 \%$ | $7.1 \%$ | $100.0 \%$ |  |  |
|  | Count | 0 | 1 | 0 | 0 | 1 |  |  |
| Two or More Races | $\%$ | $0.0 \%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |  |
|  | Count | 1 | 3 | 5 | 2 | 11 |  |  |
| Total $n$ | $\%$ | $9.1 \%$ | $27.3 \%$ | $45.5 \%$ | $18.2 \%$ | $100.0 \%$ |  |  |
|  | Count | 65 | 34 | 31 | 15 | 145 |  |  |
|  | $\%$ of Total | $44.8 \%$ | $23.4 \%$ | $21.4 \%$ | $10.3 \%$ | $100.0 \%$ |  |  |

After being presented with the unfolding second question asking which party they feel closer to, Democratic or Republican, Table 21 and Figure 4 shows the simplified breakdown of party affiliation by race/ethnicity, as well as the political party affiliation percentages within each race/ethnicity. When viewing the data as a percentage of the whole sample, the results show Hispanic students recorded the highest number of Democratic party affiliation responses with over three times that of a Republican one, $31.9 \%$ to $10.4 \%$. The remaining order of percentages of Democrat students in this simplified format is nearly identical to that of the same question with the original four responses with a slight change between students of two or more races and Blacks/African Americans. The remaining simplified student Democrat responses were white students at $22.9 \%$, Asian students at $6.9 \%$, students of two or more races at $3.5 \%$, and Black/African American students at $2.1 \%$. Similarly, the order of percentages of Republican students in this simplified format in relation to the whole sample is nearly identical to that of the same question with the original four responses but with Pacific Islander students tying with African Americans, not Asians, for the lowest percentage of republican affiliated responses. The simplified student Republican responses in relation to the whole sample were white students at $13.9 \%$, Hispanic students at $10.4 \%$, students of two or more races at $4.2 \%$, Asian students at $2.8 \%$, and Black/African American students and Pacific Islander students at $0.7 \%$. One participant who indicated a response of "something else", did not select a party lean when prompted by the second unfolding questions. Therefore, the student sample for this subquestion is $n=144$. However, even with a consolidation in political party ID response categories, several of the race/ethnicity categories still contained less than five respondents. Therefore, any chi-square test performed would lack
the statistical power necessary to produce reliable results. Instead, a chi-square test was run in which the race/ethnicity categories were consolidated into white students vs. minority students so as not to violate the assumptions of the chi-square test. The results of this test showed that the simplified form of political party affiliation differences by white/minority students were not statistically significant, $x^{2}(1, N=144)=0.991, p=.319$ and Cramer's V of . 083 (small effect size).

Table 21

Student by Race/Ethnicity - Aggregated Party ID

| Race/Ethnicity |  | Party ID |  | Total $n$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Democrat | Republican |  |
| Black or African American | Count | 3 | 1 | 4 |
|  | \% | 75.0\% | 25.0\% | 100.0\% |
| Hispanic | Count | 46 | 15 | 61 |
|  | \% | 75.4\% | 24.6\% | 100.0\% |
| White | Count | 33 | 20 | 53 |
|  | \% | 62.3\% | 37.7\% | 100.0\% |
| Asian | Count | 10 | 4 | 14 |
|  | \% | 71.4\% | 28.6\% | 100.0\% |
| Pacific Islander | Count | 0 | 1 | 1 |
|  | \% | 0.0\% | 100.0\% | 100.0\% |
| Two or More Races | Count | 5 | 6 | 11 |
|  | \% | 45.5\% | 54.5\% | 100.0\% |
| Total $n$ | Count | 97 | 47 | 144 |
|  | \% of Total | 67.4\% | 32.6\% | 100.0\% |

## Figure 4

Students by Race/Ethnicity - Aggregation of Party ID


When looking at political ideology disaggregated by race/ethnicity, a similar result emerges to that of political party affiliation. Table 22 shows the differences in the student sample with the original six survey choices for ideology by race/ethnicity, as well as the ideological percentages within each race/ethnicity. In order of greatest overall sample percentages, white students were the most liberal at $10.2 \%$, followed by $8 \%$ of Hispanics, and $0.7 \%$ of both Black or African American and Asian students. In order of greatest overall sample percentages, white students were also the most conservative at $1.5 \%$, followed by Hispanic and Asian students at $0.7 \%$ each. Of all the students that participated, some did not indicate either a race/ethnicity or ideology. Therefore, the student sample for this subquestion is $n=137$. A chi-square test was not calculated for the differences in ideological choices by race/ethnicity nor was one calculated for the differences in ideological choices by a white/minority breakdown since both tests would violate the assumptions necessary for the chi-square test.

Table 22
Student by Race/Ethnicity - Ideology

| Race/Ethnicity |  | Ideology |  |  |  |  |  | Total $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Very Liberal | Somewhat Liberal | Closer to Liberals | Closer to Conservatives | Somewhat Conservative | Very <br> Conservative |  |
| Black or African American | Count | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
|  | \% | 25.0\% | 75.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 100.0\% |
| Hispanic | Count | 11 | 20 | 13 | 7 | 3 | 1 | 55 |
|  | \% | 20.0\% | 36.4\% | 23.6\% | 12.7\% | 5.5\% | 1.8\% | 100.0\% |
| White | Count | 14 | 12 | 7 | 9 | 8 | 2 | 52 |
|  | \% | 26.9\% | 23.1\% | 13.5\% | 17.3\% | 15.4\% | 3.8\% | 100.0\% |
| Asian | Count | 1 | 4 | 5 | 3 | 0 | 1 | 14 |
|  | \% | 7.1\% | 28.6\% | 35.7\% | 21.4\% | 0.0\% | 7.1\% | 100.0\% |
| Pacific Islander | Count | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
|  | \% | 0.0\% | 0.0\% | 0.0\% | 100.0\% | 0.0\% | 0.0\% | 100.0\% |
| Two or More Races | Count | 0 | 1 | 3 | 5 | 2 | 0 | 11 |
|  | \% | 0.0\% | 9.1\% | 27.3\% | 45.5\% | 18.2\% | 0.0\% | 100.0\% |
| Total $n$ | Count | 27 | 40 | 28 | 25 | 13 | 4 | 137 |
|  | \% of Total | 19.7\% | 29.2\% | 20.4\% | 18.2\% | 9.5\% | 2.9\% | 100.0\% |

Table 23 shows a simplified aggregation of ideology by race/ethnicity when all liberal and conservative responses are coded into one category each, as well as the ideological percentages within each race/ethnicity. In this simplified aggregation, and in comparison to the whole sample, Hispanic students recorded the highest percentage of liberal affiliated responses with $32.1 \%$, white students with $24.1 \%$, Asian students with $7.3 \%$, and both students of two or more races and Black/African American students with $2.9 \%$. The simplified student conservative responses in comparison to the whole sample were white students with $13.9 \%$, Hispanic students with $8 \%$, students of two or more races with $5.1 \%$, Asian students with $2.9 \%$, Pacific Islander students with $0.7 \%$, and no Black/African American students identifying as conservatives. A Pearson chi-square test was not calculated for the simplified form of ideological differences and full race/ethnicity responses since any chi-square test performed would lack the statistical power necessary to produce reliable results. Instead, a chi-square test was run in which the race/ethnicity categories were consolidated into white students vs. minority students so as not to violate the assumptions of the chi-square test. The results of this test showed that the simplified form of ideology by white/minority students were not statistically significant, $x^{2}(1, N=137)=1.364, p=.243$ and Cramer's V of .1 (small effect size).

Table 23
Student by Race/Ethnicity - Aggregated Ideology

| Race/Ethnicity |  |  | Ideology |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Liberal | Conservative | Total $n$ |  |
| Black or African American | Count |  | 4 | 0 | 4 |
|  | $\%$ | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
| Hispanic | Count |  | 44 | 11 | 55 |
|  | $\%$ | $80.0 \%$ | $20.0 \%$ | $100.0 \%$ |  |
| White | Count |  | 33 | 19 | 52 |
|  | $\%$ | $63.5 \%$ | $36.5 \%$ | $100.0 \%$ |  |
| Asian | Count | 10 | 4 | 14 |  |


|  | \% | $71.4 \%$ | $28.6 \%$ | $100.0 \%$ |
| :--- | :--- | :---: | :---: | :---: |
| Pacific Islander | Count | 0 | 1 | 1 |
|  | $\%$ | $0.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| Two or More Races | Count | 4 | 7 | 11 |
|  | $\%$ | $36.4 \%$ | $63.6 \%$ | $100.0 \%$ |
| Total $n$ | Count | 95 | 42 | 137 |
|  | \% of Total | $69.3 \%$ | $30.7 \%$ | $100.0 \%$ |

Overall, the results of research question 1 indicate that when simplified into dichotomous variables, there is a statistical significance to the relationships between both student gender and political party affiliation and ideology. There were more conservative and less liberal male students that would be expected by chance and more liberal and less conservative female students than would be expected by chance. Similarly, there were more Republican and less Democratic male students than would be expected by chance and more Democratic and less Republican female students than would be expected by chance.

## Results for Research Question 2

How do teachers identify in terms of political ideology and political party affiliation? What differences emerge when disaggregated by race/ethnicity and gender? To address these questions, descriptive statistics, and Pearson chi-square tests were used. The teacher population for this study was $n=13$.

The political party affiliation question presented the teacher respondents with four choices: Republican, Democrat, independent, or "something else". Table 24 displays the frequencies of the teacher self-reported political affiliations, with nine Democrats (69.2\%), one Republican (7.7\%), two independents (15.4\%), and one "something else" (7.7\%).

Table 24

Teacher - Party ID

| Party ID | Frequency | Valid Percent | Cumulative Percent |
| :--- | :---: | :---: | :---: |
| Democrat | 9 | 69.2 | 69.2 |
| Republican | 1 | 7.7 | 76.9 |
| Independent | 2 | 15.4 | 92.3 |
| Something else | 1 | 7.7 | 100.0 |
| Total $n$ | 13 | 100.0 |  |

Any participants who labeled themselves as independent or "something else," received an unfolding second question asking which party they feel closer to, Democratic or Republican. With the second unfolding question now eliciting a party preference, Table 25 shows the simplified breakdown of party affiliation within the teacher population with 11 Democrats (84.6\%) and two Republicans (15.4\%).

Table 25
Teacher - Simple Aggregation of Party ID

| Party ID | Frequency | Valid Percent | Cumulative Percent |
| :--- | :---: | :---: | :---: |
| Democrat | 11 | 84.6 | 84.6 |
| Republican | 2 | 15.4 | 100.0 |
| Total $n$ | 13 | 100.0 |  |

Of the three teachers who chose independent or "something else", two chose a Democrat preference, and the third chose a Republican one. Overall, 11 out of 13 ( $84.6 \%$ ) teachers surveyed indicated that they were affiliated with, or felt closer to, the Democratic party.

The political ideology question was presented to the teacher respondents with six choices: very liberal, somewhat liberal, closer to liberals, closer to conservatives, somewhat conservative, and very conservative. Table 26 displays the frequencies of the teacher self-reported ideologies, with $46.2 \%$ very liberal, $23.1 \%$ somewhat liberal, $15.4 \%$
closer to liberals, and $15.4 \%$ closer to conservatives. There were no respondents who identified as either somewhat conservative or very conservative in the teacher survey population.

Table 26

## Teacher - Ideology

| Ideology | Frequency | Valid Percent | Cumulative Percent |
| :--- | :---: | :---: | :---: |
| Very Liberal | 6 | 46.2 | 46.2 |
| Somewhat Liberal | 3 | 23.1 | 69.2 |
| Closer to Liberals | 2 | 15.4 | 84.6 |
| Closer to Conservatives | 2 | 15.4 | 100.0 |
| Somewhat Conservative | 0 | 0.0 | 100.0 |
| Very Conservative | 0 | 0.0 | 100.0 |
| Total $n$ | 13 | 100.0 |  |

When both the three liberal categories and three conservative categories were simplified into one category each, Table 27 shows the simplified breakdown of the teacher survey population's ideology with $84.6 \%$ liberal and $15.4 \%$ conservative.

Table 27
Teacher - Simple Aggregation of Ideology

| Ideology | Frequency | Valid Percent | Cumulative Percent |
| :--- | :---: | :---: | :---: |
| Liberal | 11 | 84.6 | 84.6 |
| Conservative | 2 | 15.4 | 100.0 |
| Total $n$ | 13 | 100.0 |  |

These descriptive statistics show that an overwhelming percentage of the teacher sample is both liberal and affiliated with the Democratic party. Additionally, of those two teachers who indicated a conservative ideology, both of them indicated that they were the most moderate form of conservative by choosing "closer to conservatives". This is stark contrast to those teachers who indicated a liberal ideology. Of those 11 teachers that
indicated a liberal ideology, more than half (55\%) were of the most partisan kind with all six choosing "very liberal" as their ideology.

