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Incremental socioeconomic inequalities:

Differences in language and lessons in five Massachusetts high schools

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Submitted for a PhD in Applied Linguistics
University of Edinburgh
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DECLARATION

I hereby declare that this thesis is of my own composition and that it contains no material previously submitted for the award of any other degree. The work reported in this thesis has been executed by myself, except where due acknowledgement is made in the text.

Signed:  
Date: 

Stephanie DeMarco
“Forsan et haec olim meminisse iuvabit” – Vergil: Aeneid I

A joy it will be one day, perhaps, to remember even this.

Special thanks to John Joseph, Cristina Iannelli, Tom Connolly, Adam Scott Clark, James Thomas, Angela Gayton, Stephanie Hicks, Chrissy Cuskley, Yasamin Motomedi, Mark Atkinson, Jackie Berman (mom), Tony DeMarco (dad), and of course, Josephine.

It was the worst, but you are the best.
This study is inspired by a desire to revisit Anyon’s *Social Class and the Hidden Curriculum of Work* (1980) in a more contemporary context, one that responds to calls in the research on the socioeconomic achievement gap for deeper investigation into the heterogeneity of the middle class. More specifically, the research examines five middle class American high schools in Massachusetts, and asks the question, 'How is classroom 'work' different across these schools, thirty years after Anyon’s study?'

This study employs several methods of analysis including Anyon’s ethnographic observational analysis and a corpus linguistic analysis. It also uses reflexive interviews to review initial findings and integrate participant input into the data itself. I also draw upon the data in light of previous frameworks to develop a new framework for looking at smaller differences in teacher talk, lessons and classroom instruction that is more fit for purpose.

Through these ethnographic observations and reflexive interviews, this study reveals that even across schools that are considered to belong to the same socioeconomic class – the middle class – differences in instruction and lessons can be clearly observed. The body of literature discussing the middle class, in terms of the diversity within it, is very small, this extensive study contributes to this knowledge, and hopefully creates avenues for further research.

Using Anyon’s approach of observing ‘work’ across social class in classrooms this research builds on Anyon’s findings in a contemporary context. Insight into the ways in which difference manifests in smaller ways in the classroom may be fundamental in understanding how small differences compound across the socioeconomic spectrum. The impact of this research on the socioeconomic achievement gap is a better, more complete, look at the picture of how the distribution of resources across the socioeconomic spectrum plays a role in classroom differences.
1. INTRODUCTION

On April 26, 2016 The New York Times published the article Money, Race and Success: How your school district compares. Which looked at the socioeconomic achievement gap across the United States. The article discusses the research of Sean Reardon, the endowed Professor of Poverty and Inequality in Education at the Center for Education Policy Analysis at Stanford University. He and his colleagues analyzed the connection between socioeconomic status and academic achievement across nearly every school district in the United States, representing more than 40 million students across the country. The findings of the study show a clear relationship between the socioeconomic status of a school district and achievement (Reardon, 2016). The results also demonstrate a slow and constant incremental increase in achievement from the underperformance of schools in districts with incomes below the poverty line, to schools over performing at nearly four grade levels above average in districts with the highest incomes.

Reardon et al.’s study provides the fundamental evidence for gaps in the research that I explore in both an investigation into the impact of incremental socioeconomic inequalities across schools and an in-depth look at the variation among schools in similar socioeconomic positions. Reardon (and Reardon et al.).’s findings (2008; 2011; 2014; 2016) serve as a demonstration of the necessity of research that delves deeper into the unexplored avenues of the socioeconomic achievement gap. Earlier research has found that the socioeconomic achievement gap has grown nearly 40% since the 1940s (2014: 5), even though the connection between socioeconomic status and achievement continues to be a major focus of educational research. Reardon’s 2016 work is particularly essential in providing evidence of the incremental gaps in socioeconomics that exist between the schools participating in my study. It provides the knowledge that these incremental differences exist not only socioeconomically, but academically in no uncertain terms. I use the term incremental specifically to reference Reardon et al.’s 2016 findings. The data show these five schools are grouped together in the middle of the graph, but each of the three socioeconomic class categories I describe is above one another rising in small increments, and works as a nod to the detailed spectrum in their research. It is in an attempt to make more concrete this understanding of how cities and districts differ that I use incremental with reference to the entire socioeconomic spectrum.

Figures such as Reardon’s, showing the socioeconomic achievement gap would not be surprising to those researchers who have spent much of their careers focused on educational achievement gaps (Gamoran, 2007; Iannelli, 2013; Kozol, 1991; Reardon, 2008; 2011; 2014; 2016). Malott has a far more radical perspective that takes this conversation further to the point that he states, “Legitimacy of capitalism” is also being widely discussed (Malott, 2012). I do not intend to dispute this claim, but use his observations about the rising exposure of income inequality only as it pertains to the media’s coverage of income and
While much of the research in recent years in the United States has focused on racial achievement gaps (Howard; 2015; Ladson-Billing, 2014), research done by Fryer and Levitt (2006) claim a large majority of the black-white achievement gap can be explained by the socioeconomic gap (see also Rothstein and Wozny, 2013). However, it is important to note, that these socioeconomic differences are quite clearly not a result of the same societal forces at play (see Darity Jr. et al., 2018 for a comprehensive discussion of racial achievement and wealth gaps).

Many researchers and institutions have made efforts to lessen these gaps by taking action through educational policy, governmental funding, curriculum overhaul, teaching methods and new approaches to education. Yet Reardon’s (2014; 2016) findings make it apparent that, “the gaps persist despite these efforts”. He adds that in spite of an enormous body of research on the topic, “our understanding of the causes and patterns of these achievement gaps is far from complete” (2014: 1). Reardon (2016) seems to lament this fact even further as his more recent analysis reveals few outliers in terms of the socioeconomic achievement gap. He emphasized that the numbers serve as a reminder that “we have little evidence that we know how to provide adequate educational opportunities for children growing up in low income communities” (2016: 7).

Reardon’s work is primarily quantitative, thus while the findings provide the fundamental evidence of the persistent problem of a socioeconomic achievement gap, my thesis takes several qualitative approaches in order to explore these differences in way that focuses on teacher talk, lessons, and classrooms. Reardon et al. (2014) has even called for work that uses more descriptive methods to look into the way these achievement gaps develop to promote the importance of investigating “disparities across the full distribution of test scores” (2014: 11-12). Reardon (2016) extends an invite to broaden the scope of his research by doing work that involves a more in-depth, descriptive look at these discrepancies in achievement.

In addition to the need for a qualitative look at what these figures might mean in terms of classroom instruction, Reardon’s studies also raise a vital question concerning variation within socioeconomic classes. The studies reveal that while socioeconomic status and achievement remains strongly correlated, there are also instances of “substantive variation in average test score among school districts with similar socioeconomic profiles” (2016: 7).

The persistent themes that address this socioeconomic achievement gap in much of Reardon’s work can be found echoed throughout my thesis. The first theme presented is that of a need for research on the middle class. The second addresses the lack of research on the diversity within the middle class. In the case of both of these themes to address this lack of research my thesis uses a small sample of schools and largely qualitative data, though I make attempts to integrate some quantitative data.
These differences within my thesis are referred to as incremental, referring to the small increases in social and economic status indicators between schools within the entire socioeconomic scale. I also expand on the discussion of social class inequality at the end of this chapter as well as in the Literature Review. All of the schools participating are viewed as high schools in middle-class cities with roughly similar socioeconomic profiles. My thesis considers the potential differences in teacher talk and lessons that may assist in our ability to answer part of the question raised in Reardon’s study concerning variation between similarly socioeconomically positioned schools. The approach taken in my thesis of examining lessons and teacher talk qualitatively is even suggested as a starting point for understanding where these socioeconomic gaps emerge (2014:11).

Understanding the differences in lessons and teacher talk in and of themselves is not intended to have direct impact on improving the middle-class schools that participated in the study, as the average achievement across the participating schools is in fact above average nationwide. Nevertheless, a discussion of these differences when looked at in terms of the entire socioeconomic spectrum of student achievement is instrumental in providing a more complete understanding of the variation in instruction among incrementally different socioeconomic positions on the spectrum.

1.2. Development of the Thesis

The initial aim of my thesis was to revisit Jean Anyon’s seminal work, Social Class and The Hidden Curriculum of Work from 1980 in the wake of widespread curriculum standardization. Anyon’s research showed clear discrepancies in the education students were receiving across social classes. It also revealed the ways in which schools perpetuate social class stratification by only preparing students for occupations that correspond to their parents’ social class. Thirty-five plus years and several country-wide educational reforms later, I wanted to explore what had changed. Had the implementation of standardized curriculum enabled socioeconomically stratified instruction to disappear? Had it served to equalize classroom discourse and lessons? While simultaneously hoping the potential for standardizing curriculum as a means to create a more equitable educational experience had come to fruition, I also suspected that socioeconomic inequality continued to play a role across teacher talk and lessons. My thesis sought to look at whether or not this was the case.

My research is centered around Anyon’s Social Class and the Hidden Curriculum of Work, however there are select differences throughout my research. I call the study a revisitation or a semi-replication study rather than a replication study as these changes make for a very different piece of research. While Anyon employed a strictly qualitative examination, I

1 Or lack thereof
combined qualitative data and quantitative data. Like Anyon, I provided a rich, detailed ethnographic observational analysis of classrooms but unlike Anyon’s interviews, I use reflexive interviews. Employing this method of interview meant I discussed some of my preliminary findings with the teachers, and supplemented my findings with their feedback and input. Reflexive interviewing is a qualitative method developed in large part after Anyon’s article was first published (Alvesson, 2003; Davies and Dodd, 2002; Denzin, 2001; McLeod, 2003). Another key difference between my research and Anyon's was to be the linguistic focus of my study, where discourse and teacher talk would be the central concentration of the analysis.

These initial aims provided a starting point for the development of the research. The resulting thesis remains within the scope of this initial aim, though some changes were made to create a more focused project that addresses gaps in the literature to a greater extent.

The first adjustment made was to the spectrum of socioeconomic class that I focused on. When conducting preliminary research on cities, social class, and achievement gaps I found that within Massachusetts the spectrum of socioeconomic status depends enormously on the racial and linguistic composition of each cities’ population. The research led to extended literature on intersectionality (Crenshaw, 1991), in particular the inextricable achievement gaps of race and socioeconomic status (Gamoran, 2007; Ladson-Billings, 2006; Reardon, 2011; 2014), and Ramsay’s (1983; 1985).

It is important that my research did not discount the implications and importance of race and ethnicity to the findings, as Anyon was heavily criticised for glossing over issues of ethnicity (e.g. Ramsay, 1983; 1985). In order to avoid this criticism without ignoring race or ethnicity, I used schools that were less racially or ethnically diverse in order to make the comparison without the additional complication of race. The participating schools were chosen specifically because they have a small percentage of non-white students. This was to minimize the consideration of intersectional issues that have been known to influence variation of achievement within schools such as the black-white achievement gap, and non-native English speaker participation.

Another adjustment made was the choice to focus on a small spectrum of incrementally unequal middle-class schools. Throughout my research into differences in education across social class it is evident the achievement gap has been well recorded and researched (Darling-Hammond, 2012; 2013; Gamoran 2007+; Jenks, 1972; King and Ladson-Billings, 1990; Reardon, 2011). Studies and statistics that show the connection between socioeconomic status and achievement continually demonstrate the gross inequalities that perpetuate from the most disadvantaged - below the poverty line and in failing schools - to schools in the most privileged areas - where student success was shown to be nearly three
grades above the expected achievement in the study (Chetty et al., 2014; Reardon, 2016). What was missing from this body of research was a comprehensive look at the ways in which the middle-class conducts their classrooms. This absence seemed to be a major oversight in the research and it seemed prudent to focus my investigation toward contributing to this missing area of research.

A final change was the major focus on linguistic differences. I begin the data analysis using corpus linguistic methods to explore lexical richness, word use and language among these schools. The outcome of these findings was that when looking at lexical richness and specific word use, the teachers, across the spectrum of middle-class schools seem to be using fairly similar language. Admittedly, this may have been due to the limitations of a small corpus. In any case, the corpus findings failed to explain the salient differences that were prominent in my observations and interviews. Because of this, the data required a broader selection of analysis that included more educational research methods and a focus on lesson types rather than language alone.

These changes to the initial proposal have allowed the thesis to develop into a substantive look at a range of incremental socioeconomic differences across primarily white, middle-class classrooms. The study adds to the scarce research on middle-class students’ education in the United States and responds to requests raised by several researchers for studies that analyze the diversity within different factions of social class. In order to reach a more complete understanding of educational inequalities there is a need for exploring instruction within the middle class in order to build on our knowledge of the absent aspects within the socioeconomic achievement gap (Block, 2013; Reardon, 2014; 2016; Vandrick, 2009; 2014).

1.3. Wider understanding

It is also necessary to address the societal context of social class and socioeconomic inequality in the United States throughout the time of my thesis from 2012 – 2016. The inclusion of Reardon’s 2016 study in the New York Times was especially telling as a critical point in the emergence of social class inequalities as a topic that interests the general public. The results of Reardon’s study provide clear evidence of consistently increasing achievement levels correlating with consistently increasing socioeconomic status. The conclusion of which is the more money and social status you have, the better you will do in school. Rightly this requires us to confront a wider understanding of socioeconomic inequalities.

The media appears to agree and in the past four years a country wide conversation on income and social inequalities has progressed to the point where the newsworthiness of articles on social class inequalities is no longer in question (e.g. Fingerhut, 2016; Fitz, 2015; McCarthy, 2015; Pazzanese, 2016; Porter, 2015a; Porter, 2015b).
Malott (2012) raises this point stating that the conversation on class inequalities that is presently happening in the media would have been “unthinkable in 2010” (167). He goes on to cite an article by Haque in the Harvard Business Review (2011) that asks, "Was Marx Right?" concerning the problematic nature of capitalism and the insights Marx might provide. Chomsky (2012) reiterates this sentiment, and believes that there has been a shift in "the national discourse". He states that economic inequality, long marginalized, has now “moved to the center of the discussion”. Since 2012 it has become so much a part of the national discourse that a Democratic presidential nominee, Bernie Sanders, even put income inequality on the top of his platform in his 2016 campaign.