Results for Research Question 2A. When disaggregated by gender, Table 28 shows a cross tabulation of the differences in the teacher population with the original four political party survey choices, as well as the political party affiliation percentages within each gender. Figure 5 shows a visual representation of the differences in teacher responses. In this study, nine ( $69.2 \%$ ) of the teacher respondents were women and four $(30.8 \%)$ of the respondents were men.

## Table 28

## Teacher by Gender - Party ID

| Party ID |  |  | Gender |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  | Male | Female | Total $n$ |
| Democrat | Count | 3 | 6 | 9 |
|  | $\%$ | $33.3 \%$ | $66.7 \%$ | $100.0 \%$ |
| Republican | Count | 0 | 1 | 1 |
|  | $\%$ | $0.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| Independent | Count | 0 | 2 | 2 |
|  | $\%$ | $0.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| Something else | Count | 1 | 0 | 1 |
|  | $\%$ | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Total $n$ | Count | 4 | 9 | 13 |
|  | $\%$ of Total | $30.8 \%$ | $69.2 \%$ | $100.0 \%$ |

Of the teachers who identified as Democrats, women doubled the number of men, $66.7 \%$ to $33.3 \%$, respectively. Only one teacher ( $7.7 \%$ overall) identified outright as a Republican, and only one teacher (7.7\% overall) identified as "something else". Two teachers ( $15.4 \%$ overall) identified as independents. A Pearson chi-square test was calculated to see if these political affiliation differences by gender were statistically significant and they were not, $x^{2}(3, N=13)=3.61, p=.307$. However, due to the small
sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

## Figure 5

Teachers by Gender - Party ID


After being presented with the unfolding second question asking which party they feel closer to, Democratic or Republican, Table 29 and Figure 6 show the simplified breakdown of party affiliation by gender. In the teacher sample, $100 \%$ of men identified as Democrats compared to $77.8 \%$ of women. Additionally, while women made up $69.2 \%$ of the total teacher sample, they comprise of $100 \%$ of the Republican affiliated responses. A Pearson chi-square test was calculated to see if this simplified form of political affiliation differences by gender were statistically significant and they were not, $x^{2}(1, N=$ $13)=1.051, p=.305$. However, due to the small sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

Table 29

Teacher by Gender - Aggregated Party ID

| Gender | Party ID |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Democrat | Republican | Total $n$ |
| Male | Count | 4 | 0 | 4 |
|  | \% | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Female | Count | 7 | 2 | 9 |
|  | \% | $77.8 \%$ | $22.2 \%$ | $100.0 \%$ |
| Total $n$ | Count | 11 | 2 | 13 |
|  | \% of Total | $84.6 \%$ | $15.4 \%$ | $100.0 \%$ |

## Figure 6

Teacher by Gender - Aggregated Party ID


When looking at political ideology disaggregated by gender, a similar result emerges to that of political party affiliation. Table 30 shows the differences in the teacher population with the original six survey choices for ideology by gender, as well as the ideological percentages within each gender. In relation to the whole sample, the results show $23.1 \%$ of men and women as very liberal, $7.7 \%$ of men and $15.4 \%$ of women as
somewhat liberal, $0 \%$ of men and $15.4 \%$ of women closer to liberals, and $0 \%$ of men and $15.4 \%$ of women closer to conservatives. No teacher participants indicated they were "somewhat conservative" or "very conservative". A Pearson chi-square test was calculated to see if these ideological differences by gender were statistically significant and they were not, $x^{2}(3, N=13)=2.83, p=.419$. However, due to the small sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

Table 30
Teacher by Gender - Ideology

| Ideology |  | Gender |  | Total $n$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Very Liberal | Count | 3 | 3 | 6 |
|  | \% | 50.0\% | 50.0\% | 100.0\% |
| Somewhat Liberal | Count | 1 | 2 | 3 |
|  | \% | 33.3\% | 66.7\% | 100.0\% |
| Closer to Liberals | Count | 0 | 2 | 2 |
|  | \% | 0.0\% | 100.0\% | 100.0\% |
| Closer to Conservatives | Count | 0 | 2 | 2 |
|  | \% | 0.0\% | 100.0\% | 100.0\% |
| Total $n$ | Count | 4 | 9 | 13 |
|  | \% of Total | 30.8\% | 69.2\% | 100.0\% |

Note. No respondents selected "somewhat conservative" or "very conservative".
When both the three liberal categories and three conservative categories were simplified into one category each, Table 31 shows a simplified breakdown of the teacher survey population by gender, as well as the ideological percentages within each gender. The results show $36.4 \%$ of men and $63.6 \%$ of women as liberals and $0 \%$ of men and $100 \%$ of women as conservatives. When simplified, a Pearson chi-square test was calculated to see if these ideological differences by gender were statistically significant and they were not, $x^{2}(1, N=13)=1.05, p=.305$. However, due to the small sample size
and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

Table 31
Teacher by Gender - Aggregated Ideology

| Ideology |  |  | Gender |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Total $n$ |  |
| Liberal | Count | 4 | 7 | 11 |  |
|  | $\%$ | $36.4 \%$ | $63.6 \%$ | $100.0 \%$ |  |
| Conservative | Count | 0 | 2 | 2 |  |
|  | \% | $0.0 \%$ | $100.0 \%$ | $100.0 \%$ |  |
| Total $n$ | Count | 4 | 9 | 13 |  |
|  | \% of Total | $30.8 \%$ | $69.2 \%$ | $100.0 \%$ |  |

When disaggregated by race/ethnicity, Table 32 shows the differences in the study's teacher sample with the original four survey choices, as well as the political party affiliation percentages within each race/ethnicity. Figure 7 shows a visual representation of the differences in teacher responses. In comparison to the whole sample, of the teacher respondents who identified as Democrats, white teachers had the greatest percentage at $38.5 \%$, and both Hispanic teachers and those of two or more races at $15.4 \%$. There was only one Republican teacher respondent that identified as white (7.7\%). Of the two teacher respondents who identified as independents, both were white (15.4\%). Lastly, only one teacher respondent identified as "something else" and they were white (7.7\%). A Pearson chi-square test was calculated to see if political party affiliation differences by race/ethnicity were statistically significant and they were not, $x^{2}(6, N=13)=2.57, p=$ .861. However, due to the small sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

Table 32
Teacher by Race/Ethnicity - Party ID

| Race/Ethnicity |  |  | Party ID |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Democrat | Republican | Independent | Something else | Total $n$ |  |
| Hispanic | Count | 2 | 0 | 0 | 0 | 2 |  |
|  | $\%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
| White | Count | 5 | 1 | 2 | 1 | 9 |  |
|  | $\%$ | $55.6 \%$ | $11.1 \%$ | $22.2 \%$ | $11.1 \%$ | $100.0 \%$ |  |
| Two or More Races | Count | 2 | 0 | 0 | 0 | 2 |  |
|  | $\%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
| Total $n$ | Count | 9 | 1 | 2 | 1 | 13 |  |
|  | $\%$ of Total | $69.2 \%$ | $7.7 \%$ | $15.4 \%$ | $7.7 \%$ | $100.0 \%$ |  |

Note. There were no teacher respondents in the Black/African American, Asian, or Pacific Islander categories.

## Figure 7

Teacher by Race/Ethnicity - Party ID


After being presented with the unfolding second question asking which party they feel closer to, Democratic or Republican, Table 33 shows the simplified breakdown of party affiliation by race/ethnicity, as well as the party affiliation within each race/ethnicity. In this simplified aggregation, and in comparison to the whole sample, white teachers recorded the highest number of Democratic party affiliation responses with over three times that of a Republican one, $53.8 \%$ to $15.4 \%$, respectively. The remaining simplified teacher Democrat responses were Hispanic teachers and teachers of two or more races, both at $15.4 \%$. In comparison to the whole sample, the simplified teacher Republican responses were solely white teachers with a total of $15.4 \%$. A Pearson chi-square test was calculated to see if this simplified form of political party affiliation by race/ethnicity was statistically significant and it was not, $x^{2}(2, N=13)=1.05, p=.591$.

However, due to the small sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

## Table 33

Teacher by Race/Ethnicity - Simple Party ID

| Race/Ethnicity |  |  | Party ID |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
|  |  | Democrat | Republican | Total $n$ |  |
| Hispanic | Count |  | 2 | 0 | 2 |
|  | $\%$ |  | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| White | Count |  | 7 | 2 | 9 |
|  | $\%$ |  | $77.8 \%$ | $22.2 \%$ | $100.0 \%$ |
| Two or More Races | Count |  | 2 | 0 | 2 |
|  | \% | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
| Total $n$ | Count | 11 | 2 | 13 |  |
|  | \% of Total | $84.6 \%$ | $15.4 \%$ | $100.0 \%$ |  |

Note. There were no teacher respondents in the Black/African American, Asian, or Pacific Islander categories.

When looking at political ideology disaggregated by race/ethnicity, a similar result emerges to that of political party affiliation. Table 34 shows the differences in the teacher sample with the original six survey choices for ideology by race/ethnicity, as well as the ideological percentages within each race/ethnicity. In comparison to the whole sample, of those that indicated they were "very liberal", white teachers comprised the largest share of respondents at $30.8 \%$ followed by teachers of two or more races with $15.4 \%$. In comparison to the whole sample, of those that indicated they were "somewhat liberal", white teachers also comprised the largest share of respondents at $15.4 \%$ followed by Hispanic teachers with $7.7 \%$. In comparison to the whole sample, of those that indicated they were "closer to liberals", white and Hispanic teachers both comprised the largest share of respondents at $7.7 \%$. In comparison to the whole sample, of those that indicated they were "closer to conservatives", white teachers comprised the sole share of respondents at $15.4 \%$. There were no teacher respondents that indicated they were
"somewhat conservative" or "very conservative". A Pearson chi-square test was calculated to see if ideological differences by race/ethnicity were statistically significant and they were not, $x^{2}(6, N=13)=6.14, p=.408$. However, due to the small sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

## Table 34

Teacher by Race/Ethnicity - Ideology

| Race/Ethnicity |  |  | Ideology |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Very <br> Liberal | Somewhat <br> Liberal | Closer to <br> Liberals | Closer to <br> Conservatives | Somewhat <br> Conservative | Very <br> Conservative | Total $n$ |  |
| Hispanic | Count | 0 | 1 | 1 | 0 | 0 | 0 | 2 |  |
|  | $\%$ | $0.0 \%$ | $50.0 \%$ | $50.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
| White | Count | 4 | 2 | 1 | 2 | 0 | 0 | 9 |  |
| Two or More Races | $\%$ | $44.4 \%$ | $22.2 \%$ | $11.1 \%$ | $22.2 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
|  | Count | 2 | 0 | 0 | 0 | 0 | 0 | 2 |  |
| Total $n$ | $\%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
|  | Count | 6 | 3 | 2 | 2 | 0 | 0 | 13 |  |
|  | \% of Total | $46.2 \%$ | $23.1 \%$ | $15.4 \%$ | $15.4 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |

Note. There were no teacher respondents in the Black/African American, Asian, or Pacific Islander categories.

Table 35 shows a simplified aggregation of ideology by race/ethnicity when all liberal and conservative responses are coded into one category. In this simplified aggregation, and in comparison to the whole sample, white teachers comprised the sole conservative responses with $15.4 \%$ of the overall teacher population. In comparison to the whole sample, white teachers recorded the highest number of liberal ideology responses at $53.8 \%$, with Hispanic teachers and teachers of two or more races at $15.4 \%$. A Pearson chi-square test was calculated to see if this simplified form of ideology by race/ethnicity was statistically significant and it was not, $x^{2}(6, N=137)=6.14, p=.408$. However, due to the small sample size and lopsided distribution, the statistical power of this chi-square test to produce reliable result was severely inhibited.

## Table 35

## Teacher by Race/Ethnicity - Aggregated Ideology

| Race/Ethnicity |  |  | Ideology |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Liberal | Conservative | Total $n$ |  |
| Hispanic | Count | 2 | 0 | 2 |  |
|  | $\%$ |  | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| White | Count | 7 | 2 | 9 |  |
|  | $\%$ | $77.8 \%$ | $22.2 \%$ | $100.0 \%$ |  |
| Two or More Races | Count | 2 | 0 | 2 |  |
|  | $\%$ | $100.0 \%$ | $0.0 \%$ | $100.0 \%$ |  |
| Total $n$ | Count | 11 | 2 | 13 |  |
|  | $\%$ of Total | $84.6 \%$ | $15.4 \%$ | $100.0 \%$ |  |

Note. There were no teacher respondents in the Black/African American, Asian, or Pacific Islander categories.