In just these four years there have been several New York Times best selling books that address the issues of capitalism and income inequality (Piketty, 2014; Reich, 2016; Stiglitz, 2012), as well as a feature length documentary featuring former labor secretary Robert Reich called *Inequality for All* (Kornbluth et al., 2014). Economists also recognize the conversation around income disparities is something that has propelled some of their colleagues, namely Piketty and Stiglitz, into "near-rock-star status". The promotional value of which has caused the entire field to take note of wealth inequalities' pervasive status in the media (Schwartz, 2016).

There are, however, areas of social class that are rarely mentioned as having inequality and/or disparate levels of access and resources *within* themselves, and those are the middle classes. As a society we seem to have come to an understanding that poor people and rich people are not equal in many respects. Anyon was an early contributor to this understanding by providing evidence for *educational* socioeconomic inequalities in her article *Social Class and the Hidden Curriculum of Work* as well as *Social Class and School Knowledge* (1980; 1981). Yet we fail to take notice of any more nuance to social class issues than this, though with some recent exceptions (Cowen, 2017; Reeves, 2017). My thesis takes a focused look at incremental socioeconomic inequalities within the middle classes, where there is little research or discussion about what and how the diversity within the middle classes plays out in the classroom.

It is with this in mind that I take a deeper look at socioeconomic inequalities in education. The media coverage as well as the literature fails to adequately attend to the middle of the socioeconomic spectrum. My thesis, which observes five Massachusetts high schools across the middle class seeks to contribute to our knowledge of a wider range of inequalities across the entire socioeconomic spectrum, and their function in the classroom.

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3 Malott has a far more radical perspective that takes this conversation further to the point that he states, "Legitimacy of capitalism" is also being widely discussed (Malott, 2012). I do not intend to dispute this claim, but use his observations about the rising exposure of income inequality only as it pertains to the media's coverage of income and social inequalities.

4 This terminology is discussed further in the Literature Review.
1.4. Inequality vs. Difference

In the section that follows I attempt to clarify two titular concepts in my thesis - that of inequality and difference. As I discuss the above terms, I do not mean to imply uniformity in the fundamental meaning of these concepts, I only wish to clarify my use of these terms within this thesis.

1.4.1. Inequality

The term inequality itself can and does encompass the ideological implications of social justness, these implications are undoubtedly worthy of the extended conversation in the literature that they garner (e.g. Anyon, 2005a; Allison, 1978; Grusky & Ku, 2008; Hastie & Remmington, 2014; Kanbur, 2014; Rawls, 1958 etc.), both in understanding it in terms of quantitative and qualitative inequalities. Jones and Vogle (2013: 130) claim the conversation surrounding social class is “among the most important considerations of our time”. These conversations as they extend to socioeconomic inequalities in education, in particular Anyon (1980, 1981, 2005a), Benjamin (2003), Chetty et al. (2014), Gamoran (2007), Giroux (1983; 1997), Howard (2015), Ladson-Billings 1995; Reardon (2011, 2013a, 2013b), Reeves (2017), Reeves and Grannis (2014) Stovall (2013) etc. moved me to participate in the field that investigates these severe societal and educational inequalities.

An examination of inequalities is rarely a crusade for simply providing equal opportunity and equal resources. The use of the word inequality in my thesis does not imply that there is any perfect equality as an alternative to inequality. It also does not imply that ‘sameness’ is the end objective. The contention of much of the research referred to above is largely in line with Kornhaber et al. (2014: 6) in their belief that in order to provide equal opportunities and chances there is a need for compensatory distribution of resources, not equal distribution of resources.

Though I will not go into a further justification outside of this section, the division between the two can be understood as: **Inequality** - an unjust and unfair distribution of resources, capital and opportunity that may impact the lives and impede the success of those it affects vs. **inequality** - any quantifiably unequal distribution of resources and capital (here, specifically, those used to measure social class and academic success).

My use of the term inequality stems from an attempt to draw clear parallels from my study to Reardon and Anyon’s findings. It is my hope that adopting the term inequality enables more pronounced associations to the wider conversation of the socioeconomic achievement gap in education.

Any use of the term Inequality throughout the thesis, as defined above, is either in reference to the literature or another author’s discussion of concepts. In terms of socioeconomic inequality in education research, most commonly examined are large scale projects (Chetty
et al., 2014; Gamoran, 2001; Marks, 2014; Reardon, 2011; 2014; 2016) where the discussion of Inequality tends to encompass the entire spectrum of socioeconomic measurements, from the poorest to the richest.

The use of the term *inequality* will be used with respect to the discrepancy in resources across the five schools in the study. A discussion of inequality with reference to these schools can be primarily found in the Literature Review and Methodology chapters of the thesis describing the categorization and labeling of schools.

The discontinuity and confusion between the two terms extends from the fact that it is a problem discussing findings approaching them in terms of an unequal distribution of capital and resources in the *middle* of the socioeconomic spectrum. There is rarely language to model or conversation around these incremental inequalities on the sliding scale of the socioeconomic achievement gap that may not be *Inequalities*, but are most certainly *inequalities*.

It is a product of our lack of exploration into the middle class in terms of socioeconomic disparities that necessitates the use of inequality in these terms. Words like disadvantage, disparity and inequality are laden with significance assigned a higher level of adversity. Much of the literature I refer to deals with issues of intense levels of Inequality across racial, linguistic and social class lines, as these are the models for much of my research. The difficulty clarifying these terms speaks to a far-reaching limitation of the literature, that there is little research that explores the middle class, and the variation of economic, social and cultural capital within it.

This has not gone unnoticed. A wide range of prominent academics and public intellectuals (Au, 2012; Block, 2014; Kozol, 1991, 1995; Reardon 2011, 2013a, 2013b, 2016) have called for greater exploration of the middle of the socioeconomic spectrum as it has been left uninvestigated to a great extent. Thus, the language used to discuss both Inequalities and inequalities is something that needs further exploration, not only for the purposes of my thesis, but for the literature more broadly.

Within these definitions, the schools are labeled unequal and resources seen as inequalities to draw attention to the sliding scale of socioeconomic class within the middle class and the unequal distribution of resources and capital across the cities in the study. The claims regarding inequalities culminates only in the divisions of schools into the three socioeconomic categories.

1.4.2. DIFFERENCE

Kimpston's synthesis of research on curriculum implementation allows a demonstration of how my study differs greatly in the way I approach the data. He explains that in much of the
research on curriculum, “adoption of the curricula or programmes was not an issue; problems of implementation of adopted curricula dominated the outcome and the success of all projects studied.” (Kimpston, 1985:185). The research being undertaken focuses on neither adoption of curricula or problems of implementation and seeks only to observe the salient differences among the schools.

This study is a look at classrooms and the differences in the way lessons are taught. One question that will be explored is: Is there salient variation in the way these lessons are being presented across schools with such similar profiles? These salient variations are discussed as differences. In all considerations of the data and analysis from the collected and observed data the language will be that of difference, and not inequality.

The term ‘difference’, as used to describe lesson type, teacher talk and classroom observations should be seen, within this thesis, as a word that carries no connotations of deficit. Any discussion I put forward surrounding the general well being of students in participating schools maintains that these differences may have implications for the classrooms, but not provision for these classrooms and teacher differences to be seen as facing Inequalities in education. These schools and cities do have an unequal distribution of wealth and resources, but on the whole not to the detriment of the majority of students’ educational achievement. That is not to say that previous research where they have found classroom differences have no cause to be categorized as such.

However, over the years of educational research, policy and the progression of society it is without a doubt a challenge to see these classrooms and teacher practices as different but not inequitous. Educational approaches, as with most things, hold hierarchical positions in people’s minds. While it may be the case that people hold personal opinions on classroom practice, the evidence does not correspond to these hierarchical notions, as the statistical measures of student achievement within these schools is not particularly inequitous. In fact, all participating schools are above average in country-wide educational statistics (Chetty et al., 2014; Reardon 2011; 2016). Because of this, the probability of their future success is higher than those that fall lower on the spectrum of the specified economic, academic, and social measures. The students observed here are all getting adequate educations with regards to state requirements. An exploration into what makes teacher talk and lessons different from one another will not change that.

1.5 RESEARCH QUESTIONS

It has been nearly thirty years since Anyon’s critical comparative study on social class in the classroom and now it seems more than ever, the gap between the rich and the poor is widening (World Bank Group, 2012). It is time again to ask where public education is in all this. The recent death of Jean Anyon allows for a renewed desire to evaluate the validity and
importance of her contributions to educational research, especially in the realm of social
class. This study while not replicating Anyon’s original study, *Social Class and the Hidden
Curriculum of Work*, aims to reflect the ideas and the essence of schooling differences she
depicted.

History has proven that (separate but) equal schools do not amount to equality in
education. Much of the research holds that, “the same schooling for all translates into
inequality and injustice” (Reay, 2011). However, after years of theories, research is left
wanting in terms of a way to lessen inequalities on a large scale. The literature has yet to
look directly at the variation among the middle classes for possible answers. The aim of my
thesis is to search for a potential outlet for learning about and understanding the
“manufacture of academic advantage” (Reay, 2011) by focusing on the middle classes,
rather than the drastic socioeconomic differences between the poor and everyone else. By
looking at ten classes in five high schools across the middle class, I hope that there will be
instances of clear, observable variation or uniformity between the schools that can be
analyzed and discussed in terms of how differences or similarities may play a role in
developing insights into the socioeconomic achievement gap. It is crucial to continually
reaffirm that the research presented here is not with a view to any solution for educational
or socioeconomic inequalities. The intent of this research is to open an avenue for
investigation and meaningful new knowledge that could assist in producing a more
complete understanding of socioeconomic inequality.

I approached this research on two levels, one, as an historical reevaluation of Anyon’s study
*Social Class and the Hidden Curriculum of Work* and two, on a more identifiable level as a
look at teacher talk and classroom lessons across incrementally unequal middle class
classrooms, using social class categories as a mechanism for which to gather observable
differences. I position the research within both applied linguistics and education research
with a view to investigating differences across schools, and adding to the literature in order
to provide a wider picture of the diversity of classroom teaching across the middle class.

I began the project with two overarching questions, drawing from Anyon’s article:

Since Anyon’s *Social Class and the Hidden Curriculum of Work* (1980) and *Social Class and
School Knowledge* (1981) many educational reforms have necessarily altered classroom
instruction to some degree. In particular, there has been widespread curriculum
standardization. The primary aim of this thesis is to look at whether this standardization has
had any effect on what Anyon referred to as ‘work’ in her seminal study. I use the term ‘work’
in these questions to refer to lesson type and teacher instruction in order to draw parallels to
Anyon’s study.
The initial research questions I approached the fieldwork with were:

1. If the general inference is that students across the socioeconomic spectrum are on a more equal footing because of a standardized curriculum, is the "work" the same in schools where the socioeconomic class is seen as broadly the same?

2. If 'work' is not the same, how is it different - specifically in terms of language, instruction and teacher talk?

The more definitive research questions have been shaped by the observations, interviews and pre-analysis itself. The three research questions that emerged can be ultimately divided into the three data analysis types and are discussed at the beginning of each of the data chapters.

The main aim of this thesis is to compare teacher talk and lessons among incrementally unequal middle-class high schools. In Anyon’s 1980 study she documented students’ relationship to ‘work’. My thesis and research question are based, in great part, on this study. The findings in Anyon’s study were that teachers taught and spoke differently to students from different social classes. The type of education and teaching the students were receiving coincided with the careers of their parents in their supposed social class. By observing teacher talk in classes thirty-five + years later my aim is to investigate the influence of curriculum standardization on teacher talk and lessons hopefully answering one of the initial overarching questions:

If the general inference is that students across the socioeconomic spectrum are on a more equal footing because of a standardized curriculum, is the "work" the same within the middle class?

This question is answered in three parts using three different methods:

1. Is teacher talk across these middle class schools different when analyzed for lexical richness and word use?

2. How is the classroom ‘work’ being done? And if it is being done differently, in what way?

3. How do the teacher’s reflexive understanding of the observations and awareness of their classes help to make sense of the classroom differences across the middle class?
2. LITERATURE REVIEW

The following review of the literature will touch on prominent themes of relevant literature that will provide useful background for future chapters.

Divided into three parts, these sections will cover:

1. Jean Anyon and Social Class and The Hidden Curriculum of Work
2. Social Class, Language and Intersectionality
3. Curriculum theory and teachers’ beliefs

I frame my thesis as a revisitation or semi-replication study of Jean Anyon’s Social Class and The Hidden Curriculum of Work. It has been almost 40 years since her landmark study and in that time many have taken issue with some of the limitations of the study. As a semi-replication, I aim to discuss these limitations and use them as a guide in creating a more inclusive methodology for the present study. The study initially grounds itself in social class and language research, specifically in the field of Applied Linguistics. I subsequently employ numerous aspects of educational research to meaningfully understand language and lessons in the classrooms of the communities observed. This literature review discusses educational, social and language research in which issues of social class, curriculum and teachers beliefs are analyzed. In my own research I focus specifically on difference in teacher language and lessons in middle-class classrooms, but a broader explanation of social class theories, inequality issues, curriculum and teacher belief research are needed to provide background for the thesis.

2.1. ANYON

I focus this section specifically on Anyon’s work to introduce the literature from several areas of social class, language, and educational research, much of it found within applied linguistics literature. I begin with a short discussion of Marx which forms some background to my thesis, as social class and language in education is a key determinant being looked at. More specifically, I will address how Anyon’s work is informed by a Marxist perspective and later, how it differs from, and at times critiques, this perspective. I then review the research on Anyon’s work and the discussion surrounding her seminal text Social Class and The Hidden Curriculum of Work. The theoretical framework of my thesis can be looked at as a magnified version of one particular part of Anyon’s research, but also there are several theories and conceptions that have been derived from her other work.

Though there are many differences between my thesis and Anyon’s Social Class and the Hidden Curriculum of Work there are two points of difference that form the basis for the importance of the contribution of this research to the field. The first is that of a focus on the middle class as opposed to Anyon’s wider socioeconomic spectrum of schools. The second
is my examination of teacher language and the way the teachers are teaching as opposed to what they are teaching, as was the central question in Anyon’s article. The question is looked at in a contemporary context in light of widespread curriculum standardization. It is nowadays a very different question as more often than not, there is little doubt as to what the teachers are teaching, thus the how becomes more important.

To some extent the findings of this thesis reflect both Anyon’s work, and the work of many others. Outside of Anyon, I will discuss a select few of these theories. A primary difference in my research is the size of the socioeconomic scale that I am exploring. My schools are all only incrementally unequal in factors including income, graduation rate, racial make-up, poverty level etc. (see Methodology chapter for a more detailed description of these factors). Despite the fact that these differences are smaller and less noticeable in terms of student achievement, research supports (Kornrich & Furstenberg, 2013) the idea that small differences in expenditure on education and social status do have some effect on student performance. Thus, it is also supposed it may demonstrate a salient difference in teacher talk, instruction and lesson types. This stratification in teaching types may resemble the differences in Anyon’s (1980; 1981) schools, reflects Kozol’s (1991; 2005) observations of economic educational stratification, confirms Bourdieu’s (1973) theories of social reproduction and habitus and corresponds somewhat to Bernstein’s (1964) code theories, though on a smaller scale.

I will also raise the issue of the benefits and limitations of looking at social class in isolation, as well as the necessary discussion of intersectionality in applied linguistics and education research in addition to the near absence of, and need for research that focuses on the middle class as a diverse group.

2.1.1. Marx and Anyon

While Marx’s theory alone may add to the discussion at hand, in my thesis I refer to Marx as his theories are used by Anyon, as the connection is essential to the understanding of social class in relation to institutional education. Anyon was a staunch Marxist, as evidenced by much of her work, and an outspoken advocate of implementing classroom discourse that empowers workers, workers rights and Marx’s prediction of a worker revolution (Anyon, 2005; 2011). In particular, Anyon’s view of education took on aspects of Marx’s stance that the capitalist class is inevitably in a state of exploiting the worker class (Ollman, 1968) and this leads to social injustice.

The fundamental Anyonian outlook applies Marxist theories of social class inequalities specifically to institutional education, far more than Marx ever did. Marx cites education as one of the many components of society that could be used to perpetuate inequalities. However, it is clear from the lack of an extended discussion of institutional education
That is not to downplay the centrality of Marxism to Anyon’s work. On the first page of her book *Marx and Education* she cites Marx as her strongest influence and inspiration on her life’s research as she worked her entire career, “Rowing against the current of educational research” (Anyon, 2011: 1). Anyon stated, “Social class, forms of labor, structures of political and economic power were fundamental in perpetuating not only educational but other social inequalities (Anyon, 1994: 115). In this she puts forward a concept of social class that is inspired by Marx, but necessarily places education at the forefront. Anyon unequivocally declares herself a Marxist researcher who studies social problems with these theories as the dominant inspiration. She nonetheless incorporates other avenues of theory, specifically Bowles and Gintis (1976) in order to expose the structural nature of poverty and educational failure in urban settings in the United States” (McGrew, 2011b: 5).

However Anyon is critical of Marx in many respects. She consistently maintains throughout her research that Marxist theory applied to her research is not without its limitations. She claimed that much of traditional theoretical Marxist research was stagnant in many respects, and that Marxism needed to progress. She then mentioned that there was in fact critical work now being done by scholars “who regarded the idea of opposition between worker and capitalist as a limiting and critically useless binary opposition” (Anyon, 1994: 116).

Like Anyon, many researchers are critical of the Marxist binary delineation of social class, i.e. the proletariat/workers and the bourgeoisie/capitalists, as too simplified and argue for a more multi-dimensional approach to social class (Apple, 1996; Giroux, 1981; Pandey, 1983). It should be noted that Marx’s theory of social class has also been described by some as a “gradation” (Bottomore, 1983: 75) from the proletariat to the bourgeoisie rather than a binary, but for the purposes of this discussion I have used the implication that many take from Marx’s work, that of a two-class system (Apple, 1993; Pandey, 1983; Smith K., 2007).

By looking at the diversity within the middle class, ultimately the premise of this thesis tends toward the Weberian. One of Weber’s key objections to Marx is toward his simplified
distinctions of class. Weber proclaims the need for firmly delineated categories of social class to undergo a more nuanced theoretical approach (Giddens & Held, 1982). A clear problem lies in Marx's difficulty in the classification or non-classification of peasant landowners, doctors, lawyers and the ‘intellegencia’, and the Lumpenproletariat (the underclass) (Giddens & Held, 1982).

Anyon too has been accused of the sin of being inspired by Weber. Specifically, Mallot (2011) in his scathing review of her book Marx and Education, in which he denounces her as a “pseudo-Marxist”, “reformist”, “Weberian” and quite possibly “renders her entire career anti-Marxist” (McGrew, 2011a: 17 on Mallot’s 2012 review). McGrew objects to this accusation by Mallot of Anyon as being definitionally not Marxist. He claims that Mallot is wrong in his “faulty assumption that to draw upon Weber, or otherwise envision multiple class groupings operating within the two primary classes is somehow to reject class/Marx” (McGrew, 2011a).

In fact, a major advantage of Weber’s understanding of class is his use of three components that add depth and complexity to the issue of what categorizes social class. I tend to agree that the components of Weber’s social class theory of prestige, power and wealth seem to address Marx’s categorization problem (Giddens & Held, 1982). Marx’s essentialized two primary classes raise questions even for Anyon who addresses her concern for the absence of work on the problematic nature of intersectional identities in Marxist and in neo-Marxist research (Anyon, 2011).

2.1.2. ANYON AND SOCIAL CLASS INEQUALITY

As mentioned, the primary inspiration and theoretical background for my research is Anyon’s ‘Social Class and the Hidden Curriculum of Work’ (1980). Anyon’s methods and objectives inform a broad basis for my project. In addition, a review of the revisitations and responses to Anyon’s research allows me to fill in gaps and address the limitations of her research. It enables an expansion on ideas from the more contemporary research methods being done today.

Thirty-five+ years ago Anyon published her foundational text Social Class and the Hidden Curriculum of Work in which she observed classrooms in five schools of varying social classes to compare differences in the ways classes were being conducted and taught. She found stark contrasts in the level of the class material, the way students were spoken to and the way classroom materials were presented. Anyon looked at the type of language used, the level and depth of assignments and the extent to which the students were allowed independent thinking and autonomy. Her main focus was to observe whether or not there was a correlation among the occupations and education of these students’ parents and the way the classes were conducted. Not only were there significant findings regarding the way
the classes were conducted, but also the future expectations of the students seemed to be reflected in the markedly different ways of teaching.

The findings of Anyon’s study revealed that student creativity, peer-review and autonomy differed across schools with students from different socioeconomic classes. Her observations that these differences seemed to correlate to the positions of their parents on the socioeconomic ladder were revolutionary at the time. Students whose parents were employed in menial jobs and clerical work were constantly checked step by step, while students whose parents were CEOs and politicians were given creative assignments and allowed to work independently or in groups. Students in the working-class schools did far more rote memorization, while the students in the upper-class schools participated in activities that required more critical analysis. While the subjects were similar, the information that was being taught was vastly different. These observable differences also demonstrated that the teacher’s presentation of material assumed some sort of reference to the student’s future capabilities and needs. (Anyon, 1980; 1981; 2006b)

Anyon claimed that the objective of her research was to examine classroom interactions “for the possible meanings, consequences and implications” of those interactions (1985: 212). While taking into account Bernstein (1971), Apple (1978) and Bourdieu’s (1977) conceptualisation of social class and its connections to social power and cultural capital, Anyon goes on to define social class as “a series of relationships to several aspects of the process in society by which goods, services and culture are produced” (1980: 1). She maintains that this definition only serves to define her groupings and the classes she observed, rather than any generalization of social class groupings. Her methodology for grouping the classes was to find similar schools, relatively near to each other (same district) that were subject to New Jersey schooling requirements. She observed five schools, in two adjacent districts, and using parental occupations as the primary criteria placed them in the following categories: Working Class Schools (2), Middle Class School, Affluent Professional School and Executive Elite School.

Anyon observed that in the Working Class Schools students were doing rote work, given steps in a plan and being taught obedience and the importance of following rules. Even in an art class one teacher was quoted directing a student to, “Do it this way or it’s wrong”. Science projects were led by the teacher at the front of the class; the students were not doing the experiments themselves, and thus were given the ‘right’ findings of the experiment to take notes on and reproduce (1980: 6).

Students in the Middle Class School were given a freer rein by allowing them to contest answers and to express opinions. They often worked in pairs, and the focus was on the process of arriving at the answers rather than passively following the step-by-step process.
Creativity was rare, and the student's understanding of problems and concepts was paramount in the teacher's lessons (1980: 8).

In contrast, the *Affluent Professional School*, Anyon found the focus was on creativity in the classroom. For these students there were an abundance of answers, all good. One teacher interviewed stated, "There's value to them discussing their ideas" (1980: 9).

The *Elite Executive School* was concerned with intellectual analysis and problem solving. In one Social Studies class the questions were generally open-ended. One teacher said, “These children's opinions are important - it's important that they learn to reason things through.”

The teachers and, in many ways, the students themselves, believe that one day they will “run the town” (1980: 10).

Her findings were considered foundational at the time and they provide a concrete and empirical basis for my theoretical work. They also take account of specific aspects, within the theme of social class inequalities, such as teacher's expectations, classroom activities and student interviews rather than dealing solely with abstractions. Anyon stresses that while some of her findings may seem generalizable to the population and educational institutions, she herself did not intend to generalize beyond the sample (1980: 2).

2.1.3. **PROponents AND CRITICs OF ANYON**

Still, Anyon’s proponents and critics have pinpointed areas of concern in her research. One issue taken up with Anyon’s article is in the treatment of her classifications as homogenous. Although Anyon continually explains that her analysis of the schools is not to be used as a catch all for all students or classrooms, the future use and response to her research has largely ignored this. Some critics have made broad speculations about and counter-arguments to her claims.

Ramsay (1985) in his exchange with Anyon questions the absence of considerations of intersectionality with regards to race and ethnicity. He accuses Anyon’s descriptions of being “too tidy”, claiming that although social class is one aspect of consideration in educational inequality it is rarely sufficient to explain any phenomena fully (Ramsay, 1985). In another article, Luke (2010), albeit in support of Anyon’s work, describes it as “beginning from the empirically and quantitatively documented social facts of educational inequality (emphasis added, 2010: 3),” rather than using her observations as independent from such research. In Ramsay’s (1983) response to Anyon the most prevalent objection was a protest against her method of ignoring race within her observations. Ramsay insisted that Anyon’s classification of the students was based on social class alone, and that such a single-factor classification is insufficient (1983). Anyon (1985) went on to defend that her work was indeed a single-factor classification system, and a well-defined one, as stated in her work; and furthermore, controversies of this kind are not unusual in the field of social
class and education. Many researchers have struggled with attempts to extrapolate the “twin pivots of race and class” (Rist, 2000: 258, see also Ogbu, 1983; Ogbu and Simons, 1998; Reardon, 2011, 2014, 2016) while other researchers rebuke those who have (King J.E., 1991; Kozol, 1991; Ramsay, 1983).

Though it should be noted, a large body of research disagrees with Ramsay’s contention that social class is rarely sufficient for a thorough analysis (Anyon, 2014; Block, 2013; Reardon, 2016; Reardon and Portilla, 2015). Ramsay (1985) calls for a more complex version of Anyon’s Social Class and the Hidden Curriculum of Work that maintains a firm intersectional understanding of all forms of inequality within a study, be they socioeconomic, gender, cultural, ethnic, racial or linguistic. What seems like Ramsay’s desire for more intersectionality in Anyon’s work also appears to act as his call for researchers to halt deeper consideration of individual aspects of inequalities. It is arguable that these inequalities seem easier to operationalize when they are unpacked and looked at one by one. Ramsay’s (1985) call is also contrary to a more Latherian (1986) approach, one that recognizes the ideologies and limitations that Ramsay requires, as well as the added aspect of being self-aware, but requires more rigorous empiricism.

The second issue that remains problematic and is particular to my research is not Ramsay’s concern that social class is an insufficient indicator for difference, it is that Anyon’s discussion of the Middle Class School (and indeed all of Anyon’s categorization) hinged on the labelling of the Middle Class School as a homogenous group, though she does divide the parents’ occupations in the Middle Class School into three groups (all categorizations are Anyon’s, 1980):

1. blue-collar "rich,:" primarily skilled manual laborers
2. working-class and middle-class white-collar jobs: primarily office jobs and city employees and,
3. "middle management": primarily white-collar occupations such as mid-level employees of local firms, accountants, small business owners and even some doctors

She then looks at the students’ classrooms and sees the skills being taught as reflective of the requirements for these occupations. Anyon’s study found that in the Middle Class School most creativity was stifled, the lessons were mostly done directly from the textbook and the dominant focus was on “getting the right answer” and "get[ting] a good grade” (1980, 5).

If Anyon’s classifications of a Middle Class School are accurate, all of the students in the middle-class spectrum would need similar skills (or “work” as Anyon refers to classroom lessons, instruction and activities). In Anyon’s view, these similar skills would be instrumental for the potential careers the teachers in the Middle Class Schools believe these students would someday have, and in turn, these careers would also need similar skills. Anyon’s ethnographic analysis resulted in evidence for ‘work’ being defined by the
students' social class and that the 'hidden curriculum' of work is tacit preparation that the teachers have assumed is required for the students' future careers (Anyon, 1980: 11). In my research, it is likely that all the schools that were observed generally encompassed the three groups Anyon categorized as middle class: blue-collar "rich", working-class and middle-class white-collar jobs, and "middle management," with a few exceptions. Thus, using Anyon's assumption that students are prepared only for the level of education and skills that their parents are judged to have, it is not remiss to conclude these students should be made to do similar activities and produce similar output.

Anyon, continually emphasized (1979; 1980; 1983) as I will, that the observations she made were only small snapshots of the schools and their practices. I intend to address Anyon's seeming reduction of her class categories as homogenous groups in my thesis. Anyon previously acknowledged the limitations of her study with regards to ethnicity and culture when she revisits Ramsay's critique of her study (Anyon, 1985), but she overlooks this aspect of the study. This could have been because there was so little standardization across schools in 1980 that she would have been less able to target such specific social class differences.