Overall, the results of research question 2 indicate that the teaching sample is largely liberal and politically affiliated with the Democratic party. Conversely, of those that indicated a Republican affiliation and a conservative ideology, they were of the most moderate form of conservative partisan. When analyzed using all the categories of the variables or when analyzed using variables simplified into dichotomous pairs, there is no
statistical significance to the relationships between gender or race/ethnicity and either political affiliation or ideology. However, due to the small sample size and lopsided distribution, the statistical power of the chi-square tests to produce reliable results for this research question was severely inhibited.

## Results for Research Question 3

To address research question 3 and its subquestions, descriptive statistics and independent sample $t$-tests were used. In comparing the match/mismatch responses between the overall student and teacher survey populations for political party affiliation and ideology, only those respondents who answered both the political party affiliation and ideology questions were included in the cross-tabulations. Therefore, this comparison's student population is $n=138$, and the teacher population is $n=13$. Table 36 compares the overall percentages of student and teacher political affiliation and ideology, as well as the population percentages within each party ID and ideology. Based on the cross-tabulation results, $84.6 \%$ of teachers are liberal compared to $69.6 \%$ of students. When it comes to political party affiliation, $84.6 \%$ of teachers identified as Democrats compared to $68.8 \%$ of students. Student conservatives are almost twice the percentage of teacher conservatives, $30.4 \%$ to $15.4 \%$, respectively, and student Republicans more than double the percentage of teacher Republicans, $31.2 \%$ to $15.4 \%$, respectively. Across the entire student and teacher population, these descriptive statistics indicate that teachers and students are mostly liberal and identify with, or feel closer to, the Democratic party. Conversely, of those teachers and students that identify with some form of conservatism and the Republican party, conservative students are more ideologically conservative than conservative teachers.

Table 36
Teachers vs. Students - Comparison of Party ID and Ideology

|  |  | Sample Population |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Student | Teacher | Total $n$ |
| Liberal | Count | Ideology |  |  |
|  | $\%$ | 96 | 11 | 107 |
|  | Count | $69.6 \%$ | $84.6 \%$ | $70.9 \%$ |
|  | \% | 42 | 2 | 44 |
| Total $n$ | Count | $30.4 \%$ | $15.4 \%$ | $29.1 \%$ |
|  | \% Total | 138 | 13 | 151 |
| Democrat | Count | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |
|  | \% | Party ID |  |  |
|  | Count | 95 | 11 | 106 |
|  | \% | $68.8 \%$ | $84.6 \%$ | $70.2 \%$ |
| Total $n$ | Count | 43 | 2 | 45 |
|  | \% Total | $131.2 \%$ | $15.4 \%$ | $29.8 \%$ |
|  | $100.0 \%$ | 13 | 151 |  |
|  |  |  | $100.0 \%$ | $100.0 \%$ |

While analyzing the match/mismatch of the overall student and teacher populations is informative, so too is analyzing the population of student-teacher dyads that emerged between those students who answered the political ideology and party affiliation questions and their corresponding teachers. Out of the 13 teachers and 151 student respondents, there were 27 student-teacher dyads. These 27 student-teacher dyads were formed from the responses results of 27 students, which were then matched to their English Language Arts teachers, and compared against their teacher' response results. From these dyads there was a student teacher party affiliation match of $55.6 \%$ and a mismatch of $44.4 \%$. Additionally, from these dyads there was a student teacher ideology match of $66.7 \%$ and a mismatch of $33.3 \%$. Table 37 and 38 presents the match $/$ mismatch results for these 27 student-teacher dyads for political party affiliation and ideology. These findings demonstrate that overall, students match with their teachers both
politically and ideologically more than mismatch. However, a mismatch percentage of $33.3 \%$ is still substantial. Additionally, students and teachers differ less on their ideological leanings than they do in their party affiliations. If a grading bias were to exist based on the social interaction of teachers and students, we would expect students with a match in political party ID or ideology to have higher grades than those students who mismatch with their teachers.

## Table 37

Student-Teacher Dyad Match or Mismatch - Party ID

| Party ID |  | Student-Teacher Dyads |
| :--- | :--- | :---: |
| Match | Count | 15 |
|  | \% of Total | $55.6 \%$ |
| Mismatch | Count | 12 |
|  | \% of Total | $44.4 \%$ |
| Total $n$ | Count | 27 |
|  | \% of Total | $100.0 \%$ |

Table 38
Student-Teacher Dyad Match or Mismatch - Ideology

| Ideology |  | Student-Teacher Dyads |
| :--- | :--- | :---: |
| Match | Count | 18 |
|  | \% of Total | $66.7 \%$ |
| Mismatch | Count | 9 |
|  | \% of Total | $33.3 \%$ |
| Total $n$ | Count | 27 |
|  | \% of Total | $100.0 \%$ |

Of the 18 students whose general ideology matched that of their teacher, three were very liberal, seven were somewhat liberal, five were closer to liberals, two were closer to conservatives, and one was somewhat conservative. Of the nine students whose general ideology mismatched that of their teacher, three were somewhat liberal, one was
closer to liberals, four were closer to conservatives, and one was somewhat conservative. Of the students that either matched or mismatched with their teacher, none indicated that they were very conservative. Table 39 shows ideological breakdown of those students that matched or mismatched with their teachers' ideology (e.g., liberal or conservative).

## Table 39

Student Ideology - Those Who Matched vs. Mismatched

| Ideology |  | Student |  |
| :--- | :--- | :---: | :---: |
| Very Liberal | Count | Matched | Mismatched |
|  | \% within Student | $16.7 \%$ | 0 |
| Somewhat Liberal | Count | 7 | $0.0 \%$ |
|  | \% within Student | $38.9 \%$ | 3 |
| Closer to Liberals | Count | 5 | $33.3 \%$ |
|  | \% within Student | $27.8 \%$ | 1 |
| Closer to Conservatives | Count | 2 | $11.1 \%$ |
|  | \% within Student | $11.1 \%$ | 4 |
| Somewhat Conservative | Count | 1 | $44.4 \%$ |
|  | \% within Student | $5.6 \%$ | 1 |
| Total $n$ | Count | 18 | $11.1 \%$ |
|  | \% Total | $100.0 \%$ | 9 |

Note. There were no matches or mismatches in the "very conservative" category.
When looking at the individual student-teacher mismatch data, of the nine students whose general ideology mismatched that of their teacher, four were more liberal than their teacher and five were more conservative that their teacher.

Results for Research Question 3A. Descriptive statistics were used to analyze the student-teacher dyads and the potential relationship between the political party or ideology match/mismatch between students and teachers and student grades. Of the 27 student-teacher dyads, one student did not indicate a final semester grade. Therefore, the total number of student-teacher dyads for this subquestion is $n=26$. Descriptive statistics showed that a mismatch in political party affiliation was related to a higher student grade
final grade $(M=88)$ than a match $(M=83.79)$. Similarly, descriptive statistics showed that a mismatch in political ideology was related to a higher student final grade ( $M=$ $88.67)$ than a match $(M=84.18)$. Tables 40 and 41 present the match $/$ mismatch mean differences and standard deviations between the match/mismatch of both political party affiliation and political ideology and student grades.

## Table 40

Student Grades - Ideology Match/Mismatch With Teacher

| Ideology | $N$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Match | 17 | 84.18 | 7.342 |
| Mismatch | 9 | 88.67 | 8.544 |
| Total $n$ | 26 | 85.73 | 7.912 |

Table 41
Student Grades - Party ID Match/Mismatch With Teacher

| Party ID | $N$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Match | 14 | 83.79 | 7.738 |
| Mismatch | 12 | 88.00 | 7.816 |
| Total $n$ | 26 | 85.73 | 7.912 |

In addition to descriptive statistics, two independent sample $t$-test were performed, one for political party match/mismatch and one for political ideology match/mismatch. The results for both the political party match/mismatch and the political ideology match/mismatch on student grades indicated no statistically significant relationship with political party affiliation match/mismatch, $t(24)=-1.378, p=.181$ and political ideology match $/$ mismatch $t(24)=-1.403, p=.173$.

Results for Research Question 3B. Descriptive statistics were used to analyze the modality of education by students. Due to COVID-19, families had the choice to send
their children to school in-person, remain $100 \%$ online, or both. Out of the 150 student participants, 117 indicated a modality of education. Therefore, the sample size for this research question is $n=117$. Table 42 shows the breakdown of the student sample by the modality of instruction. Based on the results, $42.7 \%$ of students learned in-person all semester, $42.7 \%$ of students learned online all semester, $11.1 \%$ were online for the first half of the semester then in-person for the second half, and $3.4 \%$ of students were inperson for the first half of the semester then online for the second half.

## Table 42

## Modality of Education

|  | Frequency | Valid Percent |
| :--- | :---: | :---: |
| Online All Semester | 50 | 42.7 |
| Online For 1st 9-weeks, In-Person For 2nd <br> 9-Weeks | 13 | 11.1 |
| In-Person For 1st 9-Weeks, Online For 2nd <br> 9-Weeks | 4 | 3.4 |
| In-Person All Semester | 50 | 42.7 |
| Total $n$ | 117 | 100.0 |

Of the 117 participants that indicated a modality of education, 26 created studentteacher dyads. Of the 26 student-teacher dyads for both party ID and ideology match/mismatch, $53.8 \%$ of students were online all semester, $26.9 \%$ were in-person all semester, $19.2 \%$ were online to start the year and then in-person in the second half of the first semester, and no students in the student-teacher dyads were in-person and then online learners in the second half of the first semester. Tables 43 and 44 show the crosstabs of the match/mismatch for political party ID and ideology and modality of education. Of the students who were online all semester, $50 \%$ matched their teacher's
party ID and ideology whereas $50 \%$ mismatched. Of the students who were online for the first nine-weeks then in-person for the second nine-weeks, $60 \%$ matched their teacher's party ID and ideology whereas $40 \%$ mismatched. Of the students who were in-person all semester, $57.1 \%$ matched their teacher's party ID and ideology whereas $42.9 \%$ mismatched.

## Table 43

Match/Mismatch Party ID - Modality of Education

| Modality of Education |  | Party ID |  | Total $n$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Match | Mismatch |  |
| Online All Semester | Count | 7 | 7 | 14 |
|  | \% | 50.0\% | 50.0\% | 100.0\% |
| Online For 1st 9-weeks, In-Person For | Count | 3 | 2 | 5 |
| 2nd 9-Weeks | \% | 60.0\% | 40.0\% | 100.0\% |
| In-Person All Semester | Count | 4 | 3 | 7 |
|  | \% | 57.1\% | 42.9\% | 100.0\% |
| Total $n$ | Count | 14 | 12 | 26 |
|  | \% of Total | 53.8\% | 46.2\% | 100.0\% |

Note. There were no respondents that selected "In Person For 1st 9-Weeks, Online For 2nd 9-Weeks".

Table 44
Match/Mismatch Ideology - Modality of Education

| Modality of Education |  | Ideology |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Match | Mismatch | Total $n$ |
| Online All Semester | Count | 7 | 7 | 14 |
|  | $\%$ | $50.0 \%$ | $50.0 \%$ | $100.0 \%$ |
| Online For 1st 9-weeks, In-Person For | Count | 3 | 2 | 5 |
| 2nd 9-Weeks | $\%$ | $60.0 \%$ | $40.0 \%$ | $100.0 \%$ |
| In-Person All Semester |  |  |  |  |
|  | Count | 4 | 3 | 7 |
| Total $n$ | $\%$ | $57.1 \%$ | $42.9 \%$ | $100.0 \%$ |
|  |  |  |  |  |
|  | Count | 14 | 12 | 26 |

Note. There were no respondents that selected "In Person For 1st 9-Weeks, Online For 2nd 9-Weeks".

Additionally, a two-way ANOVA was performed to see if the political party ID match/mismatch between the 26 student-teacher dyads and the modality of education had any statistically significant impact on student grades, and it did not, $F(2)=2.383, p=$ .118. Furthermore, a two-way ANOVA was also performed to see if the ideology match/mismatch between the 26 student-teacher dyads and the modality of education had any statistically significant impact on student grades, and it did not, $F(2)=3.463, p=$ .051. These results further support the earlier $t$-test results, which did not show a statistically significant relationship between either the political party affiliation match/mismatch and student grades or the ideology match/mismatch and student grades.