The research I offer in my thesis hopes to function as an addendum rather than a correction to Anyon's work as curriculum standardization and major education reforms since 1980 require a new look at schools in the manner of Anyon. It is against the background of taking a new look, rather than addressing shortcomings of Anyon's research, that these questions of the differences among the middle class are discussed and looked at focusing on the reality of how the work is being done, rather than Anyon's previous exploration of what was being done.

While many educational researchers take radical stances on research when discussing social class, these ideological stances often detract from the observational methods used in classrooms, major findings and influential arguments stemming from these ethnographic studies (Anyon, 1980; 1981; Kozol, 1991; Rist, 1970). As Luke (2010) a supporter of Anyon's work, points out in his revisitation to Social Class and School Knowledge, "Ethnographic research can instantiate and bring life to quantitative macro-sociological documentation on persistent patterns of educational inequality" (Luke, 2010: 2). Luke (2010) believes Anyon's Social Class and Hidden Curriculum of Work and School Knowledge were major landmarks in observing inequalities in talk rather than curriculum ideology and that drew the attention towards, "persistent uses of the authority sources and uses of knowledge." (Luke, 2010: 3). The empirical findings of Anyon's observations set the background for significant amounts of both quantitative and qualitative educational

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5 I say likely because I use an alternative method of classification to Anyon, so this supposition is made only in order to reflect on how my schools would fit into Anyon's structures.
research and is widely read in teacher education classes (eg. University of Massachusetts – Boston, 2015; University of Wisconsin – Madison, 2016; City University of New York, 2017).

Anyon's last response to Ramsay stated, "What is interesting to me is... the marked similarities in our findings despite enormous cultural, physical, ethnic, class and historical differences between The United States and New Zealand" (Anyon, 1985: 210). In my view, as well as Luke’s (2010), this similarity in global social class differences in education evidenced by both Anyon in New Jersey in The United States and Ramsay in Auckland, New Zealand allows researchers to do empirical research that focuses on class, without ignoring race, but setting it aside. The possibilities that these two projects can be so small and specific yet become generalizable to such a large body of research is in itself a reason to believe that the separation of the two concepts of race and class can be extricable to an extent in order to focus on one or the other, and are at least as problematic as other issues in ethnographic research. In focusing primarily on social class my study is in line with Luke (2010) in his belief that,

"our refinement of an understanding of the intersecting influences of social class on educational equity and indeed social justice... continues, but tempered by an understanding that social class is a necessary but not always sufficient or comprehensive explanatory category for the analysis of educational practice and attainment" (Luke, 2010: 19).

2.2. Social class and language

In concert with social class a second focus of my research is language. It is vital, then, to consider some foundational perspectives on how language may contribute to the reproduction of social class. It is difficult to consider social class in language and education without reflecting on Bernstein's theory of elaborated and restricted codes and Bourdieu's cultural capital and habitus. These theories are reminiscent of Marx who believed that few social factors were not guilty of perpetuating class inequalities (Apple, 1992).

**Basil Bernstein’s code theory**

Truly understanding what Bernstein (1962; 1964) meant by his codes could be the subject of an entire thesis, and indeed is the subject of several expansive articles (e.g. Apple et al., 2002; Harker & May, 1993). However, it is impossible to ignore the relevance of Bernstein’s code theory to my own work. Bernstein’s initial discussion of codes defined them as "Forms of spoken language in the process of their learning initiate, generalise and reinforce special types of relationship with the environment and thus create for the individual particular forms of significance" (Bernstein, 1962: 31).

According to Bernstein (1971), the two codes: restricted and elaborated are both learned, but each code is designated a place in the social structure. Restricted codes are restricted in the sense that they are limited to direct language. There is a lack of metaphor, complexity
and vocabulary in the restricted code. Elaborated code includes metaphors, complexity and expanded vocabulary, as it is needed for a more varied set of social situations. While the working class generally only need the restricted code, consequently, their “social identity is constrained” (Bernstein, 1964: 57) by that code. The middle class, however, has access to both codes. Here, one can see parallels to Anyon’s findings of the working class students that were assigned only rote tasks, and the executive elite students who were discussing abstract ideas (1980).

Even more code theory is reflected in Anyon’s work Social Class and School Knowledge where in the working-class schools the students saw knowledge as the basics and “facts and skills” while the Executive Elite students were being prepared to solve problems. One example of a student response when asked what knowledge was strikes me as particularly suited to a discussion of Bernstein’s codes. The student, who was in the Executive Elite school when asked about knowledge, replied, “It depends on how you use it [the word]. There are two kinds of knowing: information knowing and wise knowing. Information knowledge, that’s what you learn in school. Wise knowing is moral knowing, it’s maturity, you learn that in life” (1981: 28). This student would no doubt be engaging her elaborated code in this situation.

Bernstein has been criticized for the essentialization of students language that the code theory has given rise to and contributed to the mindset of a deficit ideology in terms of social classes. It should however be noted that the evolution of Bernstein’s research develops and formulates more nuanced delineations across elaborated and restricted codes. He also adds emphasis to the contribution of hegemonic factors in the stratification of these codes. Bernstein describes his stance, and a subsequent clarification of his code theory, “[it] accepts neither a deficit nor a difference position but draws attention to the relations between macro power relations and micro processes of transmission, acquisition and evaluation and the positioning and oppositioning to which these practices give rise” (Bernstein, 1990: 118).

Bourdieu’s notions of habitus and cultural capital

Bernstein refers to codes when discussing access to Bourdieu’s concept of cultural capital, though most researchers see it as aligning with Bourdieu’s notion of habitus. Bourdieu himself has described habitus, likening it to Bernstein's codes, but subsequently explaining where they differ, “The concept of habitus, however, is a more general concept, more extensive and exhaustive in its regulation. It is essentially a cultural grammar specialized by class positions and fields of practice (1990:3).”

The notions of habitus and cultural capital are thoroughly intertwined and because of this are very often conflated to a great extent, though discussed as separate entities
One way to look at these two concepts is as an imagined self-perpetuating cycle where the more capital for use in the game one possesses, the more one's habitus necessarily develops a “feel for the game”; the more dominant culture one has access to, the more one's disposition enables them to navigate that culture.

Bourdieu explains that while capital is garnered through ‘cultural products’ or “assets and resources” (Hollingworth et al., 2011) specifically language and educational institutions as well as societal beliefs and practices (Bourdieu, 1986: 471), the nature of habitus is very much an involuntary process of habituation to a culture or social situation without any conscious concentration on acquisition of said 'habitus', and is “seen as inherent in the nature of things” (1976: 118).

Hollingworth et al.’s (2011) study illustrates these concepts using technological skills for academic achievement as an example. She describes how coding and knowledge of technology skills are now perceived by many parents as vital to a successful education. The social class division then becomes tangible. Demonstrated by the difference between middle-class parents who possess the habitus, as well as the cultural capital, to be able to enact this desire for their children to have technological skills as a cultural resources, and those in the lower classes who are constrained by their own lack of habitus, as well as social or economic capital, to impose these skills on their children. This stratification between classes can be seen to be a product of these two Bourdeusian concepts.

Examples such as this, describing habitus and cultural capital in terms of lower, working, middle and upper class are pervasive. In relation to language and education the pertinence of habitus and cultural capital allows us to make sense of schools as middle-class
institutions (Apple, 1993)- producing lessons for middle-class children, with language they are familiar with - and ask how this is problematic.

Bourdieu addresses the mismatch of habitus in the education system stating, “[It] demands of everyone alike that they have what it does not give...” (Gaddis, 2012: 2). He contends that the upbringings absent in the transmission of the dominant culture (cultural capital) leads to an inability to develop a “disposition” (habitus) that allows for a certain comfort with and around the dominant culture. This in turn harms students opportunities for climbing the socioeconomic ladder. Bourdieu is concerned with this issue particularly as it related to youth lower on the socioeconomic status spectrum (Gaddis, 2012: 2).

Although Bourdieu's conceptions of social and cultural reproduction seem to rely on Weber's vision of social class as being acquired through many different aspects of life including marriage, fame, cultural capital, social status and by virtue of birth (i.e. beauty, athleticism) (Smith, 2007). Anyon’s study relates in that the parental occupation of the students' is the primary indicator of social class. This gives rise to the results of Anyon’s study which demonstrates the reproduction of social class as perpetuated by cultural reproduction, and necessity of the specific skills and cultural capital for those occupations that the student was expected to inherit. The need for a skill is only relayed to the student as a product of the future need to reproduce the occupational requirements of their parents. Bourdieu refers to this social reproduction from the parent to the child as “hereditary transmission of power and privilege” (1973: 257). Bourdieu gives schools more credit that they may deserve as he believes the institution of education is quite good at masking its intentions of social and cultural reproduction. Many researchers, in particular Apple and King (1977) claim that this type of reproduction is exactly what schools are for, and the notion that it is not what we want from our schools is a radical one (Young, 2009). Apple and King (1977) go further to state that it is not only the institution of education that performs this reproduction, but even “curriculum has its roots in social control” (344).

*Codes* and *habitus* form the basis for designating much of language “to account for the differential positioning of persons within the division of labor. Such positioning is a function of power, and the coding of power is implicated in language” (Atkinson, 1985: 101). This speaks to its inherent relation to Anyon and even Marxist theory.

Bourdieu's class reproduction explores the wider process of connections and networks and the cyclical process of academic success, and consequent socioeconomic success (1977). Bernstein also specifically “recognizes that knowledge and symbols – as commodities and as a part of a set of social practices that are organized around the economic and cultural capital and patterns of mobility for identifiable class actors... are crucial” (Apple, 1992: 134).
Society has ingrained power relations and cultural capital on nearly everything. Beckett (2010) claims that there’s no shortage of things that allocate where you belong in the social spectrum. He goes on to explain, “In fact, being middle class has always been a slippery business. Having servants, renting a good property, owning a good property, owning a business, being employed in one of ‘the professions’, how you speak, how you use cutlery – at different times, all these have been regarded as essentials of middle-class life”. This description of the extent of what classifies one in terms of social class resonates as a Bourdieusian reflection of habitus and cultural capital and its ability to participate in the perpetuation of the status quo.

If these theories help us to conceptualize the way social class and the preservation of power works in society, then we can use these concepts in relation to educational institutions. Apple continually champions the notion that educational institutions and their teachings are inextricably linked to “the larger society” (1992: 131). This conception of the preservation of power in “the larger society” is central to Marx and Anyon’s work, as well as Anyon’s efforts to expose inequalities in education and her contributions to educational theory, social justice and urban education (e.g. 1980; 2014). The idea that classroom education may be instrumental in perpetuating inequalities is also central to my thesis. My focus relies on an extensive look at the language and lessons of teachers in middle-class schools in order to achieve a greater understanding of differences in classroom practice across the middle class.

2.2.3. Social class and intersectionality

Social class in my thesis is not only held up as a sufficient aspect to use for analysis, but the analysis is simplified by minimizing the issue of race, ethnicity and language, and focusing on primarily white, middle-class schools in order for social class to be the ultimate focus. In this section I will review and respond to objections to social class research in a vacuum, when in most cases class, race and education are inextricably linked by social, racial and historical factors.

Social class is a key concept in this project, yet as in all cases when it is discussed, the term gives rise to much debate over how each class is to be defined. How does one reconcile the different ideologies and subjectivity involved, or account for the large numbers of outliers and exceptions? I consider opting for terms such as ‘disadvantaged’ or ‘under-privileged’ rather than involve myself in the complicated task of delineating the social class indicators that I believed were appropriate. However, no matter what easily definable concept I replace it with; I am still discussing the issue of social class stratification in education. I will

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6 Beckett was referring to cultural capital indicators of the middle class in the United Kingdom, which undoubtedly is an entirely different conception of social class than the United States. However the comment provides an understanding of what types of cultural capital could be indicators of middle classedness.
provide publically available data and describe the schools in rich detail when conducting my research, it is important to note the divisions between the cities and schools I observed were already obvious, as acknowledged by the teachers in their interviews, before any analysis had taken place.

Rist, who in 1970 wrote *Student Social Class and Teacher Expectations*, widely seen as another foundational text explaining how schools helps to reinforce the social class structure of society, revisited his research more than thirty years later, and maintained his 1970 stance that “the dynamic between class and race supersedes the prominence and effect of either one” (2000: 134). The literature provides evidence that race and class are powerfully and inextricably linked in the United States. Attempts to isolate one or the other will unavoidably leave research open to some level of criticism, though it seems remiss to imply that research on one is invalid without the other.

This is not a claim that social class is, or ever can be, a “stand alone” variable, though it is vital as one factor among a collection of factors. Some of Giroux (1980) and Bernstein’s (1962: 1964) major contributions to language and educational research involved isolated uses of class. Today most researchers see the idea of social class as working in conjunction and in “relation to gender, ethnicity/race, affiliated culture and subcultural context, linguistic disposition, and indeed sexuality and sexual preference” (Luke, 2010: 19).

2.2.4. Gap in the Research: The Middle Class

Another aspect of social class is that the literature on social class in education has largely been dominated by studies of disadvantaged, working class and low-income schools and students. The absence of social class studies on students from other parts of the social spectrum leaves a disparity in the literature, and a failure to look at a large population of American students. Without observations on these students, research will continue to discuss ‘failure’ in schools and education without analyzing the students who are reaching standard levels of achievement in terms of Massachusetts and United States as a whole.

Success in much of education is defined as high school graduation, passing state standardized exams and movement onto higher education. This is a simplified version of educational success and in general the contrasts are clear when comparing the low-income schools with the upper-class schools. Examining the differences within the middle classes may provide novel types of findings that a simple rich school vs. poor school analysis has not been able to contribute. Apple contends that often the middle class is wrongly grouped together stating, “The middle class – occupies an important place in the economy, the state and cultural institutions, it would be all too reductive to see it as homogenous” (1992: 144).
2.2.5. GAP IN THE RESEARCH: WITHIN THE MIDDLE CLASS

That being said, research on differences within the middle classes is also minimal. The “middle class” in education has some presence in the literature (e.g. Ball, 2003; Crozier, 2015; Crozier et al., 2008; Reay et al., 2011), but even so it is seen as limited to a small body of research in the United Kingdom where reference to “middle class” seems to be far more restricted to the upper classes. Yet even within the United Kingdom, Keane (2011) claims most of the studies on inequality and education focus on the working-class. Keane, drawing on Ball (2003) goes on to explain that the absence of much focus on the middle-class students ignores, “How privilege operates to (re)produce and sustain inequality” (Keane, 2011: 451).