Results for Research Question 3C. Descriptive statistics were used to analyze the level of political participation among teachers and students. Students and teachers were presented with eight options and asked to select all that applied with regards to their political participations within the last 12 months. Of the 150 student participants, only 134 responded to the political participation question. Therefore, the sample for this subquestion is $n=134$. Table 45 shows the breakdown of participations for students. Of the 134 student participants, the most common form of political action was getting into a political argument with someone with $62.7 \%$ of students indicating that they had done that in the past 12 months. The remaining percentages of political participation actions on behalf of the students in the past 12 months were posted a message or comment online about a political issue or campaign with $42.5 \%$, tried to persuade anyone to vote one way or another with $32.8 \%$, worn a campaign button, put a sticker on your car, or placed a sign in your window or in front of your house and joined in a protest march, rally, or
demonstration both with $17.2 \%$, attended a meeting to talk about political or social concerns with $13 \%$, given money to an organization concerned with a political or social issue with $6 \%$, and given money to any candidate running for public office, any political party, or any other group that supported or opposed candidates with $3.7 \%$. Of the 134 students who responded to the political participation question, 32 (23.9\%) indicated that they did not participate in any of the aforementioned participations in the previous 12 months.

Table 45

## Student Political Participations

| During the Past 12 Months, Have You Done Any of the Following? | $n$ | Percent |
| :--- | :---: | :---: |
| Attended a meeting to talk about political or social concerns | 18 | $13.0 \%$ |
| Given money to an organization concerned with a political or social <br> issue | 8 | $6.0 \%$ |
| Joined in a protest march, rally, or demonstration | 23 | $17.2 \%$ |
| Posted a message or comment online about a political issue or <br> campaign | 57 | $42.5 \%$ |
| Tried to persuade anyone to vote one way or another | 44 | $32.8 \%$ |
| Worn a campaign button, put a sticker on your car, or placed a sign in <br> your window or in front of your house | 23 | $17.2 \%$ |
| Given money to any candidate running for public office, any political <br> party, or any other group that supported or opposed candidates | 5 | $3.7 \%$ |
| Gotten into a political argument with someone | 84 | $62.7 \%$ |

Table 46 shows the total number of student political participations engaged in with the largest percentage of students indicating no political participation at $23.9 \%$. The next percentages in order from greatest to smallest belonged to students who participated in two forms of political participation in the previous 12 months at $20.9 \%$, one form of
political participation in the previous 12 months at $19.4 \%$, three forms of political participation in the previous 12 months at $18.7 \%$, four forms of political participation in the previous 12 months at $10.4 \%$, five forms of political participation in the previous 12 months at $5.2 \%$, and both six and seven forms of political participation in the previous 12 months at $0.7 \%$ each. The data results clearly show the overwhelming majority of students are participating in various forms of political expression. Overall, more than $76 \%$ of students engaged in some form of political participation over the previous 12 months, and over half of them (56.7\%) engaged in at least two forms of political participation over the previous 12 months.

Table 46

## Students - Number of Political Participation Actions

| Number of Political <br> Participation Actions | Frequency | Valid Percent | Cumulative Percent |
| :--- | :---: | :---: | :---: |
| 0 | 32 | 23.9 | 23.9 |
| 1 | 26 | 19.4 | 43.3 |
| 2 | 28 | 20.9 | 64.2 |
| 3 | 25 | 18.7 | 82.8 |
| 4 | 14 | 10.4 | 93.3 |
| 5 | 7 | 5.2 | 98.5 |
| 6 | 1 | 0.7 | 99.3 |
| 7 | 1 | 0.7 | 100.0 |
| Total $n$ | 134 | 100.0 |  |

Of the 13 teachers who participated in the study, all answered the political participation question. Therefore, the sample size for this subquestion is $n=13$. Table 47 shows the breakdown of participations for teachers. Of the 13 teacher participants, the most participated forms of political action in the past 12 months were giving money to an organization concerned with a political or social issue and posting a message or comment online about a political issue or campaign with $61.5 \%$. The remaining percentages of
political participation actions on behalf of teachers in the past 12 months were giving money to any candidate running for public office, any political party, or any other group that supported or opposed candidates with $53.8 \%$, getting into a political argument with someone at $46.2 \%$, trying to persuade anyone to vote one way or another with $30.8 \%$, wearing a campaign button, putting a sticker on your car, or placing a sign in your window or in front of your house with $23.1 \%$, and both attending a meeting to talk about political or social concerns and joining a protest march, rally, or demonstration with 7.7\% each. Of the 13 teachers who responded to the political participation question, two (15.4\%) indicated that they did not participate in any of the aforementioned participations in the previous 12 months.

## Table 47

## Teacher Political Participations

| During The Past 12 Months, Have You Done Any of The <br> Following? | N | Percent |
| :--- | :---: | :---: |
| Attended a meeting to talk about political or social concerns <br> Given money to an organization concerned with a political or | 1 | $7.7 \%$ |
| social issue | 8 | $61.5 \%$ |
| Joined in a protest march, rally, or demonstration <br> Posted a message or comment online about a political issue or <br> campaign | 8 | $7.7 \%$ |
| Tried to persuade anyone to vote one way or another | $4.5 \%$ |  |
| Worn a campaign button, put a sticker on your car, or placed a sign <br> in your window or in front of your house | 3 | $30.8 \%$ |
| Given money to any candidate running for public office, any <br> political party, or any other group that supported or opposed <br> candidates | 7 | $53.8 \%$ |
| Gotten into a political argument with someone <br> None of These. | 6 | $46.2 \%$ |

Table 48 shows the total number of teacher political participations engaged in with the largest percentage of teachers indicating two and five forms of political
participation at $23.1 \%$. The next percentages in order from greatest to smallest belonged to teachers who participated in either zero or three forms of political participation in the previous 12 months at $15.4 \%$, and one, four, or six forms of political participation in the previous 12 months at $7.7 \%$. There were no teachers that participated in all seven forms of political participation. The data results clearly show the overwhelming majority of teachers are participating in various forms of political expression. Overall, more than $84.6 \%$ of teachers engaged in some form of political participation over the previous 12 months, and more than two-thirds (76.1\%) engaged in at least two forms of political participation over the previous 12 months.

Table 48
Teachers - Number of Political Participation Actions

| Number of Political |  |  |  |
| :--- | :---: | :---: | :---: |
| Participation Actions | Frequency | Valid Percent | Cumulative Percent |
| 0 | 2 | 15.4 | 15.4 |
| 1 | 1 | 7.7 | 23.1 |
| 2 | 3 | 23.1 | 46.2 |
| 3 | 2 | 15.4 | 61.5 |
| 4 | 1 | 7.7 | 69.2 |
| 5 | 3 | 23.1 | 92.3 |
| 6 | 1 | 7.7 | 100.0 |
| Total $n$ | 13 | 100.0 |  |

Note. No respondents selected seven political participation actions.

## Summary of Research Findings

In conclusion, the data from the student and teacher surveys revealed that students and teachers are overwhelmingly liberal and identify with the Democratic party. The results also indicate that of total participants that are conservative or who identify with the Republican party, students are greater partisans. Furthermore, the data suggests that students and teachers have been moderately to highly engaged in political actions over the past 12 months with teachers being more frequent political actors. Lastly, the results
indicate that a political affiliation or ideology match/mismatch does not have any statistically significant biasing effect on students' grades.

## CHAPTER V

## CONCLUSIONS

Chapter five presents a conclusion to this research. This chapter's discussions are based on the previous chapter's results and organized by the research questions. The discussions are followed by research implications, limitations to the research and recommendations, as well as implications for practice and policy.

## Summary of The Results

This study had two purposes. First, the purpose of this study was to ascertain the political party affiliations and political ideologies of both students and teachers in a particular population in Spring Branch ISD in Houston, Texas, and to disaggregate these results by race/ethnicity and gender. Second, the purpose of this study was to identify the extent to which there were student/teacher political affiliation and ideology matches/mismatches in high school English Language Arts classrooms and if those matches/mismatches had any effect on student academic outcomes. If so, this study would seek to determine if such a relationship was moderated by instructional method or level of political participation. The sample of this study consisted of two groups. The first group consisted of all high school students at the five comprehensive high schools in Spring Branch ISD in Houston, Texas, who were over the age of 18 as of January 10, 2021. The second group consisted of all the senior-level English Language Arts teachers at these same five comprehensive high schools in Spring Branch ISD in Houston, Texas.

This research study was quantitative in nature and utilized a non-experimental research design with nonprobability purposeful sampling and an online survey instrument to collect data. Two online survey instruments were used, one for students and one for
teachers. Surveys were directly emailed to the corresponding population of the survey by the researcher and included several multiple-choice questions aimed at collecting demographic and attitudinal data.

## Research Question 1

The first research question examined how students identified in terms of political ideology and political party affiliation. The student responses revealed that the student survey population is overwhelmingly liberal and overwhelmingly identifies with the Democratic party. More than two-thirds of all students surveyed indicated a liberal ideological leaning and a Democratic party affiliation. While political party affiliation and political ideology are not the same, based on the student survey population results, they appear to be highly correlated with $67.1 \%$ of the student survey population indicating they are Democrats and $69.6 \%$ of the student survey population indicating they are liberals. Similarly, $32.9 \%$ of the student survey population indicated they are Republicans, and $30.4 \%$ of the student survey population indicated they are conservatives.

The secondary purpose of research question one examined the differences that emerged when the student party ID and ideology responses were disaggregated by race/ethnicity and gender. An analysis of the student survey population indicated that female students are far more likely to identify with the Democratic party (74\%) than male students (58\%). Conversely, male students are far more likely to identify with the Republican party (42\%) than female students (26\%), although both are in the minority of the overall student survey population. Ideological placement results are similar to those of political party affiliation for both males and females in the student body population. As
stated before, while both political party affiliation and political ideology are not the same, based on the results of the student survey population, they appear to be highly correlated even when disaggregated by gender, with $26 \%$ of men and $41.1 \%$ of women identifying with the Democratic party compared to $26.8 \%$ of men and $42.8 \%$ of women identifying with a liberal ideology. Similarly, $18.5 \%$ of men and $14.4 \%$ of women identified with the Republican party compared to $17.4 \%$ of men and $13 \%$ of women identifying with a conservative ideology.

When looking at political ideology and party affiliation disaggregated by race/ethnicity, a similar correlation trend between party affiliation and ideology emerges to that of the overall population and gender disaggregation. When comparing the disaggregated race/ethnicity results, the survey showed $32.1 \%$ of Hispanics identifying as liberal compared to $31.9 \%$ identifying as Democrats, $24.1 \%$ of whites identifying as liberal compared to $22.9 \%$ identifying as Democrats, $7.3 \%$ of Asians identifying as liberal compared to $6.9 \%$ identifying as Democrats, $2.9 \%$ of both Pacific Islander and Black/African American students identifying as liberal compared to $0 \%$ and 2.1\% identifying as Democrats, respectively, and $2.9 \%$ of students of two or more races identifying as liberal compared to $3.5 \%$ identifying as Democrats. Conversely, $8 \%$ of Hispanics identified as conservative compared to $10.4 \%$ identifying as Republicans, $13.9 \%$ of whites identifying as both conservative and as Republicans, $2.9 \%$ of Asians identifying as conservative compared to $2.8 \%$ identifying as Republicans, $5.1 \%$ of students of two or more races identifying as conservative compared to $4.2 \%$ as Republicans, $0.7 \%$ of Pacific Islander students identifying as both conservative and as

Republicans, and 0\% Black/African American students identifying as conservative compared to $0.7 \%$ as Republicans.

## Research Question 2

The second research question examined how teachers identified in terms of political ideology and political party affiliation. For the second research question, the teacher surveys revealed that the teacher survey population is overwhelmingly liberal and overwhelmingly identifies with the Democratic party, even more so than the student population. Nearly $85 \%$ of teachers surveyed indicated a Democratic party affiliation versus about $15 \%$ for Republicans. While both political party affiliation and political ideology are not the same, based on the teacher survey population results, they appear to be exactly correlated with the same percentage of the teachers, indicating both a Democratic affiliation and liberal ideology at $84.6 \%$. Likewise, the same percentage of the teachers indicating a Republican affiliation and conservative ideology was also the same at $15.4 \%$. However, the exact congruence between the teachers' ideology and party ID is likely due to the small number of teacher participants in the teacher sample.

The secondary purpose of research question two examined the differences that emerged when the teacher party ID and ideology responses were disaggregated by race/ethnicity and gender. Further analysis of the teacher survey population indicated that while political party affiliation and political ideology are not the same, they are correlated even when disaggregated by gender, with $100 \%$ of men and $77.8 \%$ of women identifying with both the Democratic party and a liberal ideology. Similarly, $0 \%$ of men and $22.2 \%$ of women identified with the Republican party and a conservative ideology.

When looking at political ideology and party affiliation disaggregated by race/ethnicity, the same correlation trend between party affiliation and ideology emerges to that of the overall population and gender disaggregation. As stated before, while both political party affiliation and political ideology are not the same, based on the results of the teacher survey population, they appear to be exactly correlated even when disaggregated by race/ethnicity, with both $53.8 \%$ of white teachers identifying with both the Democratic party and with a liberal ideology, and $15.4 \%$ of both Hispanic teachers and teachers of two or more races also identifying with both the Democratic party and with a liberal ideology. Similarly, $0.0 \%$ of men and $15.4 \%$ of women identified with the Republican party and a conservative ideology.

## Research Question 3

The third research question examined to what extent was there a match/mismatch between teachers' and students' political party identity and their political ideology? Based on the results, an overall Democratic and liberal trend emerges between the two survey populations with some notable difference between the student survey population and the teacher survey population, specifically in the concentration level of both their political party affiliations and their ideologies. Teachers appear to be far more liberal than the student body, $84.6 \%$ to $69.6 \%$, respectively. The difference is nearly identical when it comes to political party affiliation, with $84.6 \%$ of teachers identifying as Democrats compared to $68.8 \%$ of students. The difference between the two populations is even more significant when examining the teacher and student Republican and conservative responses. Student conservatives almost double the percentage of teacher conservatives, $30.4 \%$ to $15.4 \%$, respectively, and student Republicans more than double the percentage
of teacher Republicans, $31.2 \%$ to $15.4 \%$. These results indicate that while the teaching population is far more Democratic and liberal on one end of the spectrum, the student population is far more Republican and conservative on the other end of the spectrum.

The secondary purpose of research question three examined if there was a relationship between the political party ID or ideology match/mismatch and student grades. When analyzing the sample of teacher-student dyads, the data showed that while more than half of teachers and students indicate a match in both political affiliation and ideology, the match is stronger for that of ideology than for that of political party. Regardless, both a match or mismatch between students and teachers on either political party affiliation or ideology did not produce a statistically significant effect on the students' final grades. Surprisingly, the grading averages in student grades were slightly higher overall for teacher-student mismatches than for teacher-student matches.

The remaining purposes of research question three were to examine if a correlation between political party ID or ideology match/mismatch and student grades existed when moderated by an instructional method such as online, virtual, or mixed, or level of political participation on behalf of the students and teacher. Despite there being no statistically significant relationship between student-teacher party ID or ideology match/mismatch and student grades, a two-way ANOVA was conducted to see if the modality of education (online vs. in-person) along with any existing match/mismatch had any combined effect on student academic outcomes, and it did not. Whether students attended class in-person or online, this had no statistically significant combined effect with any existing party ID or ideology match/mismatch on student academic outcomes.

Since no correlations of party ID or ideology match/mismatch and student grades
were found, a descriptive analysis was preformed to gain insight into the level of political participations amongst the students and teachers. The results show that the overwhelming majority of both teachers and students have participated in various forms of political action in the previous 12 months, but teachers are far greater partisan actors. Of those that engaged in four or more political actions in the previous 12 months, teachers outnumber students $38.5 \%$ to $17 \%$. Additionally, the number of students that did not engage in any political actions in the previous 12 months was $23.9 \%$ compared to $15.4 \%$ of teachers. Furthermore, teachers seem to be far more likely to use their money to participate in politics than their speech. This dynamic is reversed when it comes to students. Of the top three forms of political actions taken by teachers in the past 12 months, two involved donating money. When it comes to students, of the top three forms of political actions takes in the past 12 months, all three involved expressions of verbal or written speech, such as getting into a political argument with someone, posting a message or comment online about a political issue or campaign, or trying to persuade anyone to vote one way or another. However, these results might be due to both students' lack of financial capacity to donate as well as teachers' professional awareness leading them to remain somewhat cautious in their outward speech.

## Research Implications

This study extended the current body of political bias research in higher education to the high school domain and added new match/mismatch research to the current body of literature in the K-12 domain. First, this research study determined that students and teachers are overwhelmingly Democratic and Liberal. With regards to teachers, these findings are in line with the results of prior research on teacher party affiliations and
ideologies (Yettick et al., 2017). However, this research study's teacher sample was significantly more Democratic and liberal than samples in prior research. This might be due to the fact that Spring Branch ISD is in an immediate suburb of a large liberal city. Previous studies on implicit educator bias have found that teachers in counties with larger populations of Black students demonstrate relatively lower levels of anti-Black implicit bias (Chin et al., 2020). With that research as a corollary, it is possible that teachers in a heavily Democratic county such as Harris county in Houston, Texas, similarly demonstrate higher levels of liberalism and Democratic affiliation. However, teachers in Spring Branch ISD might live in surrounding counties that are predominately Republican and conservative. Future research might want to investigate whether this is likely due to this research study's small sample size, the geopolitical makeup of the location of the district, or if the increasing polarization in America is also widening these divides.

With regards to students, there is little research into the specific political party and ideological leanings of high school students. This is partly due to the fact that most high school student are below the age of consent and getting parental approval to ascertain their political and ideological demographics is very difficult. While previous literature has shown that students are generally becoming more politically active and engaged (American Psychological Association, 2018; Kaplan, 2018; Wong, 2015), this study provided insight into students' party ID and ideology backgrounds, as well as their modalities of political participation. This study's findings showed an overwhelming majority of high school students in this sample are Democratic, liberal, and engaged in some form of political participation in the previous 12 months. However, due to the relatively small sample size and any potential selection bias of students, these results may
not represent the entire student population in both Spring Branch ISD high schools or Spring Branch ISD students in general. Therefore, with this contextualization in mind, this research has shown that the student population in this sample is slightly more diverse in its beliefs than the teaching population and has more Republican and conservative representation.

When it comes to a politically or ideologically motivated grading bias, this study did not identify a statistically significant correlation. This research found no statistically significant relationship between student-teacher party ID or ideology match/mismatch and student grades. This may be because the sample size was too small to find any effects. It could also be that the extent of mismatch was not as great as it might be in other districts. Previous research into teacher bias has noted that the "bias of crowds" theory indicates that the context in which one is embedded influences one's automatic bias associations and that bias is not a stable trait of individuals but rather a social phenomenon (Chin et al., 2020). That said, previous literature has also shown that a political match/mismatch between students and professors in higher education did not lead to a statistically significant positive or negative grading bias (Kemmelmeier et al., 2005; Linvill, 2008; Rom \& Musgrave, 2014; Musgrave \& Rom, 2015). This study's findings add to the previous literature and support these conclusions but at the high school level. However, these findings warrant additional investigation by future researchers since the number of student-teacher dyads in this study did not meet the threshold necessary for a properly powered study of this type.

Lastly, this study offers insight into some of the specific political activities of teachers and students in the previous 12 months, which also warrants further research.

This research demonstrates that students and teachers are highly active in expressing their political opinions but through markedly different modalities. This research shows that students expressed the majority of their political opinions through spoken on written speech and social media posts as where teachers expressed their political opinions in large part through their financial resources. This might be due to several factors, such as teachers wanting to preserve the appearance of objectivity in front of their students, maintaining cordial relationships with parents, students, and colleagues, or protecting their employment status from district reprisal (Will, 2020). Regardless of the motivation, the existing literature and the results of this study both showed that teachers using their finances to express their political opinions was one of the top three ways in which teachers participate in the political process (Yettick et al., 2017).

With survey research showing the gaps widening between the ideologies of political parties, as well as the existing literature indicating an increase in the political activation of teachers and students, this research provides needed insight at a critical time. The increase in political partisanship amongst the general public and the increased political activation of teachers and students has caused many to question whether teachers might be allowing a politically motivated grading bias to affect student academic outcomes. This research helps dispel that belief, substantiates some of the findings in higher education research, and brings them into the arena of secondary education.

## Limitations

This study's purpose was to ascertain the political party affiliations and political ideologies of both students and teachers and identify the extent to which there were student/teacher political affiliation or ideology matches/mismatches in high school

English Language Arts classrooms and if those matches/mismatches had any effect on student academic outcomes. However, several limitations existed in this study that future studies might want to consider when investigating if the current political polarization affects student educational outcomes at the high school level.

In choosing to examine political party affiliations and ideologies of high school students, several challenges arose. This study chose to only survey students that were of consenting age at the time the online survey instrument was administered. This was done for several reasons. First, if the survey was to be administered to all students, then the researcher would require parental consent from any student under the age of 18. The total high school population for Spring Branch ISD is approximately $N=10,522$ students, with about $88 \%$ of the total population under the age of 18 as of this study's survey date of administration. Therefore, to survey all high school students, this study would have had to seek out and obtain approximately 9,259 letters of parental consent. The sheer task of doing this was too large a burden for this particular study. Additionally, as a result of limiting the student population to those aged 18 or older, these findings may not be generalizable to younger high school students. Second, in attempting to organize and account for any letter of consent from students under the age of 18 that wished to participate, this study would have lost some of the anonymity it afforded those that chose to complete the survey. Knowing which specific students were eligible to take the survey, along with the demographic and classroom data collected, could have made ascertaining the identity of student survey respondents a possibility. Additionally, if students knew the researcher had records specifically accounting for the participants in the survey pool, the possibility that they might have altered what would have otherwise been their unfettered
responses cannot be discounted. However, in limiting the student sample size in the manner stated above, the study's overall ability to generate enough survey responses and provide properly powered results was severely limited.

A further limitation of this study came from the aforementioned choice in student sample requirements. In limiting the student surveys to only those 18 years of age or older at the time of survey administration, the number of corresponding teachers was also significantly reduced from about 614 total high school teachers to 36 senior-level English Language Arts teachers. Of the 36 teachers in the potential survey population, only 13 completed the survey. While this is generally a reasonable response rate of $36 \%$, the lack of more teacher respondents limited this study's ability to form student-teacher pairs for match/mismatch evaluations. According to a priori sample size analysis, an adequately powered study would have required at least 100 student-teacher dyads. Due to the lack of student and teacher respondents, this study was only able to generate 26 student-teacher dyads, severely limiting the power of the study and the reliability of its findings.

Furthermore, the results of this study should be interpreted cautiously given the small sample size and the limited number of student-teacher dyads and cannot be generalized to other districts. Texas's political, social, racial, ethnic, and educational dynamics are unique to each geographic area. Spring Branch ISD is located in Harris county, a large liberal county. Based on previous research, the "bias of crowds" theory suggests that results will be different in locations with different political attributes and student population demographics, such as rural conservative districts that are majority White (Chin et al., 2020).

Lastly, due to the design's causal-comparative nature, internal validity cannot be
fully guaranteed as correlation does not equal causation. While positive or negative relationships can be discovered, it is unlikely that causation can be fully identified. A potential match/mismatch correlation, or lack thereof, is only one of many factors that go into the teaching and learning process. There will always be other influencing variables impacting student academic outcomes beyond the scope and influence of the teacher/student interaction.

## Recommendations

While this study found no statistically significant relationship between studentteacher political affiliation or ideology match/mismatch and student grades, future studies may want to consider the following recommendations.

This study was severelly limited in its ability to create student-teacher dyads Should future studies want to limit their surveys to students aged 18 or older, future researchers might want to consider offering some form of monetary inducement in exchange for student participation. Since no inducement was offered, the response rate to this study's student survey instrument was about $14 \%$. numberFuture studies might want to ensure the participation of
all teachers in the population before survey administration so that every student respondent can comprise a student-teacher dyad for properly powered match/mismatch evaluations.

To gain a more accurate understanding of the nuisances that geography play in the political leanings of a community and district, future researchers might want to consider conducting research in several different districts so their results can be more predictive in aggregate. Additionally, sampling only a particular area may skew the data due to the
"bias of crowds" theory and make any results non-transferable to other locations. To address this, future researchers should consider studying several different districts with different political attributes and student population demographics and adding districtlevel covariates in models, emphasizing the need to consider contextual differences across school districts.

## Implications for Practice and Policy

This research is significant for all high school stakeholders, including educators, school leaders, and families. For educators and school leaders, this research helps dispel the belief that teachers might be allowing a politically motivated grading bias to affect their students' academic outcomes. While grading is determined by a hodgepodge of criteria, this research shows that a political grading bias likely is not one of them, or at the very least, is not as pervasive as many might think given the hyper partisan nature of our current body politic.

The results of this research generally indicate that the current policies in Spring Branch ISD governing student and teacher political speech within the classroom are sufficient. Currently, Spring Branch ISD's policy regarding teachers and students and their political expression in the classroom is covered in board policy "EMB(LOCAL) Miscellaneous Instructional Policies: Teaching About Controversial Issues" in which: teachers shall not use the classroom to transmit personal beliefs regarding political or sectarian issues. Students and educators shall ensure that, to the extent possible, discussions are conducted fairly and courteously. A teacher selecting topics for discussion in the classroom shall be adequately informed about the issue and capable of providing instruction on the subject, free from personal bias.