In the United States the research on the middle class is even less prevalent. There are distinct calls for such research that explores a wider range of aspects of social class and its usefulness by Block (2013), Vandrick (2009; 2014) and Reardon (2011; 2016). Additionally there is a small area of work that focuses on privilege, specifically in the areas of global wealth, race and heteronormativity (Case, 2013; Case et al., 2014; McIntosh, 1990; Vandrick, 2009; 2014).

Granting this, there remains a persistent shortage of a discussion of inequalities among the American middle classes. Lopez-Calva and Ortiz-Juarez (2014) address this absence of analysis from a global middle-class perspective, which gives a promising account of the varieties of the middle classes, specifically those on the verge of poverty. Atkinson and Brandolini’s (2013) report on defining the Luxembourg middle class also delves cautiously into the discussion in terms of income though the research is focused on particularly affluent countries.

Until recently, the American middle classes have continually been seen and referred to as socioeconomically homogenous (Jackson & Marsden, 2012; Posey-Maddox, 2014; Weller, 2006) and there is a noticeable lack of qualitative evidence supporting the notion that such incremental inequalities exist. Even large scale statistical analyses on inequality across the entire spectrum of social classes (ones which provides quantitative evidence for these incremental inequalities) present the results by emphasizing the stark differences between the two ends of the spectrum, the very rich and the very poor (Chetty et al, 2014; Reardon, 2011; 2016). The literature is in need of contributions to this area of research on middle-class schooling differences, differences that we know statistically exist but need insight into how they play out in the classroom. My thesis seeks to contribute to knowledge on the topic of middle class education and the differences and similarities across incrementally unequal middle-class categories.
2.3. CURRICULUM

2.3.1. INEQUALITY AND CURRICULUM STANDARDIZATION

The section that follows presents a discussion of inequality and curriculum standardization, curriculum theory and follows with a consideration of two significant debates within curriculum theory literature. The focus of my research is on a look at classrooms in the manner of Anyon’s Social Class and the Hidden Curriculum of Work post-curricular standardization. Thus, is a necessary component of the research to explore the theoretical foregrounding of the standardization, development, and implementation of curriculum as well as the theoretical debates within the field. While curriculum theory has arguably been a contentious discussion since Dewey (1902; 1938), Kilpatrick (1918) and Bobbit (1918), this thesis operates from the movement towards mass national standardization of curricula most markedly with the release of A Nation At Risk7 (1983), a report by the United States Department of Education claiming the public schools are insufficiently preparing American students for their futures. This largely culminated in the establishment of policy reforms known as "standards-based reform" which represented a starting point for curriculum standardization across The United States.

The relevance of a discussion about inequality and curriculum standardization as a background to this study is particularly salient in light of the ongoing push towards the Common Core Standards Initiative8 in The United States. Policywise this nationwide curriculum standardization measure was implemented as a response to ongoing criticisms of US educational inequalities. These educational inequalities are oftentimes equated with curricular inequalities across socioeconomic lines or, education by zip code. Education by zip code refers to the idea that, "a student's exposure to a topic depends on where he or she lives as students' social backgrounds remain significantly correlated with their opportunities to cover content" (Timberlake et al. 2017: 46).

Educational inequalities are, in the main, researched as they pertain to gaps in educational attainment that primarily affect students the Department of Education (2017) refers as: 'underserved groups and communities', 'historically underserved populations', 'traditionally underserved groups' etc. (as mentioned in Timberlake et al., 2017). These inequalities have been attributed to an enormous variety of factors, many of which contribute to the choice of my participating schools such as: teacher qualifications (Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2008; Darling-Hammond, 2001; Mansfield, 2015), higher education attendance (Hearn & Rosinger, 2014), standardized test scores (Au, 2016; http://thenotebook.org/articles/2004/09/22/origins-of-the-standardized-curriculum/)

There are two of many articles citing the 1983 report A Nation At Risk as the beginning of ubiquitous standardization of curriculum in the United States. While this may be an unofficial starting point, it works well for the purposes of this thesis as it is shortly after Anyon’s (1980) Social Class and The Hidden Curriculum of Work, and is widely understood as the beginning of standardized curriculum in terms of public knowledge.

8 http://www.corestandards.org/
However, these measures only scratch the surface of known correlating contributors to social, racial and educational inequality such as: social capital (Lundberg, 2013), home ownership (Boehm, & Schlottmann, 1999), free and reduced lunch eligibility (Fram, Miller-Cribbs, & Van Horn, 2007; Kurz, 2004), health (Basch, 2011; Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010), expulsions, suspensions and other forms of discipline (Gregory, Skiba and Noguera, 2010; Lynn, & Parker, 2006), social and emotional factors (Becker & Luthar, 2002), participation in Advanced Placement (AP) classes (Klugman, 2013; Solorzano, & Ornelas, 2004; Taliaferro, & DeCuir-Gunby, 2008), educational debt (Ladson-Billings, 2006), school and city resources (Betts, Reuben, & Danenberg, 2000), parental education and involvement (Howard & Reynolds 2008; Jeynes, 2005; Lareau, 2000) as well as bi- and monolingualism and language spoken at home (Breen, & Jonsson, 2005; Crosnoe, & Turley, 2011).

There is no shortage of literature noting the glaring lack of policy that attempts to address any number of these other factors empirically proven to have significant effects on these educational inequalities. Fundamentally, the focus of policy initiatives are efforts to get students from ‘underserved groups and communities’ to climb the socioeconomic ladder by achieving academically (Jones & Vagle, 2013), and by proxy the notion that “those on the bottom rungs earn less in wages, status and overall perceived value and therefore in order to be recognized as valuable to society either through measures of salary or prestige, must work relentlessly to climb the ladder (Jones & Vagle, 2013: 129)”.

Thus, it makes sense that the ultimate solution of policymakers is to equalize education by having students in “underserved groups and communities” receive the same education as students in more affluent communities by standardizing curriculum as a means to do so. Ayalon (2006) claims that this is indeed the case and states that, “school curriculum plays a major role in the discourse on the policies that may help reduce educational inequalities (2006; 1186). It is so pervasive that most teachers relentlessly defend this tactic, even when direct experience demonstrates this is not the case (Timberlake et al., 2017).
Greene continues to object to the notion of widespread standardization and believes that not only is 'the same education' not a solution but it is partly responsible for socioeconomic achievement gaps. Greene comments that,

> a single standard of achievement and a one dimensional definition of the common will not only result in severe injustices to the children of the poor and the dislocated, the children at risk, but will also thin out our cultural life and make it increasingly difficult to bring into existence and keep alive an authentically common world. (1995: 172-173)

It is the contention of this thesis that a potentially informative (and previously absent) take on the idea of observing curricular inequality in the middle of the socioeconomic spectrum may be more effective if many of these empirically cited inequalities (i.e. poverty, income) were lessened to the point of near equality or incremental inequality in terms of their socioeconomic position and the educational achievement of students.

Critique of specific curricula is to a great extent beyond the scope of this thesis, though I add some thoughts on the Massachusetts Curriculum Framework in the following sections as well as in the Methodology chapter. The key motivation for this study lies in the fact that in the present day, unlike at the time of Anyon's study, there is a standard curriculum. Observing teacher talk and lessons filtered through a standardized curriculum (any standardized curriculum) may reveal new insights into the ways teachers present and convey a standardized curriculum.

Necessarily it is important to point out that approaching the study using standardized curriculum as a filter does not invalidate the claim curriculum standardization does not create education standardization (Powell, 2014). It does, however, rely on the assumption held by many administrators, policymakers, teachers and the public that the use of standardized curriculum provides standardized education practices and opportunities (with respect to curricular offerings) across the socioeconomic spectrum (e.g. Timberlake et al. 2017).

Citing both popular media and academic research in both the United States and the United Kingdom (Carpentier, 2014; Savage et al., 2014; Schmidt & Burroughs, 2012) the term curriculum standardization attempts to create the appearance of an educational initiatives that create a more socioeconomically equal footing. This expectation is even mentioned in the Massachusetts Curriculum Frameworks claiming, “the standards aim to align instruction with this framework so that many more students than at present can meet the requirements of college and career readiness” (MCF, 2011: 5).

Previous research substantiates the claim that it is not unnatural to see a standardized curriculum, as education standardization (Ravitch, 1995). My study does not aim to provide an analysis on the standardized portion of the curriculum, but rather intends to address the
diversity of language and lessons used to teach a standardized curriculum, specifically among groups that are generally thought to be similar in terms of social class.

2.3.2. Curriculum Theory

My discussion of curriculum theory is divided into four sections. I begin with a reflection on particular aspects of curriculum theory, and which aspects of these theories are identifiable within the Massachusetts Curriculum Framework (MCF). Specifically, I relate these theories primarily to the MCFs guidelines for preparing students for becoming The Literate Person of the Twenty-First Century (MCF, 2011: 3), the ten Guiding Principles (MCF, 2011: 7) of the framework as well as several other aspects of the document. Specific content or text requirements are not discussed in detail with respect to curriculum standardization or curriculum theory in this section.

I then go on to explain the issue of theory versus practice that remains relevant to any discussion of curriculum, and causes much controversy within the field of curriculum theory. Even with a set of curriculum mandates inspired by more practical content knowledge-based theories, the issue of what actually happens in class in practice versus in theory continues to merit extensive discussion in the literature. An expansion of the theory versus practice debate is an overview of how this debate shapes the creation of curricula into both the genericization of curriculum and the overstandardization of curriculum. Both of which are problematic to some extent, citing Timberlake et al.’s (2017) work with scripted curricula and reflecting on the Massachusetts Curriculum Framework’s use of genericization.

Dewey appears to foreshadow some of this predicament and the futility of the debates with a view to the belief that the end result of an ideological debate between the two is the same in terms of the end of product of curriculum standardization. He states,

"by the time [the progressive’s] ideals and theories had been translated over into their working equivalents in the curriculum, the difference between them and what he as a conservative really wished and practiced became often the simple difference of tweedle dum from tweedle dee. So the “great big battle” was fought with mutual satisfaction, each side [conservative and progressive] having an almost complete victory in its own field. (Dewey, 2001:388)

Finally, I provide a short explanation of how my research is shaped by the literature and theories of curriculum as explained by Eisner (1994), Au (2012) and Bernstein (1996).

2.3.3. Massachusetts Curriculum Framework and Curriculum Theories

The wider questions of: what a curriculum is, what the objectives of curriculum are, what should or should not be included in a curriculum and how a curriculum should be developed, are just some of the questions asked by curriculum theorists (Smith, 1996; 2000).
A lack of agreement over what in fact, curriculum theorists are theorizing adds another complication. MacDonald (1971) explains that within the broader scope of curriculum theory there are three theoretical orientations: knowledge oriented, reality oriented and value oriented. Pinar (1978) early on divides curriculum theorists into traditionalists, conceptual empiricists and reconceptualists, though again this division only serves to further complicate the subject. The division also does not hold up to the various reconceptualizations, crises and deaths of Curriculum Theory over the years, many of which are constructed by Pinar himself (1995; 2006).

Though not all encompassing in terms of its discussion of curriculum theory I will primarily organize this section around Young’s (2014) 3 Futures. Much of the additional literature I review is grounded in the traditionalist and the reconceptualist views of curriculum theory (Pinar, 1978; Schwab, 2013; Young, 2013).

I specifically use Young’s categorization of 3 Futures as it enables a more nuanced version of curriculum theory than the overarching public understanding of curriculum as traditional (conservative) vs. progressive, but also reflects a division that corresponds to many of the Massachusetts Curriculum Framework components. The 3 Futures also creates a clear separation between these conceptions that in practice are difficult to separate. At the end of this section, I expand on the concepts in terms of these 3 Futures and add elements from the framework, as well as theories that fall outside of the scope of Young’s proposed Futures. It is importnat to note that Young’s 3 Futures have evolved over time, and Young’s earlier iterations of organizations of curriculum theories were polarized in terms of ’curriculum as fact’ vs. ’curriculum as practice’ and a critical opposition to rigidly codified knowledge (1975; 1999). However, Young’s 3 Future categorization is fit for purpose in its ability to synthesize the necessary ideas that can be seen reflected in the Massachusetts Curriculum Framework. These may contrast somewhat with his earlier stances but I believe this categorization is most effective at present in providing a broad understanding of curriculum theories for the purposes of this thesis.

As mentioned, a common distinction in describing curriculum conceptualizations is in terms of traditional (conservative) and progressive (Rafferty, 2011). One definition defines traditional curriculum as, “a plan for action or a written document that includes strategies for achieving desired goals or ends” (Ornstein & Hunkin, 2004:10) and progressive as, “the totality of learner experiences in relation to all educational arrangements and practices, as well as the political, racial, social, and gender-oriented issues outside the classroom” (Rafferty, 2011: 387)

Despite some clear definitions (Dewey, 1997; Ornstein & Hunkin, 2004; Pinar et al., 2004), defining progressive or traditional education has given rise to much dispute and confusion. As Davies states, “A precise definition of progressive education remains elusive” (2002:
He goes on to cite many scholars who have said the same (Cremin, 1988; Kliebard, 1995; Ravitch, 2000; Semel, 1999) and calls the multiple definitions that are available “an incoherent jumble of loosely related elements with little meaning” (270). While traditional and progressive curriculum theories have some relation to Young’s Futures 1 and 2, Young’s framing provides a much less “incoherent jumble” with which to work.

2.3.3.1. Future One

Future 1 promotes the conceptualization of curriculum largely seen as traditional or conservative. In Future 1 Young describes knowledge as a “one way transmission”, “a given”, unchangeable and “fixed in history” (Young, 2014: 63).

Hirsch, a contentious figure in curriculum theory, is largely responsible for the presence of Future 1 aspects’ ubiquity in curriculum across England and to some extent The United States (Au, 2013; See et al., 2017). Hirsch seemingly consciously fails to address issues of critical reflection on who defines and creates ‘knowledge’. He first produces a similar description in the 70s, yet even into the present day Hirsch (2016) insists that “by systematically imparting to all children the knowledge that is commonly possessed by successful citizens can all children gain the possibility of ‘success’” (2016: 116). The set of knowledge that equates to future success he calls “The Needed Knowledge” (Hirsch, 2016: 116). Hirsch maintains it is the public’s aversion to “imposed uniformity” that causes a rejection of his definition of successful curriculum. A problem with “The Needed Knowledge” is that it fails in large part to address any need for change within the canon of what is considered “Needed Knowledge”. Young’s primary objection to Future One is its rigidity of the constraints of knowledge. Others (Apple, 2014; Ayers 1992; Delpit, 2006; Freire, 1973; Greene 1971) reject the lack of student agency and the requirement of the teacher as the unquestioned purveyor of knowledge. Young later builds upon Hirsch’s theories of ‘Needed Knowledge’ by imbuing it with a description of ‘powerful knowledge’ that engages with the ideas that Hirsch ignores.

Mansour describes the type of education (2008; 2009; 2013) where teachers fill students’ “memory store” with information, and where students do not actively participate in the learning process as the type of curriculum that would suit the parameters of Future 1. Mansour explains that in this theory, “The teacher is seen as being an active transmitter of knowledge, the pupil is initially empty headed and plays an intellectually passive role” (2009: 29).

Parts of the Massachusetts Curriculum Framework that draw on the ideas of Future 1, work in concert with Future 2 and 3. The requirements appear to be based in a Future 1 description of learning a set of required facts and information. However, interestingly, the objectives are written in terms of the students’ actions rather than the teachers'. The
frameworks mandate that a student that meets the objectives of the Massachusetts Curriculum Framework will build[s] strong content knowledge and value[s] evidence (MCF, 2011: 9). This removes the teacher's role as purveyor of knowledge, by placing the onus on the student for acquisition of what could be seen as a form of Hirsh's "Needed Knowledge".

Importantly though, in addition to this it employs Young's conception of the way 'powerful knowledge' works in order to value the students' active participation. Young explains that powerful knowledge requires another step in addition to simple transmission of knowledge. He describes it as, “the interdependence of the two purposes of 'transmitting past knowledge' and being able to use that knowledge to create new knowledge” (Young 2014: 102). His description of 'powerful knowledge' and its two purposes seems to be the objective of many of the goals of the Massachusetts Curriculum Framework such as its description of a Literate Person of the Twenty-First Century as someone who “draws on informational texts and multimedia in order to build academic vocabulary and strong content knowledge” (MCF, 2011: 7).

2.3.3.2. Future Two

Young's description of Future 2 aligns closely with a more progressive educational conception in the view that knowledge is 'socially constructed' and open to change with respect to learners needs, interests and experiences (2014: 59). He explains that this Future was brought about by the changing needs of learners in particular in response to social inclusion and widening access policies and the growing population of students now required to remain on in school.

With Future 2 came a rejection of any defined objective knowledge. This was a refreshing change from the traditional curricular systems, which were now seen as outdated and elitist. It embraced the idea that "learning mattered more than teaching" and of "developing 'new kinds of smart'” (Young, 2014: ix).

Future 2 is based in no small way on aspects of Freire's conscientization stating that knowledge is dialectical and students need emancipatory learning. Conscientizaton (Freire, 1970) came to be seen as a concept of education where there was no fixed facts and learners needed to be emancipated from the oppressive power structure of the teacher as the purveyor of "Needed Knowledge". Freire claims conscientization includes the competencies to "intervene in reality in order to change it", and his vision of critical pedagogy is providing students with these competencies (with Macedo, 2005). Greene similarly objected to traditional curriculum standards claiming “a single standard of achievement and a one-dimensional definition of the common will... result in severe injustices to the children” (1995:173).
Young accepts that the inferences drawn from Freire's critical pedagogy in some way led to the construction of models focused largely on a rejection of all canonical knowledge in favor of personal knowledge, student-centered learning, and learner agency. Young explains Freire's writings do state that Freire believes the 'banking model' (traditional model) is not the solution to the emancipation of learners. But neither does Freire imply that the students are emancipated by being taught only a personalized, self-directed subjective view of reality. Freire's primary claim is that a model of education where a teacher transmits knowledge without inquiry, dialogue, or context of its creation is not an education at all, and is at its core oppressive (Young, 2014).

Apple (1978) who incidentally is largely seen as a proponent of progressive education, also sees much of Future 2's education that relies on subjectivity and personal knowledge as problematic. He argues against curriculum as primarily experiential and contextual, admitting that while yes, curriculum must be complemented by experiences, it cannot “become[] everything”. He goes on to reason that if everything is defined as experience, and all experience as knowledge, “there can be very little serious ethical, political or aesthetic dialogue... All things are equal; all values are relative” (Apple, 1978: 515). Apple's concern with the underlying power structures of canonical knowledge or 'Official Knowledge' as he calls it remains, but he aligns with Young's take that a subjective experience-based approach in itself is insufficient.

Some of the Massachusetts Curriculum Frameworks' values appear to fundamentally rely on a progressive/Future 2 view of education. The framework's guiding principles advocate for activities and objectives that work to “develop[] thinking and language together through interactive learning” (MCF, 2011: 7) as well as “build[] on the language, experiences, knowledge, and interests that students bring to school” (MCF, 2011: 8).

2.3.3.3. Future Three

Future 3 emerges from the belief that both Future 1 and 2 are both at least partially correct in their conception, but also “fundamentally mistaken” (Young, 2014: 66). While Future 1 defines and pins knowledge down to an unchanging set of information, Future 2 presumes that there is no preferred knowledge, and knowledge is subjective in light of its learners' needs and strengths.

Of the 3 Futures, the Massachusetts Curriculum Framework appears to base the majority of its curriculum guidelines on a vision much like that of Future 3, where teacher autonomy leads to the selection of both emancipatory and constantly evolving body of knowledge and canonical texts.

A key component of Future 3 is its solidification of subjects as codified, while knowledge within these subjects is constantly evolving. This notion of subjects as the “most reliable
tools to get knowledge and make sense of the world” allows for the flexibility of Future 2, but some aspect of a ‘Needed Knowledge’ or indeed, Young’s ‘powerful knowledge’ (2014). However, the evolution of knowledge is located not in the dialectical work of classroom learners and student experiences as it might be in Future 2, but in communities of specialists that are considered experts in their fields (2014: 67).

Young claims that Future 3 creates a balance between the stability of subject areas with the flexibility of evolving content (2014). A similar balance is repeatedly stressed in the Massachusetts Curriculum Framework in terms of necessity of learning a set of particular information, and then the flexibility to apply, question, manipulate or interpret that information. This balance allows for critical engagement without removing objective knowledge.

One specific stated objective in the Frameworks is for a student to be able to, “Balance knowledge, understanding, application for example, in knowing, understanding, and manipulating the “rules” of grammar” (MCF. W.7-9 http://www.doe.mass.edu/frameworks/). This example makes clear the students must develop knowledge of the “rules” of grammar, arguably a Future 1 set of immovable facts, and the ability to manipulate the “rules” of grammar, far more of a Future 2 use of social, adaptable, subjective knowledge. This corresponds almost perfectly with Young’s description of Future 3 as maintaining the stability of subject areas (grammar) with the flexibility of evolving content (manipulation of rules).

The Massachusetts Curriculum Framework also cites the need for “the skills in reading, writing, speaking, and listening that are the foundation for any creative and purposeful expression in language” (MCF, 2011, 3) and for students to “actively seek the wide, deep, and thoughtful engagement with high-quality literary and informational texts that builds knowledge, enlarges experience, and broadens worldviews” (MCF, 2011, 3). The coexistence of objectives that require both codified information, and ability to see that information evolve is paramount in Young’s Future 3 and is present in the Massachusetts Curriculum Framework.

In a practical sense, Young’s transcendant Future 3 appears to espouse the concepts and notions of a basic foundational structure of the Massachusetts Curriculum Framework. Although there seems to be a heavier emphasis on Future 2 in terms of explicit guidelines and principles, there is also a distinctly outlined set of content-rich knowledge-based requirements that function in the way Future 1 might. The documents combined set of requirements are reflected throughout and the autonomy afforded teachers within the framework makes it clear that teachers themselves are able to choose a personalized balance of Future Three’s two components.
2.3.3.4. Limitations

Young is largely concerned with social justice being an integral component of curriculum (2014). Though not an argument against Young’s conception of Future 3 as a “way of thinking about knowledge” (2014: 69), it is necessary to raise the point that a discussion of the hegemonic forces behind the creation of both knowledge and the structure of educational institutions is lacking in Young’s discussion of the 3 Futures. Apple mentions the continual need for this issue to be raised stating,

“Teaching and learning are fundamentally about influencing epistemology and consciousness, and, generally speaking, as long as what students are being taught and how it is being taught fall within the boundaries of the hegemonic commonsense of those in power locally or regionally, then the types of consciousness the curriculum fosters and develops in students tends to go unchallenged. (2012: 92)".

Though Young makes clear that he recognizes that knowledge is changing and changeable, there is little explicit recognition of the nature of knowledge makers, in the case of Future 3, “specialist communities of researchers in different fields” (2014: 67).

Proponents of Future 2 would argue that “curricular content, and knowledge in general ... is a construction of social class inequality and its content is controlled by the elite and powerful” (Baker, 2015: 764) and by limiting knowledge makers to specialists and researchers, again there is some inherent elitism about knowledge as well as the continued lack of contextual understanding of who is making the knowledge.

Now, this may be intrinsic in Young’s (2014) Future 3 where he states that subjects remain unchanged, but knowledge changes within fixed subjects. It can be argued that the subject of history can be be adjusted by expert historians to the realities of for example, the problematic notion of Christopher Columbus discovering America in 1492 to a more developed understanding of notions of power and colonialism and what ‘discover’ means in the context of 1492. Still, this adjusted discussion of history will also be managed and constructed in a way that may not enforce critical reflection on the knowledge makers i.e. expert historians. Au believes that the choice of content in itself employs underlying ideologies, going on to maintain that curriculum is inherently political and systematically perpetuates the status quo that presently is one of social and economic inequality (Au referencing work with Apple, 1995, 2012: 51).

2.3.3.5. Other theories

There are other aspects of curriculum theory that appear within the Massachusetts Curriculum Framework specifically that of a theory upholds curriculum as preparation for
life, citizenship and social action. While these conceptions are widely discussed they are difficult to categorize within organizations of curriculum theories, most probably because they do not tangibly stand in opposition to other conceptualizations, but as potential components of their constitution. The curriculum as preparation, citizenship, and social action perspective however, is seen in research such as Giroux (1983), hooks (1994), and Greene (1971) and usually focuses on a direct departure from traditional approaches and conceptions of curriculum.

Greene describes the dominant view of curriculum from the perspective of educational philosophers in terms of "a structure of socially prescribed knowledge, external to the knower, there to be mastered" (2) this is in line with much of Young's objection to Future 1 and many critical theorists' overall objection to traditional 'banking model' theories (Delpit, 2006; Freire, 1970; 1972; Greene, 1971; 1993; Kozol, 1991; 2005). Greene (1971) contends that a curriculum should enable growth in students and enable them, "To make sense of [their] own life world" and "offer occasions for ordering the materials of that world"... and to "realize what it is to generate the structures of [their] own initiative" (Greene, 1971: 253, 268).

As in Future 3, these objectives are echoed in the Massachusetts Curriculum Framework as students aim to attain skills that may enable them to be agentive in their own lives such as, "purposeful expression in language (MCF, 2011: 9)." and "the critical reading necessary to pick carefully through the staggering amount of information available (MCF, 2011: 3), as well as 'engagement with texts that enlarge experiences and broaden world views (MCF, 2011: 3).

Tedesco et al. (2014) requires that one consider the reality of society's functions and "expected results" in order to advance curriculum that allows for critique and self awareness and provides a system for adapting to more progressive and inclusive ideals. Rather than the curriculum being individual student preparation for future success, he maintains it is concerned with "the outcome of a process reflecting a political and societal agreement about the what, why and how of education for the desired society of the future" (Tedesco et al., 2014 et al: 527, emphasis added).

These theories can be recognized in principles in the Massachusetts Curriculum Framework that state that the classroom curriculum is meant "to nurture students' sense of their common ground as present or future American citizens and prepares them to participate responsibly in our schools and civic life (MCF, 2011: 8). The framework also does not limit these principles to individual citizens, but reiterates that the goal is to prepare the citizenry for the desired society of the future. The framework encourages the need for students "to understand other perspectives and cultures" and "appreciate that the twenty-first century
classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together” (MCF, 2011: 9). It also recognizes the capacity of the school’s wider objectives, and the curricular aims to “reach [] out to families and communities in order to sustain a literate society” (MCF, 2011: 8).

Grundy (1987) provides a point of view that carries the sense of Freire’s (1970) conscientization as he declares an effective curriculum-in-action’s objective should aim toward emancipating students from their own oppression. Grundy (1987) explains that curricula that focuses particularly on knowledge, production and process ignore the need for students to be able to enact these skills in order to improve lives. In her opinion, a curriculum that allows students to use these skills to negotiate society in the form of social action is integral to an educational system that produces successful citizens.

Preparation for citizenship and social action-based theories of curriculum appear to play and important role in the Massachusetts Curriculum Framework, supplementing aspects of Young’s Future 3 that have been previously identified.

The Massachusetts Curriculum Frameworks are standards that enforce a curriculum that works toward a vision of education where the ability to negotiate society is paramount to successful citizenry. A primary goal within that vision is for students to be able “to reflexively demonstrate the cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic” (MCF, 2011, 3). This one objective in itself, can be seen to encompass most of the curriculum theories that underpin the frameworks.

### 2.3.4. Curriculum Debate

A discussion of curriculum is vital to understand the nature of what is being explored across social classes in this study. Research on curriculum many times is the object of social justice-focused education research (see: Anyon, 1980, 1981, 2006a; Apple, 1993, 2004; Ayers et al., 2008; Ayers, 1986, 1992; Cochran-Smith, 2004; Giroux, 1992; Villegas, & Lucas, 2007). In order to sufficiently address the entirety of politics and issues of curriculum studies, I would need to address the overarching concerns of education and the cultural, social and economic implications that precede them. The scope of this thesis does not allow for such an exploration, but in this section I will discuss what is seen as a key debate currently surrounding curriculum theory, and how it is reflected in standardized curricula, as well as how that pertains to the present study.