In addition, the teacher shall be certain that: (1) the issue in question is within the range, knowledge, maturity, and comprehension of the students; (2) the issue is current and educationally significant; (3) the consideration of the issue does not interfere with required instruction; and (4) sufficient relevant information on all aspects of the issue is provided. In guiding classroom discussion of controversial issues, teachers shall: (1) foster students' critical thinking skills; (2) encourage discussion based on rational analysis; (3) create an atmosphere in which students learn to respect others' opinions and disagree courteously; (4) ensure that multiple viewpoints about the issue are presented by introducing an unexpressed viewpoint when necessary; and (5) avoid any attempt to coerce or persuade students to adopt the teacher's point of view (Spring Branch ISD, 2002).

As such, this study cannot make any argument for further action to either mitigate or increase policies surrounding teacher or student political expression in the classroom. Teachers and students should continue to follow the guidelines given to them by their districts, as the current status quo does not seem to foster a political grading bias despite any teacher-student political party ID or ideology match/mismatch.

## Conclusions

As the current American political divide continues to expand to levels unseen in previous decades, it is important to evaluate how these changes might affect students' academic outcomes in the educational system. With the increasing polarization of our country's body politic and an increase in the politicization of both the curriculum and classroom experiences, tension between teachers and students with countervailing beliefs could lead to an unconscious grading bias among educators. Overall, this research study
established that this is not the case. This research study found little to support the assumption that a political affiliation or ideology match would lead to a positive grading bias or that a political affiliation or ideology mismatch would lead to a negative grading bias. These results were not expected based on the cultural capital and social interaction theories underpinning the theoretical framework for this study. While our nation's political partisanship continues to increase, researchers, educators, school leaders, and families can take comfort in knowing that our nation's educational institutions remain unprejudiced.

## References

Abramowitz, A. I., Alexander, B., \& Gunning, M. (2006). Incumbency, Redistricting, and the Decline of Competition in U.S. House Elections. The Journal of Politics, 68(1), 75-88. https://doi.org/10.1111/j.1468-2508.2006.00371.x

Abramowitz, A. I., \& Saunders, K. L. (1998). Ideological Realignment in the U.S. Electorate. The Journal of Politics, 60(3), 634-652. https://doi.org/10.2307/2647642

Abramowitz, A., \& Saunders, K. (2005). Why Can't We All Just Get Along? The Reality of a Polarized America. The Forum, 3(2). https://doi.org/10.2202/1540-8884.1076

Agarwal, K. (2019, January 11). Texas Revises History Education, Again. Perspectives on History. https://www.historians.org/publications-and-directories/perspectives-on-history/january-2019/texas-revises-history-education-again-how-a-good-faith-process-became-political

Akkerman, S. F., \& Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. Teaching and Teacher Education, 27(2), 308-319. https://doi.org/10.1016/j.tate.2010.08.013

Alexander, K. L., Entwisle, D. R., \& Thompson, M. S. (1987). School Performance, Status Relations, and the Structure of Sentiment: Bringing the Teacher Back In. American Sociological Review, 52(5), 665-682. https://doi.org/10.2307/2095602

Alwin, D. F., Cohen, R. L., \& Newcomb, T. M. (1991). Political attitudes over the life span: The Bennington women after fifty years. Univ of Wisconsin Press.

Alwin, D. F., \& Krosnick, J. A. (1991). The Reliability of Survey Attitude Measurement: The Influence of Question and Respondent Attributes. Sociological Methods \& Research, 20(1), 139-181. https://doi.org/10.1177/0049124191020001005

Alwin, D. (1993). Personality and Social Structure. Contemporary Sociology, 22(1), 5861. Retrieved June 9, 2020, from www.jstor.org/stable/2074988

American National Election Studies. (n.d.). About Us. ANES | American National Election Studies. Retrieved April 9, 2020, from https://electionstudies.org/aboutus/

American Psychological Association. (2018). Stress in America: Generation Z. Stress in America ${ }^{T M}$ Survey.

Apple, M. W. (2004). Ideology and curriculum. Routledge.
Baldassarri, D., \& Gelman, A. (2008). Partisans without Constraint: Political Polarization and Trends in American Public Opinion. American Journal of Sociology, 114(2), 408-446. https://doi.org/10.1086/590649

Bartolomé, L. I. (Ed.). (2008). Ideologies in education: Unmasking the trap of teacher neutrality (Vol. 319). Peter Lang.

Bohnel, S., \& Miller, M. (2017, December 8). Forest City teacher who made racist remarks resigns. Retrieved September 23, 2018, from https://www.thegazette.com/subject/news/education/k-12-education/forest-city-teacher-who-made-racist-remarks-resigns-20171208

Bourdieu, P. (1973). Cultural reproduction and social reproduction. London: Tavistock, 178.

Bourdieu, P. (1988). On interest and the relative autonomy of symbolic power. Center for Psychosocial Studies.

Braidwood, T., \& Ausderan, J. (2017). Professor Favorability and Student Perceptions of Professor Ideology. PS: Political Science \& Politics, 50(02), 565-570. https://doi.org/10.1017/S1049096516003206

Brenan, M. (2018, December 20). Nurses Again Outpace Other Professions for Honesty, Ethics. Retrieved September 2, 2019, from www.gallup.com website: https://news.gallup.com/poll/245597/nurses-again-outpace-professions-honestyethics.aspx

Britzman, D. (1986). Cultural myths in the making of a teacher: Biography and social structure in teacher education. Harvard educational review, 56(4), 442-457.

Brookhart, S. M., Guskey, T. R., Bowers, A. J., McMillan, J. H., Smith, J. K., Smith, L. F., ... \& Welsh, M. E. (2016). A century of grading research: Meaning and value in the most common educational measure. Review of Educational Research, 86(4), 803-848.

Calarco, J. M. (2011). "I Need Help!" Social Class and Children’s Help-Seeking in Elementary School. American Sociological Review, 76(6), 862-882. https://doi.org/10.1177/0003122411427177

Chin, M. J., Quinn, D. M., Dhaliwal, T. K., \& Lovison, V. S. (2020). Bias in the Air: A Nationwide Exploration of Teachers' Implicit Racial Attitudes, Aggregate Bias, and Student Outcomes: Educational Researcher. https://doi.org/10.3102/0013189X20937240

CiZek, G. J., Fitzgerald, S. M., \& Rachor, R. A. (1995). Teachers' Assessment Practices: Preparation, Isolation, and the Kitchen Sink. Educational Assessment, 3(2), 159. https://doi.org/10.1207/s15326977ea0302_3

Clarke, M. (2009). The ethico-politics of teacher identity. Educational philosophy and theory, 41(2), 185-200.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, N.J: L. Erlbaum Associates.

Cohen, J. (1992). Statistical Power Analysis. Current Directions in Psychological Science, 1(3), 98-101. Retrieved from JSTOR.

Collins, R. (1987). A micro-macro theory of intellectual creativity: The case of German idealist philosophy. Sociological Theory, 5(1), 47-69.

Cox, K. B. (2011). Putting classroom grading on the table: A reform in progress. American Secondary Education, 67-87.

Crosnoe, R., Johnson, M. K., \& Elder, G. H. (2004). Intergenerational Bonding in School: The Behavioral and Contextual Correlates of Student-Teacher Relationships. Sociology of Education, 77(1), 60-81. https://doi.org/10.1177/003804070407700103

Davis, H. A. (2003). Conceptualizing the Role and Influence of Student-Teacher Relationships on Children's Social and Cognitive Development. Educational Psychologist, 38(4), 207-234. https://doi.org/10.1207/S15326985EP3804_2

Delpit, L. (1995). Other people's children: Cultural conflict in the classroom. Harvard Educational Review, 65, 510-510.

DiMaggio, P. (1982). Cultural Capital and School Success: The Impact of Status Culture Participation on the Grades of U.S. High School Students. American Sociological Review, 47(2), 189-201. JSTOR. https://doi.org/10.2307/2094962

Dimock, M., Doherty, C., Kiley, J., \& Keeter, S. (2014). Political Polarization in the American Public - How Increasing Ideological Uniformity and Partisan Antipathy Affect Politics, Comprosmise, and Everyday Lide. The Pew Research Center, 124.

Downey, D. B., \& Pribesh, S. (2004). When Race Matters: Teachers' Evaluations of Students' Classroom Behavior. Sociology of Education, 77(4), 267-282. https://doi.org/10.1177/003804070407700401

Dubin, S. C. (1987). Symbolic slavery: Black representations in popular culture. Social Problems, 34(2), 122-140.

Dunn, A. H., Sondel, B., \& Baggett, H. C. (2019). "I Don’t Want to Come Off as Pushing an Agenda": How Contexts Shaped Teachers' Pedagogy in the Days After the 2016 U.S. Presidential Election. American Educational Research Journal, 56(2), 444-476. https://doi.org/10.3102/0002831218794892

Durr, M. (2016, November 10). Royal Oak Middle School students chant "build the wall" in cafeteria. Retrieved May 30, 2019, from mlive.com website: https://www.mlive.com/news/2016/11/royal_oak_middle school_studen.html

Farkas, G., Sheehan, D., Grobe, R. P., \& Shuan, Y. (1990). Cultural Resources and School Success: Gender, Ethnicity, and Poverty Groups within an Urban School District. American Sociological Review; Washington, 55(1), 127. http://dx.doi.org.ezproxy.lib.uh.edu/10.2307/2095708

Fiorina, M. P., \& Abrams, S. J. (2008). Political Polarization in the American Public. Annual Review of Political Science, 11(1), 563-588. https://doi.org/10.1146/annurev.polisci.11.053106.153836

Fraenkel, J., \& Wallen, N. (2009). How to design and evaluate research in education (7 ${ }^{\text {th }}$ ed.). New York, NY: McGraw-Hill Higher Education.

Garrett, R. K., \& Weeks, B. E. (2013). The promise and peril of real-time corrections to political misperceptions. In Proceedings of the 2013 conference on Computer supported cooperative work - CSCW '13 (p. 1047). San Antonio, Texas, USA: ACM Press. https://doi.org/10.1145/2441776.2441895

Gershenson, S., Holt, S. B., \& Papageorge, N. W. (2015). Who Believes in Me? The Effect of Student-Teacher Demographic Match on Teacher Expectations. W.E. Upjohn Institute. https://doi.org/10.17848/wp15-231

Glanz, J. (2000, March 11). Survey Finds Support Is Strong For Teaching 2 Origin Theories. The New York Times. https://www.nytimes.com/2000/03/11/us/survey-finds-support-is-strong-for-teaching-2-origin-theories.html

Gouldner, A. W. (1979). The future of intellectuals and the rise of the new class. New York, 79.

Harris, A. L. (2011). Kids don't want to fail: Oppositional culture and the Black-White achievement gap. Cambridge, Mass: Harvard University Press.

Hetherington, M. J. (2001). Resurgent Mass Partisanship: The Role of Elite Polarization. American Political Science Review, 95(03), 619-631. https://doi.org/10.1017/S0003055401003045

Hyland, N. E. (2005). Being a Good Teacher of Black Students? White Teachers and Unintentional Racism. Curriculum Inquiry, 35(4), 429-459. https://doi.org/10.1111/j.1467-873X.2005.00336.x

Iyengar, S., Sood, G., \& Lelkes, Y. (2012). Affect, Not Ideology: A Social Identity Perspective On Polarization. The Public Opinion Quarterly, 76(3), 405-431. Jstor.

Johnston, A. (2014, December 4). American Student Protest Timeline, 2014-15. Retrieved August 12, 2019, from https://studentactivism.net/2014/12/04/american-student-protest-timeline-201415/

Jost, J. T. (2006). The end of the end of ideology. American psychologist, 61(7), 651. Jost, J. T., Federico, C. M., \& Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. Annual review of psychology, 60, 307-337.

Kagubare, I. (2019, February 8). Some States Still Lag in Teaching Climate Science. Scientific American. https://www.scientificamerican.com/article/some-states-still-lag-in-teaching-climate-science/

Kaplan. (2018, March 21). Kaplan Test Prep Survey: High School Students Express Increased Interest in Activism and Prefer to Attend a College Where Fellow Students Share the Same Politics | Kaplan Test Prep. Retrieved January 19, 2019, from https://www.kaptest.com/blog/press/2018/03/21/kaplan-test-prep-survey-high-school-students-express-increased-interest-activism-prefer-attend-college-fellow-students-share-politics/

Keith, B. E., Magleby, D. B., Nelson, C. J., Orr, E. A., \& Westlye, M. C. (1992). The myth of the independent voter. Univ of California Press.