Though the division of theory and practice in curriculum research has been called “artificial” (Pacheco, 2012: 2) it serves as way to understand the prior examination of a selection of theoretical conceptualizations. While Young’s Futures 1 and 2 are in line with
the polarization of the theory versus practice debate, it is clear that even Future 3 may be part of a contentious discussion of applicability and operationalization. In terms of this discussion, curriculum theorists seem to fall into one of these two categories of approaches to research: 1) An abstract, idealistic version of curriculum, or 2) A practical, functional guide to curriculum.

2.3.4.1. Theoretical
Theoretically minded research tries to address the overarching questions of curriculum in a way that considers the social and political context. Apple and King (1977) pose the question of what legitimate knowledge is. Rugg (1921: 698) asks, “How shall content be determined?". Greene (1993) along with Apple and King (1977) also ask questions concerning who is making the knowledge? Who is choosing what is legitimate? And who decides what is knowledge?

Pinar (1978: 210) explains the knowledge that all curriculum carries some dimension of the political is inherently underlying these questions. Greene (1993) agrees and declares a need to fight against knowledge that has only taken into consideration white men. She advocates an “ongoing and collaborative decoding” (212) of the works that are to be included in a curriculum with the ultimate goal of a curriculum that enables students “to become” (220). Pinar plants himself in the midst of the debate in that he claims to work with both theoretical and practical aspects of curriculum, but he concedes that many curricularists believe that theories are “usually at variance at what happens in schools” (Pinar, 1978: 207).

2.3.4.2. Practical
Young expressed some frustration with theoretical research, though I have discussed portions of his curriculum theories in the subsequent sections. He first takes issue with the theorists’ faith in the “emancipatory capacities of learners” as opposed to “trust in knowledge”. This leads directly to his key argument, one that he maintains is the crux of the crisis in curriculum theory (2013: 102). Young claims that the intense focus that curriculum theory currently has on who makes the knowledge draws attention away from the main question of curriculum theory, that of “what is knowledge?” or employing his terminology, what is “powerful knowledge?” (2013). By stating that the ultimate goal of curriculum is “being able to use knowledge to create new knowledge” (Young, 2013: 102), he contends that curriculum theorists have some level of responsibility to respond with a tangible answer to Apple and King’s (1977) question of what knowledge is, and make decisions about what students need for schooling, lest this question be left to bureaucrats (Young, 2013: 103) .
Though I am in agreement with Young that this question indeed deserves an answer from curriculum theorists, it does not relieve the question of its validity and is an important and necessary investigative direction, one that Young does not fully addresses.

Schwab (2013) seems to agree with Young in his frustration but seems more concerned with the lack of practicality in much of curriculum research. His explanation relies on the argument that theory is an ideal that is a lasting “truth” and describes what is best, while practice relies on “decisions” and prescribes what is better in that specific context. Schwab does not mince words in his rejection of the theoretical, decrying that “theoretical constructions are ill-fitted and inappropriate to problems of actual teaching and learning” (2013: 591).

2.3.4.3. Overspecification and Genericization

The debate has inevitably found its way into research on standardized curriculum where there exists a struggle between the genericization of curriculum and the over specification of standards. Pinar (1992) is early to predict this clash of “academic freedom” and the increase of standardized examinations.

Eisner (2000) later provides a reminder of these contradictory strands of the standardization of curriculum, he points out that there is a desire of school districts to produce curricular objectives that engage the students in meaningful learning outcomes. Noddings (2013) echoes this in her list of the “three great aims” of educational policy statements: “Cooperation, Critical Thinking and Creativity” (Noddings, 2013: 210). These objectives then face the problem that grading systems and standardized testing are not built for cooperation, as they encourage competition. They are not built for critical thinking or creativity as the tests are objectively scored with no room for these skills. The aspirational policy makers and school districts that Eisner discusses develop these types of curricula then are at odds with the requirements of high stakes testing that require highly specified, targeted information (Eisner, 2000).

As described, Future 3 strikes a balance between prescription of subjects and flexibility of knowledge. This is recognized in many of the Guiding Principles and mandates within the Massachusetts Curriculum Framework. Similarly, the Massachusetts Curriculum Framework also strikes a balance between highly specified content knowledge and criticality and meaningful learning outcomes.
This balance is evident in the History and Social Science learning standards where there is recognizable specificity and an objective basis for the information the students learn as in:

**WH1.** Using historical maps, locate the boundaries of the major empires of world history at the height of their powers. (49)

**CG1.** Define and use correctly mercantilism, feudalism, economic growth, and entrepreneur. (50)

**CG1.** Define and use correctly gross domestic product, economic growth, recession, depression, unemployment, inflation and deflation. (50)

Yet there is also evident flexibility for creativity and more critical thinking such as:

**USI3.** Explain the ideas of the Declaration of Independence. (65)

**WH13.** Analyze the causes, and course, and effects of Islamic expansion through North Africa, the Iberian Peninsula, and Central Asia. (51)

**USI23.** Analyze the rising levels of political participation and the expansion of suffrage in antebellum America. (68)

(MCF, 2011: page numbers as noted)

**Overspecification of standards**

The overspecification of standards has also been a topic of much of the research. Ladson-Billings (2007) refers to them when mentioning the repercussions of falling in international educational rankings. During those times in our history, she explains that is when there is a renewed focus on going “back to basics”, which means an extreme focus on those subjects seen as essential (i.e. math and reading). Specifically this affects schools in low income neighborhoods, in order to make progress (to rise in rankings; demonstrated by higher standardized test scores) the curriculum needs to do away with all unrelated subjects that are not considered essential (usually art and music).

Previously, I stated that the Massachusetts Curriculum Framework struck a balance between overspecification and genericization. In spite of this there are fragments of a rigid and objective set of essential rule-based basics as in: “Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing,” and “Observe hyphenation conventions” and “Spell correctly” (MCF, 2011:67). However, though these detailed specifications are evident in some parts of the framework, there is not an ‘extreme focus’ on these objectives in the way Ladson-Billings’ (2007) describes.

This type of curriculum, with acutely specific standards that led to many teachers in urban schools becoming essentially test preparation tutors has let to the deprofessionalization of teaching, sometimes these highly specific curriculum standards are referred to as teacher proof curricula (Priestley, 2011). Ladson-Billings (2016) calls it the “cafeteria style approach” and Greene questions these types of standards asking whether educators thought they should be producing “mere ‘job-holders’ and consumers” (1982: 5).
Eisner retreats to a neutral position explaining that, “there is a kind of tension between the desire for clarity that requires specificity and, the degree to which specificity impairs the very process it is designed to promote (2000: 345). For Eisner (2000), there is no easy answer. He describes the problems of standardized curriculum in terms of a paradox where neither genericization or overspecification works to achieve the desired outcomes of curriculum objectives or schooling:

When all students are expected to travel on the same road, towards the same destinations, at about the same rate, meaningful comparisons are believed to be possible. However, when students move along different tracks, pursue individual goals and develop their individual aptitudes, when resources to schools vary and where context conditions matter, meaningful comparisons are extremely difficult to make” (2000: 352).

Genericization

Priestley (2011) explains that there is a trend of many national curricula toward more generic criteria rather than a prescribed set of content stating, “soft skills required for the workplace” which seem to be replacing the type of “knowledge required to critically engage with the world” (2011: 223). Some examples of this genericification of curriculum include Scotland’s curriculum specifications of goals for students such as becoming a “Responsible Citizen” and an “Effective Contributor” or New Zealand’s curriculum requirements of “Using Language, Symbols and Texts” and “Relating to Others” (Priestley, 2011: 223-224, see also: Priestley & Sinnema, 2014; Curriculum for Excellence, Scotland; New Zealand Curriculum Online). This shift to a more generic criteria are particularly relevant to the United States’ (possible) adoption of The Common Core, though less so to the Massachusetts Curriculum Framework. While more specific in its requirements, the depth of understanding the students need to fulfill and the ultimate aims of the criteria is very much open to interpretation as demonstrated by these Common Core standards for 10-12 grade English Language Arts:

**CCSS.ELA-LITERACY.CCRA.R.2**
Determine central ideas or themes of a text and analyze their development

**CCSS.ELA-LITERACY.CCRA.R.3**
Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Priestley (2011: 223) questions whether these “soft skills” of contributing effectively, using language, and relating to others is sufficient for a more considerable goal of “critically engaging with the world” and whether acquisition of generic, decontextualized, skill-based competencies are even learnable without the accompanying content and context. The
findings in my thesis benefit from this query, and the resulting framework may help provide support for potential research into the topic.

Ravitch addresses the need for students to be able to "analyze a multiplicity of ideas and put their creative powers to work in answering questions such as: Where could I use this? For what purposes? In what context?" (2000: 210). Noddings (2013) adds to this, stating that generic skills are not unnecessary, but many times their overuse in a class leads directly to unequal classrooms. Much of the research argues that it is particularly common in underprivileged schools for the teachers to depend on the curriculum and skills-based requirements for how and what to teach, as opposed to the "conceptual and higher-order instruction" that may be afforded to the more advantaged students (Noddings, 2013: 214-215). Noddings relates this move to more generic curricular standards to educational inequalities claiming that new standardized curricula that includes "soft skills" requirements and generic learning outcomes ignores the reality that there may remain an imbalance in the development of required skills and outcomes depending on the student population.

Subsequently children who come from higher socioeconomic advantage will have these skills reflected in their environments earlier, lessening the need for the amount of direct instruction such as generic mandated specifications as, “using language, symbols and texts” (Priestley, 2011: 224). This then allows the teachers to use more and more content as a vehicle to reinforce these “soft skills” leaving the students in less advantageous situations working on these skills for longer periods of time.

My thesis, using the Massachusetts Curriculum Framework, assists in developing an understanding of how different teachers used language and lesson types across incrementally unequal school districts. As they are all using the Massachusetts Curriculum Framework as a structural basis for their lessons, the advantage of this approach is the data is better able to reveal differences and the observations can be analyzed under comparable classroom conditions.

Priestley's (2011) question of whether “soft skills” are indeed enough to “critically engage with the world” and the data found throughout my observations adds to a continual debate in education over standardized curriculum and its ability (or lack thereof) to create a more equal playing field in the classroom (Ravitch, 1995: 12). Notably, it is the use of the curriculum as a basis for comparison that allowed for some demonstrable indications of the curriculum’s salient differences through the categorization of lesson types in my thesis.
2.3.5. Framing and Observations

These debates are continually hashed out in the literature and I suspect will continue to be. The conversation is many times foregrounded in contentious and philosophical discussions of knowledge (Young, 2009; 2013) and consciousness (Au, 2012). The research in my thesis focuses on more tangible aspects of curriculum. The subsequent sections have addressed to some extent the theoretical constitutions of the Massachusetts Curriculum Framework. The following will outline the curriculum research that surrounds my analysis of the data, and how my data can be categorized within the discussion of curricular elements.

Au (2012) designates nine different elements of curriculum, though some have overlapping meaning. The chart outlines these elements and presents an organized view of different possible aspects of classroom data. Although Au's personal theory of curriculum goes much further into the objectives and requirements of a curriculum, this categorization allows for a view of the numerous dimensions one curriculum can have and the infinite analytical angles that are available to researchers (2012: 31-32).

<table>
<thead>
<tr>
<th>Curriculum Element</th>
<th>Consists of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Curriculum</td>
<td>... what is not taught (Eisner, 1994)</td>
</tr>
<tr>
<td>Explicit Curriculum</td>
<td>... institutionally established aims and objectives (Eisner, 1994)</td>
</tr>
<tr>
<td>Implicit Curriculum</td>
<td>The structure and convention of the classroom including grading, social interaction, and teaching style that convey norms and mores. (Eisner, 1994)</td>
</tr>
<tr>
<td>Enacted Curriculum</td>
<td>An amalgamation of the explicit and implicit curriculum (Eisner, 1994). Further understood as a compendium of all of the curricula listed here.</td>
</tr>
<tr>
<td>Overt Curriculum</td>
<td>Similar to the explicit curriculum in its basis in institutionally established plans (Weisz, 1989)</td>
</tr>
<tr>
<td>Social Curriculum</td>
<td>&quot;The social interactions that take place in the classroom&quot; (Weisz, 1989)</td>
</tr>
<tr>
<td>Hidden Curriculum</td>
<td>... &quot;tacit preparation for relating to the... reproduction of the system of relations in society&quot; (Anyon, 1980: 13)</td>
</tr>
<tr>
<td>Unofficial Curriculum</td>
<td>Teacher encouraged spontaneous and extrainstitutional lessons and activities (Weisz, 1989)</td>
</tr>
<tr>
<td>Masked Curriculum</td>
<td>&quot;Academic content 'masquerading' as a procedural/management or informal activity&quot; (Wiesz, 1989: 158).</td>
</tr>
</tbody>
</table>

I take efforts to capture several elements of curriculum in my analysis of observations that intersect with each other. This is in line with Au’s (2012) engagement with Bernstein (1996) and Vygotsky’s (1987) work to reimagine curriculum as a compendium of interactions in the classroom and school and not one specific “thing” (Au, 2012: 44)
The data I look at is analyzed in terms of both the Enacted Curriculum grounded in the concept that I am observing the Explicit "institutionally established aims and objectives" as well as the Implicit "structure and conventions of the classrooms... and teaching style" but crucially not the underlying "norms and mores" that the Implicit Curriculum may convey.

Huebner (1976; 1999) emphasizes that curriculum is indeed contextual and made of many elements. He magnifies the enormity of the selection of factors that may contribute to contexts specifically mentioning, “physical materials” such as the classroom itself, furniture, the selection of books and other available amenities and anything that can be seen as a purchase made as an investment in students’ environments. (1999: 221).

Huebner (1999) also reinforces Bernstein’s (1996) contention that the language chosen for in-class use, the ways in which a pedagogic discourse is applied, and the way content is taught constitutes the curriculum or as Bernstein refers to it, the ‘framing of knowledge’ (1996: 35). The central aim of my analysis is focused primarily on this conception of ‘framing of knowledge’. Bernstein’s conception concerns itself with theories of knowledge as an addition to the more easily tangible ways of assessing discourse and the communication of information. It is also concerned with the social context of the setting in which it is being communicated. Au’s (2012) description of framing draws on Bernstein (1996) and Morais (2002) and states, “Framing is about the selection of knowledge, its sequencing, its pacing, the criteria of selection, and the social/educational interactions that communicate that knowledge (Au, 2012: 43).”