Kelly, D. M., \& Brandes, G. M. (2001). Shifting out of "Neutral": Beginning Teachers' Struggles with Teaching for Social Justice. Canadian Journal of Education / Revue Canadienne de l'éducation, 26(4), 437-454. JSTOR. https://doi.org/10.2307/1602176

Kelly-Woessner, A., \& Woessner, M. C. (2006). My Professor is a Partisan Hack: How Perceptions of a Professor's Political Views Affect Student Course Evaluations. PS: Political Science \& Politics, 39(3), 495-501. https://doi.org/10.1017/S104909650606080X

Kemmelmeier, M., Danielson, C., \& Basten, J. (2005). What's in a Grade? Academic Success and Political Orientation. Personality and Social Psychology Bulletin, 31(10), 1386-1399. https://doi.org/10.1177/0146167205276085

Kim, Y. (2017). Knowledge Versus Beliefs: How Knowledge and Beliefs Mediate The Influence of Likeminded Media use on Political Polarization and Participation. Journal of Broadcasting \& Electronic Media, 61(4), 658-681. https://doi.org/10.1080/08838151.2017.1375497

Kincheloe, J. L., \& Steinberg, S. R. (1997). Changing multiculturalism. Open University.
Kinder, D. R., \& Kalmoe, N. P. (2017). Neither liberal nor conservative: Ideological innocence in the American public. University of Chicago Press.

Klar, Samara \& Krupnikov, Yanna. (2016). Independent Politics: How American Disdain for Parties Leads to Political Inaction. Cambridge University Press.

Klem, A. M., \& Connell, J. P. (2004). Relationships Matter: Linking Teacher Support to Student Engagement and Achievement. Journal of School Health, 74(7), 262273. https://doi.org/10.1111/j.1746-1561.2004.tb08283.x

Kozlowski, K. P. (2015). Culture or Teacher Bias? Racial and Ethnic Variation in Student-Teacher Effort Assessment Match/Mismatch. Race and Social Problems; New York, 7(1), 43-59. http://dx.doi.org.ezproxy.lib.uh.edu/10.1007/s12552-014-9138-x

Kumpulainen, K., \& Wray, D. (2003). Classroom interactions and social learning: From theory to practice. Routledge.

Kuncel, N. R., Credé, M., \& Thomas, L. L. (2005). The Validity of Self-Reported Grade Point Averages, Class Ranks, and Test Scores: A Meta-Analysis and Review of the Literature. Review of Educational Research, 75(1), 63-82. https://doi.org/10.3102/00346543075001063

Lamont, M., \& Lareau, A. (1988). Cultural Capital: Allusions, Gaps and Glissandos in Recent Theoretical Developments. Sociological Theory, 6(2), 153-168. JSTOR. https://doi.org/10.2307/202113

Lane, R.E. (1962). Political ideology: why the American common man believes what he does. Free Press of Glencoe.

Larson, J., McNeilly, M., \& Ryan, T. (2020). Free Expression and Constructive Dialogue at the University of North Carolina at Chapel Hill. https://fecdsurveyreport.web.unc.edu/files/2020/02/UNC-Free-ExpressionReport.pdf

Lavrakas, P. J. (2008). Encyclopedia of survey research methods. Sage Publications.

Levendusky, M. S. (2004). Sorting, Not Polarization: The Changing Nature of Party ID and Ideology in the US Electorate. In annual meeting of the American Political Science Association.

Linvill, D. (2008). Student Perspectives of Political Bias in the College Classroom. All Dissertations. https://tigerprints.clemson.edu/all_dissertations/261

Linvill, D. L. (2011). The Relationship between Student Identity Development and the Perception of Political Bias in the College Classroom. College Teaching, 59(2), 49-55.

Lozano, L. M., García-Cueto, E., \& Muñiz, J. (2008). Effect of the number of response categories on the reliability and validity of rating scales. Methodology: European Journal of Research Methods for the Behavioral and Social Sciences, 4(2), 73-79. https://doi.org/10.1027/1614-2241.4.2.73

Malouff, J. M., Emmerton, A. J., \& Schutte, N. S. (2013). The Risk of a Halo Bias as a Reason to Keep Students Anonymous During Grading. Teaching of Psychology, 40(3), 233-237. https://doi.org/10.1177/0098628313487425

Marsh, M. M. (2003). The Social Fashioning of Teacher Identities. Rethinking Childhood. Peter Lang Publishing, Inc., 275 Seventh Avenue, New York, NY 10001.

Martin, A. J., \& Collie, R. J. (2018). Teacher-student relationships and students' engagement in high school: Does the number of negative and positive relationships with teachers matter? Journal of Educational Psychology. https://doi.org/10.1037/edu0000317

Maxey, E. J., \& Ormsby, V. J. (1971). The Accuracy of Self-Report Information Collected on the ACT Test Battery: High School Grades and Items of Nonacademic Achievement.

Merriam-Webster. (n.d.). Definition of BIAS. Merriam-Webster.Com. Retrieved January 2, 2020, from https://www.merriam-webster.com/dictionary/bias

McConnell, C., Margalit, Y., Malhotra, N., \& Levendusky, M. (2018). The Economic Consequences of Partisanship in a Polarized Era. American Journal of Political Science, 62(1), 5-18. https://doi.org/10.1111/ajps. 12330

McMillan, J. H., Myran, S., \& Workman, D. (2002). Elementary Teachers' Classroom Assessment and Grading Practices. The Journal of Educational Research, 95(4), 203-213. Retrieved from JSTOR.

McMillan, J. H., \& Nash, S. (2000). Teacher Classroom Assessment and Grading Practices Decision Making. Retrieved from https://eric.ed.gov/?id=ED447195

Musgrave, P., \& Rom, M. (2015). Fair and Balanced? Experimental Evidence on Partisan Bias in Grading. American Politics Research, 43(3), 536-554. https://doi.org/10.1177/1532673X14561655

Natanson, H. (2019, December 26). One of the nation's biggest school systems will let students take time off to protest. The conservative backlash has begun.

Washington Post. https://www.washingtonpost.com/local/education/one-of-the-nations-biggest-school-systems-will-let-students-take-time-off-to-protest-the-conservative-backlash-has-begun/2019/12/26/7c2ebaf8-27e3-11ea-9c21-

2c2a4d2c2166 story.html

Northbrook High School | YES Prep Charter Schools. (n.d.). Retrieved April 26, 2020, from https://northbrookhs.yesprep.org/

Nias, J. (1993). Changing times, changing identities: Grieving for a lost self. Educational research and evaluation: For policy and practice, 139-156.

Nias, J. (1996). Thinking about Feeling: the emotions in teaching. Cambridge Journal of Education, 26(3), 293.

Oppenheimer, B. I. (2005). Deep red and blue congressional districts: the causes and consequences of declining party competitiveness. In Congress reconsidered (Vol. 8, pp. 135-57). Washington, DC: CQ Press.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., \& Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. Administration and Policy in Mental Health and Mental Health Services Research, 42(5), 533-544. https://doi.org/10.1007/s10488-013-0528-y

Pew Research Center. (2014, June 12). Political Polarization in the American Public | Pew Research Center. https://www.pewresearch.org/politics/2014/06/12/political-polarization-in-the-american-public/

Pew Research Center. (2017a, September 13). Partisans Differ Widely in Views of Police Officers, College Professors | Pew Research Center. Retrieved October 12, 2018, from http://www.people-press.org/2017/09/13/partisans-differ-widely-in-views-of-police-officers-college-professors/

Pew Research Center. (2017b, October 5). The Partisan Divide on Political Values Grows Even Wider. Pew Research Center - U.S. Politics \& Policy. https://www.pewresearch.org/politics/2017/10/05/the-partisan-divide-on-political-values-grows-even-wider/

Pew Research Center. (2017c, December 19). Most Americans Say Trump's Election Has Led to Worse Race Relations in the U.S. | Pew Research Center. Retrieved October 12, 2018, from http://www.people-press.org/2017/12/19/most-americans-say-trumps-election-has-led-to-worse-race-relations-in-the-u-s/

Pew Research Center. (2018, April 26). The Public, the Political System and American Democracy | Pew Research Center. Retrieved October 12, 2018, from http://www.people-press.org/2018/04/26/the-public-the-political-system-and-american-democracy/

Pew Research Center. (2019a). "In a Politically Polarized Era, Sharp Divides in Both Partisan Coalitions."

Pew Research Center. (2019b). Partisan Antipathy: More Intense, More Personal. Pew Research Center - U.S. Politics \& Policy. https://www.pewresearch.org/politics/2019/10/10/partisan-antipathy-more-intense-more-personal/

Phillips, K. (2019, February 18). Florida sixth-grader arrested after dispute with teacher over Pledge of Allegiance. Washington Post. https://www.washingtonpost.com/education/2019/02/17/florida-sixth-grader-charged-with-misdemeanor-after-refusing-recite-pledge-allegiance/

Quinlan, C. (2018, March 13). Schools are trying to prevent students from joining the National School Walkout. ThinkProgress. https://thinkprogress.org/schools-are-telling-students-not-to-protest-32039330e1c8/

Quinn, D. M. (2020). Experimental Evidence on Teachers' Racial Bias in Student Evaluation: The Role of Grading Scales. Educational Evaluation and Policy Analysis, 0162373720932188.

Rafaeli, A., \& Sutton, R. I. (1989). The expression of emotion in organizational life. Research in organizational behavior, 11(1), 1-42.

Rohde, D. W. (2010). Parties and leaders in the postreform House. University of Chicago Press.

Rom, M. C., \& Musgrave, P. (2014). Political Outcome Bias in Grading: Identifying Problems and Suggesting Solutions. Journal of Political Science Education, 10(2), 136-154. https://doi.org/10.1080/15512169.2014.894352

Salkind, N. J. (Ed.). (2010). Encyclopedia of research design (Vol. 1). Sage.
Sears, D. O., \& Levy, S. (2003). Childhood and adult political development. In D. O. Sears, L. Huddy, \& R. Jervis (Eds.), Oxford handbook of political psychology (p. 60-109). Oxford University Press.

Sinclair, H. (2017, September 4). School forced to apologize after teacher banned students from wearing pro-Trump MAGA t-shirts. Retrieved May 30, 2019, from Newsweek website: https://www.newsweek.com/school-apologises-after-teacher-bans-students-wearing-trump-t-shirts-maga-make-659370

Singer, A. (2019). How schools can and should respond to student activism. Phi Delta Kappan, 100(7), 62-66. https://doi.org/10.1177/0031721719841341

Spring Branch ISD. (2002, July 1). MISCELLANEOUS INSTRUCTIONAL POLICIES: TEACHING ABOUT CONTROVERSIAL ISSUES - EMB(LOCAL)-A - Spring Branch ISD.
https://pol.tasb.org/Policy/Download/599?filename=EMB(LOCAL).html\&title= MISCELLANEOUS\%20INSTRUCTIONAL\%20POLICIES\&subtitle=TEACHI NG\%20ABOUT\%20CONTROVERSIAL\%20ISSUES

Spring Branch ISD. (2019, November 21). Placement in a Disciplinary Alternative
Education Setting—Disciplinary Alternative Education Program Operations. https://pol.tasb.org/Policy/Download/599?filename=FOCA(LEGAL).pdf\&filena me=FOCA(LEGAL).pdf

Spring Branch ISD. (n.d.a). District Information - Spring Branch Independent School District. Retrieved January 26, 2019, from https://www.springbranchisd.com/about/districtinfo

Spring Branch ISD. (n.d.b). Profile—Academy of Choice. Retrieved April 26, 2020, from https://soc.springbranchisd.com/about/profile

Spring Branch ISD. (n.d.c). Virtual School—Spring Branch Independent School District. Retrieved April 26, 2020, from https://www.springbranchisd.com/schools/virtualschool

Strauss, V. (2019, January 17). Analysis | Teachers are told not to get 'political' in the classroom. What does that actually mean? Washington Post.
https://www.washingtonpost.com/education/2019/01/17/teachers-are-told-not-get-political-classroom-what-does-that-actually-mean/

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., et al. (2007). Racial microaggressions in everyday life: Implications for clinical practice. American Psychologist, 62, 271-286.

Sue, D. W., Lin, A. I., Torino, G. C., Capodilupo, C. M., \& Rivera, D. P. (2009). Racial microaggressions and difficult dialogues on race in the classroom. Cultural Diversity And Ethnic Minority Psychology, 15(2), 183-190. doi:10.1037/a0014191

Taber, C. S., \& Lodge, M. (2006). Motivated Skepticism in the Evaluation of Political Beliefs. American Journal of Political Science, 50(3), 755-769. JSTOR.

Texas Education Agency. (2019). Graduation Toolkit. https://tea.texas.gov/sites/default/files/Graduation_Toolkit_Summer2019.pdf

Tierney, R. D., Simon, M., \& Charland, J. (2011, July). Being fair: Teachers’ interpretations of principles for standards-based grading. In The Educational Forum (Vol. 75, No. 3, pp. 210-227). Taylor \& Francis Group.

Victor, D. (2019, June 5). Texas Teacher Fired Over Tweets Asking Trump to 'Remove’ Immigrants. The New York Times. https://www.nytimes.com/2019/06/05/us/teacher-tweets-trump-georgia-clark.html

Wallace, T. L., \& Chhuon, V. (2014). Proximal Processes in Urban Classrooms: Engagement and Disaffection in Urban Youth of Color. American Educational Research Journal, 51(5), 937-973. https://doi.org/10.3102/0002831214531324

Warner, R. M. (2012). Applied statistics: From bivariate through multivariate techniques. Sage Publications.

Woessner, M., \& Kelly-Woessner, A. (2009). I Think My Professor is a Democrat: Considering Whether Students Recognize and React to Faculty Politics. PS, Political Science \& Politics; Washington, 42(2), 343-352.

Wong, A. (2015, May 21). Student Activism Is Making a Comeback. The Atlantic. https://www.theatlantic.com/education/archive/2015/05/the-renaissance-of-student-activism/393749/

Wong, M. G. (1980). Model Students? Teachers' Perceptions and Expectations of Their Asian and White Students. Sociology of Education, 53(4), 236-246. JSTOR. https://doi.org/10.2307/2112532

Yee, V., \& Blinder, A. (2018, March 14). National School Walkout: Thousands Protest Against Gun Violence Across the U.S. - The New York Times. Retrieved May 30, 2019, from https://www.nytimes.com/2018/03/14/us/school-walkout.html

Yettick, H., Lloyd, S., Harwin, A., \& Osher, M. (2017). Educator Political Perceptions A National Survey. Retrieved from https://www.edweek.org/media/educator-political-perceptions-education-week-12-12-2017.pdf

Zembylas, M. (2003a). Emotions and Teacher Identity: A poststructural perspective. Teachers and Teaching, 9(3), 213-238. https://doi.org/10.1080/13540600309378

Zembylas, M. (2003b). Interrogating "Teacher Identity": Emotion, Resistance, and SelfFormation. Educational Theory, 53(1), 107-127. https://doi.org/10.1111/j.17415446.2003.00107.x

Zhang, Z., \& Burry-Stock, J. A. (2003). Classroom Assessment Practices and Teachers' Self-Perceived Assessment Skills. Applied Measurement in Education, 16(4), 323-342. https://doi.org/10.1207/S15324818AME1604_4

Zollo, F., Bessi, A., Del Vicario, M., Scala, A., Caldarelli, G., Shekhtman, L., ... Quattrociocchi, W. (2015). Debunking in a World of Tribes. ArXiv:1510.04267 [Cs]. Retrieved from http://arxiv.org/abs/1510.04267

Zuiderveen Borgesius, F. J., Trilling, D., Möller, J., Bodó, B., De Vreese, C. H., Helberger, N., Internet Policy Review, \& Internet Policy Review. (2016). Should we worry about filter bubbles? Internet Policy Review. https://doi.org/10.14763/2016.1.401

## Appendix A

## Survey Instrument - Teacher (6 Questions)

## SURVEY INTRODUCTION

Title of The Research Study: The Effect of Political Affiliation and Political Ideology Match/Mismatch Between High School Teachers and Students on Student Academic Outcomes.

We invite you to take part in a research study about the political affiliation and ideology match/mismatch between high school students and teachers and its effect on student academic outcomes. You meet the criteria for inclusion in this study because you are either a high school student or high school English Language Arts teacher.

In general, your participation in the research involves minimal risk and the survey itself does not ask you for any personal identifying information. Participation is voluntary and you will not receive compensation for your participation. You may decline to answer any questions you do not want to answer. The survey will take about 2 minutes to finish. The full consent information can be read here:
https://www.dropbox.com/s/jbdliyky6xzeznr/MichaelOrtiz-HRP-502e.pdf?dl=0
This survey is sponsored by The University of Houston. If you have any questions or comments about the survey you may contact Dr. Virginia Rangel at 713-743-0343, or by email at vrangel3@uh.edu or Michael Ortiz at maortiz7@central.uh.edu.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the University of Houston Institutional Review Board (IRB) to speak to someone independent of the research team at 713-743-9204. You can also write to the University of Houston IRB at cphs@central.uh.edu.

## CONSENT

[consent]
I have read the consent information and agree to take part in the research" prior to moving forward to the study instrument(s).
$\qquad$ Yes
$\qquad$

## DEMOGRAPHIC INFO

[you]
Please choose one or more races that describes you.
_ Black or African American (1)
Hispanic (2)
White (3)
__ American Indian (4)

Asian (5)
Pacific Islander (6)
Two of More Races (7)
[gender]
What is your gender?
_ Male [0]
__ Female [1]

## PARTY ID

[pid]
Generally speaking, do you usually think of yourself as a Democrat, a Republican, an independent, or what?
_ Democrat [1]
__ Republican [2]
__ Independent [3]
__ Something else [4]
[IF pid=3 OR 4]
[pidlean]
Do you think of yourself as closer to the Republican Party or to the Democratic Party? Closer to the Republican Party [1]
__ Closer to the Democratic Party [2]

## IDEOLOGY

[lcself]
When it comes to politics, would you describe yourself as liberal or conservative?
_ Very Liberal [1]
__ Somewhat Liberal [2]
_ Closer to Liberals [3]
_ Closer to Conservatives [4]
__ Somewhat Conservative [5]
_ Very Conservative [6]

## POLITICAL PARTICIPATION

[particip]
During the past 12 months, have you done any of the following? Mark all that apply
_ Attended a meeting to talk about political or social concerns
_ Given money to an organization concerned with a political or social issue
Joined in a protest march, rally, or demonstration
_ Posted a message or comment online about a political issue or campaign
Tried to persuade anyone to vote one way or another

- Worn a campaign button, put a sticker on your car, or placed a sign in your window or in front of your house

Given money to any candidate running for public office, any political party, or any
other group that supported or opposed candidates
_ Gotten into a political argument with someone
__ None of these [ALLOW ONLY IF NO OTHERS SELECTED]

## Appendix B

## Survey Instrument - Student (9 Questions)

Title of The Research Study: The Effect of Political Affiliation and Political Ideology Match/Mismatch Between High School Teachers and Students on Student Academic Outcomes.

We invite you to take part in a research study about the political affiliation and ideology match/mismatch between high school students and teachers and its effect on student academic outcomes. You meet the criteria for inclusion in this study because you are either a high school student or high school English Language Arts teacher.

In general, your participation in the research involves minimal risk and the survey itself does not ask you for any personal identifying information. Participation is voluntary and you will not receive compensation for your participation. You may decline to answer any questions you do not want to answer. The survey will take about 2 minutes to finish. The full consent information can be read here: https://www.dropbox.com/s/jbdliyky6xzeznr/MichaelOrtiz-HRP-502e.pdf?dl=0

This survey is sponsored by The University of Houston. If you have any questions or comments about the survey you may contact Dr. Virginia Rangel at 713-743-0343, or by email at vrangel3@uh.edu or Michael Ortiz at maortiz7@central.uh.edu.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the University of Houston Institutional Review Board (IRB) to speak to someone independent of the research team at 713-743-9204. You can also write to the University of Houston IRB at cphs@central.uh.edu.

ASSENT
[assent]
I have read the consent information and agree to take part in the research" prior to moving forward to the study instrument(s).
_ Yes
_ No

## DEMOGRAPHIC INFO

[you]
Please choose one or more races that describes you.
Black or African American (1)
Hispanic (2)
White (3)
_ American Indian (4)
Asian (5)
__ Pacific Islander (6)
$\qquad$ Two of More Races (7)
[gender]
What is your gender?
_ Male [0]
_ Female [1]
PARTY ID
[pid]
Generally speaking, do you usually think of yourself as a Democrat, a Republican, an independent, or what?

Democrat [1]
__ Republican [2]
independent [3]
__ something else [4]
[IF pid=3 OR 4]
[pidlean]
Do you think of yourself as closer to the Republican Party or to the Democratic Party?
__ Closer to the Republican Party [1]
__ Closer to the Democratic Party [2]

## IDEOLOGY

[lcself]
When it comes to politics, would you describe yourself as liberal, conservative, or neither liberal nor conservative?
_ Very Liberal [1]
__ Somewhat Liberal [2]
__ Closer to Liberals [3]
_ Closer to Conservatives [4]
__ Somewhat Conservative [5]
_ Very Conservative [6]

## POLITICAL PARTICIPATION

[particip]
During the past 12 months, have you done any of the following? Mark all that apply
_ Attended a meeting to talk about political or social concerns
_ Given money to an organization concerned with a political or social issue
Joined in a protest march, rally, or demonstration
_ Posted a message or comment online about a political issue or campaign
Tried to persuade anyone to vote one way or another

- Worn a campaign button, put a sticker on your car, or placed a sign in your window or in front of your house

Given money to any candidate running for public office, any political party, or any
other group that supported or opposed candidates
_ Gotten into a political argument with someone

## CLASS

[class]
Who is your English Language Arts Teacher?
[covid]
How did you experience your fall semester classes after Sept. $8^{\text {th }}$ (Labor Day)?
Online all semester [1]
_ Online for $1^{\text {st }} 9$-weeks then in person for $2^{\text {nd }} 9$-weeks [2]
_ In person for $1^{\text {st }} 9$-weeks then online for $2^{\text {nd }} 9$-weeks [3] In person all semester [4]
[grade]
What was your final $1^{\text {st }}$ semester grade in THIS class?

## Appendix C

## University of Houston Institutional Review Board (IRB) Approval.

DIVISION OF RESEARCH
Institutional Review Boards
APPROVAL OF SUBMISSION
October 23, 2020
Michael Ortiz
maortiz8@uh.edu
Dear Michael Ortiz:
On October 8, 2020, the IRB reviewed the following submission:

| Type of Review: | Initial Study |
| :---: | :---: |
| Title of Study: | THE EFFECT OF POLITICAL AFFILIATION AND POLITICAL IDEOLOGY MATCH/MISMATCH BETWEEN HIGH SCHOOL TEACHERS AND STUDENTS ON STUDENT ACADEMIC OUTCOMES |
| Investigator: | Michael Ortiz |
| IRB ID: | STUDY00002524 |
| Funding/ Proposed Funding: | Name: Unfunded |
| Award ID: |  |
| Award Title: |  |
| IND, IDE, or HDE: | None |
| Documents Reviewed: | - MichaelOrtiz-2ndEmailScript-Teachers.pdf, Category: Recruitment Materials; <br> - MichaelOrtiz-3rdEmailScript-Teachers.pdf, Category: Recruitment Materials; <br> - MichaelOrtiz-3rdEmailScript-Students.pdf, Category: Recruitment Materials; <br> - MichaelOrtiz-2ndEmailScript-Students.pdf, Category: Recruitment Materials; <br> - Michael Ortiz-HRP-503Final.pdf, Category: IRB Protocol; <br> - MichaelOrtiz-1stEmailScript-Teachers.pdf, Category: Recruitment Materials; <br> - Ortiz-SurveyInstrument-Student.pdf, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); <br> - HRP-411.pdf, Category: Consent Form; <br> - Ortiz-SurveyInstrument-Teacher.pdf, Category: <br> Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.); |


|  | - MichaelOrtiz-1stEmailScript-Students.pdf, <br> Category: Recruitment Materials; <br> - MichaelOrtiz-HRP-502e.pdf, Category: Consent <br> Form; |
| ---: | :--- |
| Review Category: | Expedited |
| Committee Name: | Designated Review |
| IRB Coordinator: | Maria Martinez |

The IRB approved the study on October 23, 2020; recruitment and procedures detailed within the approved protocol may now be initiated.

- The letter of cooperation from Spring Branch ISD must be submitted via a modification before research initiation.

As this study was approved under an exempt or expedited process, recently revised regulatory requirements do not require the submission of annual continuing review documentation. However, it is critical that the following submissions are made to the IRB to ensure continued compliance:

- Modifications to the protocol prior to initiating any changes (for example, the addition of study personnel, updated recruitment materials, change in study design, requests for additional subjects)
- Reportable New Information/Unanticipated Problems Involving Risks to Subjects or Others
- Study Closure

Unless a waiver has been granted by the IRB, use the stamped consent form approved by the IRB to document consent. The approved version may be downloaded from the documents tab.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

Sincerely,
Research Integrity and Oversight (RIO) Office
University of Houston, Division of Research
7137439204
cphs@central.uh.edu
http://www.uh.edu/research/compliance/irb-cphs/