It is Bernstein’s ‘framing of knowledge’, that most closely equates (with some exceptions) to my discussion and analysis of the observation data, and the topics of analysis. Bernstein’s description could potentially include a more comprehensive view of curriculum including developers and policy makers, however, the part of the description of framing that my thesis data engages with is teacher and classroom-based. The framing that is examined in my study is limited with a caveat of, within the prescribed frameworks (i.e. the selection of knowledge – within the prescribed frameworks).

2.4. Teachers’ Beliefs and The Implementation Gap
Beyond a look at curriculum theory, teachers’ beliefs also play an instrumental role in the classroom. I recognize some background of teacher belief research is necessary to understand the context of my research. However, the aims of my thesis do not benefit from an extensive analysis of the beliefs of teachers, though it is clear many threads of the teachers’ personal values are apparent in the interviews and observations. The teacher interviews and observations provide insight into the participating teachers’ beliefs, and in turn their beliefs subsequently informed the data which made it richer and more
comprehensive. Many of these beliefs are explicitly articulated in the interviews in terms of the ways they see their students.

2.4.1. Teachers' Beliefs

Some of the literature that considers teachers' beliefs surrounds a discussion of how these beliefs effect the implementation of a curriculum. The relevance to my research can be seen primarily in this crossover between two dimensions of the literature: curriculum implementation and teachers' beliefs. Specifically it is the necessity of recognizing that the data, both observed and interviewed of the manner in which the framework-based lessons are conducted are inextricably tied in with teachers' beliefs.

There are many research standpoints on the topic of teachers' beliefs and their potential to impact classroom practice. The starting point for a discussion is difficult most ostensibly because of the lack of continuity in terminology. As it refers to the literature these terms cover a variety of discussions concerned with teachers' beliefs, both explicit and implicit, and their impact on curriculum, policy and practice:

- The implementation gap (e.g. Priestley, 2016; Timberlake, 2014; Wenden, 2014)
- Curriculum implementation (Carson, 1986)
- Implementing School Reforms (e.g. Cuban, 1992; Darling-Hammond, 2015)
- Teacher mediation of curriculum/policy (e.g. Brian, Reid, & Comerford Boyes, 2006; Osborn et al., 1997; Priestley, 2016).
- Teacher agency (e.g. Lasky, 2005; Priestley, Biesta, Philippou & Robinson, 2015)
- Teacher ideology (e.g. Apple, 2004; Pajares, 1992)
- Teacher Thinking (e.g. Clark, 1998; Hollingworth, 1989)

While in individual pieces of research the authors exhibit more nuance within the definition and the specific terminology is necessary, the use of these terms generally refer to similar concepts in the literature. This is noted by Pajares, explaining that the discussion surrounding teacher beliefs are:

"...often under an alias of attitudes, values, judgements, axioms, opinions, ideology, perceptions, conceptions, conceptual systems, preconceptions, dispositions, implicit theories, personal theories, internal mental processes, action strategies, rules of practice, practical principles, perspectives, repertoires [sic] of understanding, and social strategy, to name but a few" (Pajares 1992: 309).

She goes on to add that there are other complications in discussing teacher beliefs and that they are perpetually, "Entangled with notions such as knowledge, conceptions, values, goals, and emotions (Abelson 1979; Nespor, 1987; Pajares, 1992; Torner, et al., 2010).

My use of these as somewhat interchangeable in terms of the basic concept they are referring to is well supported and should not impede any understanding of this review of literature. The following section primarily uses articles that employ the term 'teacher/s' beliefs', but with some exception.
Aside from the terminology, the definition of teacher's beliefs is similarly contentious. The definition of teachers' beliefs fall into a common category of terms that are defined often, and by many, but remain complicated in the lack of a broadly accepted definition of the concept (Au, 2012; Fives & Buehl, 2012; Skott, 2015; Pajares, 1992). There remains no objective consensus on the definitive meaning of teachers' beliefs.

Fives and Buehl (2012: 473) present a list of six definitions that I see as useful in synthesizing the definitions across much of the literature. The table is partially replicated below noting various definitions from noted sources. Added emphasis has been placed on portions of the definitions, to denote prominent themes in the literature. I then go on to refer to these prominent themes to extend the discussion further.

| Beliefs are | “A proposition that is accepted as true by the individual holding the belief. It is a psychological concept and differs from knowledge, which implies an epistemological warrant” (Richardson, 1996: 104 derived from Green [sic.] (1971)

“Beliefs are understood to be a set of interrelated notions... Educational beliefs are a substructure of the total belief system and must be understood in terms of their connections to other, perhaps more influential, beliefs. Most belief systems are formed early and changes in belief systems during adulthood are difficult and thus rare” (McAlpine, Erik-Brophy & Crago, 1996: 32)

“Teacher belief is a particularly provocative form of person knowledge that is generally defined as pre- or in-service teachers' implicit assumptions about students, learning, classrooms, and the subject matter to be taught... Teacher's beliefs appear to be relatively stable and resistant to change (e.g. Brosseau, Book, & Byers, 1988; Kagan, 1992: 65-66)

“Belief systems are dynamic, permeable mental structures, susceptible to change in light of experience...” (Thompson, 1992: 140)

“An individual's judgement of the truth or falsity of a proposition” (Pajares, 1992: 316)

“Teacher beliefs can be represented as a set of conceptual representations which store general knowledge of objects, people and events, and their characteristic relationships” (in Hermans, van Braak & Van Keer, 2008: 128; Clark & Peterson, 1996; Fang, 1996)

Table 2.2: Portions of this table have been reproduced from Fives and Buehl, 2012: 471.

The major themes drawn from this table, as well as a condensed review of the topic of teachers’ beliefs can be summarized into three key points: Teachers’ Beliefs are seen as formed early and relatively stable, but not immovable. They are individual subjective judgements and conceptions that all actions filter through and they can also be implicit assumptions about people, surroundings and their relationships.

I raise issues that locate the main questions surrounding teacher beliefs that are relevant to my research, and acknowledge the connections of these issues to my thesis. Although I have divided the section into several parts, these divisions are superficial and for the ease of reading, as each of the issues presented have significant crossover with one another.
2.4.1.1. Implicit beliefs

There are several factors that are considered in teachers' beliefs studies, though one stands out as particularly necessary to consider. If beliefs are as many researchers claim (Fives & Buehl, 2012), implicit or unconscious assumptions about topics that in turn impact practice, how can implicit beliefs be assessed meaningfully? (Fives & Buehl, 2012: 474). Additionally, once these beliefs are addressed directly, they are made explicit. Can they subsequently be assessed meaningfully as implicit beliefs, which are, in some cases, definitionally teachers' beliefs (Kagan, 1992)?

Fives and Buehl (2012) and Skott (2015) through their surveys of much of the literature both come to an agreement that teachers' beliefs are to some extent explicit and implicit, and both impact teacher practice. According to these surveys of the literature the most thorough and reliable research on teachers' beliefs take steps to analyze beliefs in a variety of contexts observing in action, as well as direct inquiry.

2.4.1.2. Beliefs as a filter

A broad consensus in the literature sees teacher's beliefs as a filter with which they apply curriculum and policy, as well as information through their personal belief systems and experiences, and then enact them in a way they see fit (Fives & Buehl, 2012: 478 see also Bryan, 2012; Grossman et al., 1989; Kagan, 1992; Nespor, 1987; Pajares, 1992). The notion of taking into account this teacher belief filter in order to implement effective reform is seen as part and parcel of the creation of new developments in curriculum and policy in more recent research.

Osborn et al.’s (1997) discussion of preservation of a teacher’s autonomy aligns with the concept of a belief filter, but suggests employing it in a way that accepts “the prescribed framework” is not unreasonable as long as it is flexible enough to allow what he terms “creative mediation” (Osborn et al., 1997: 52) This is not unlike Arshad et al.’s (2012) stance which states, “Values can be imparted unconsciously through the choice of word or content of what we teach (2012: 4)”. Reinforcing this in a wider cultural context. Osborn et al. (1997) maintains that that teachers the world over possess an ability to interpret the institutional restrictions that are placed on their teaching. In my thesis, rather than look at teachers’ beliefs as a filter, I attempt to use the standardized curriculum as the filter with which to observe the classes. To some extent the study can be seen as observing Osborn et al.’s (1997) ‘creative mediation’ of the curriculum.

2.4.1.3. Stability and malleability of beliefs

Much of the research centers around the question of the stability of beliefs and whether or not (and to what extent) teachers’ beliefs are malleable. Skott (2015) reveals that research that addresses the nature of teachers’ beliefs in the implementation phase view teachers’
beliefs as a significant factor to consider, but policy makers who see teachers’ beliefs as immovable and are viewed “primarily as an obstacle to change” (Skott, 2015: 14).  

Fives and Buehl (2012) say that the case cannot be that teachers’ beliefs are immutable. Otherwise, research into this topic would be “interesting [but] provide[s] little to inform teacher education or practice” (475). They go on to explain that “some degree of plasticity is needed” (475) for research on teachers’ beliefs to not become an exercise in futility.

There are a number of studies that maintain that the more fossilized a belief is, the less malleable it will be (Gooya, 2007; Zeichnern & Tabachnick, 1981). Kagan’s (1992) research takes the approach that intervention in teacher belief needs to be a reflective process claiming it is necessary to unpack and explicate the beliefs of teachers and expose them to different viewpoints that challenge these beliefs in order that they are given the, “opportunities to examine and integrate new information into their belief systems” (36).

Institutional pressures are also widely seen as an impediment to the shifting of teachers beliefs. Researchers cite an enormous number of factors outside of teacher control that impact classroom action including: work overload, time restraints, problems with child behaviour, working conditions relationships with colleagues, lack of resources, physical demands of teaching and time pressures, children's needs, non-teaching tasks, personal needs, parents' expectations and interpersonal relationships and end of course tests (Mansour, 2008: 34). Mansour (2008) describes this burden of pressures as not so much teachers and their beliefs that are resistant to change but it is, “the institutional climate that is not favorable to, or supportive of change” (2008: 35).

2.4.2. Effects of Beliefs on Implementation

The topic of teachers’ beliefs coincides with my thesis predominantly at the point of implementation. A discussion of teachers’ beliefs on classroom instruction in general is seen throughout the section, however, there is significant explicit discussion on how a teachers’ beliefs impact the implementation of curriculum and policy.

Osborn et al. (1996) explains that curricular implementation, through the individual agency of teachers, is imbued with their implicit beliefs and can in some instances be regarded as tantamount to a form of policy creation in itself (64).

Arshad et al. (2012) explains that proactive teachers are able to inject classroom lessons with beliefs related to their own personal social justice agendas, and that this does not require a shift in policy. Florian and Black-Hawkins (2011), demonstrate this claim and show there can be a shift in teacher mindset, and their image of classroom construction without any significant alterations to curriculum.
A problem plaguing research on teacher implementation is what Datnow, Hubbard and Mehan (1998) refer to as the “unidirectional, technical, mechanical and rational” (see also Carlson, 1965; Havelock, 1969). They claim that policy reform does not fully capture how educational innovations play out as “social, negotiated features of school life” (1998: 1). Going further, Datnow et al. (1998) declares that research that employs these types of models of implementation is significantly lacking insofar as its ability to inform practice.

Tempering this inherent ability of teachers to agentively mediate policy is a bureaucratic resistance to implementation. It acts as an impediment to teacher agency in the classroom and impedes whether policy directives are “correctly” executed by teachers (Priestley et al., 2015). Scripted curricula (Timberlake et al., 2017) and other policies are manufactured to restrict the amount of personal influence teachers’ beliefs and values have on their classrooms.

While ethnographic research suggests many teachers are able to circumvent most policies and input regulation (Arshad et al., 2012; Cotton, 2006; Osborn, 1996; Priestley, 2016), nevertheless teachers’ perception of threats to their ability to be agentive should remain a consideration within the literature, as this circumvention is often done unintentionally and subconsciously, as teachers infrequently overtly resist policy reforms (Osborn, 1996).

Cuban’s (1998) historical review of Platoon schools echoes the problematic notion of requesting a teacher answer the question, “Have you done what you said you were going to do and can you prove it? (456)”. But in reality, policy and curriculum much like the ideals of the Platoon schools as they are,

“adopted and, as they are implemented, undergo changes that transform them in ways that few of the designers of the original reform could predict, or even claim ownership. Because schools change reforms as much as reforms change schools, judging an innovation’s success or failure is no easy task.” (Cuban, 1998: 455)

Bryan (2012) along with Cotton (2006) and Olsen (1992) see meaningful change only viable in light of reforms that align, to some extent, with teachers’ beliefs. Cotton (2006) even goes as far as to say “Unless curriculum developers take account of teachers’ beliefs in designing new curriculum materials, those materials are unlikely to be implemented in their intended format (67)”. Others claim that reforms can be put in place but the predicted outcome of these reforms will be modified by teachers in a way that is consistent with their beliefs and allows them a level of autonomy in line with those beliefs.

2.4.2.1. Provisions for more successful curriculum creation

Cotton’s (2006) study on the implementation of environmental education demonstrates the need for more teacher involvement in curriculum creation. Cotton concluded that the results of the success or failure of the implementation will usually fall on the teacher even though they are rarely consulted on policy; when in fact, the creation of a curriculum needs
to take teachers’ beliefs into account in order to see successful implementation. This is in line with Olsen’s (1992) recommendation that also sees teacher input as invaluable tools in the development of curricula. Clark (1998) even goes so far as to “promote a consultant role” for teacher’s beliefs in policy creation and implementation (5).

In Cotton’s (2006) study, the curriculum’s new pro-environmental education curriculum seemingly did not account for the beliefs of Cotton’s three participants who felt strongly “that they, as teachers, should not impose their own views on their students (74)”. These teachers did not express a desire to be entirely neutral, but also wanted to avoid expressing their own values (Cotton, 2006: 76). This was in contradiction to the stance that teachers were supposed to have taken in their classroom practice, one of pro-environmental friendliness. The teachers took it upon themselves to teach a much more nuanced version of this policy, one in which they could impart their specific value of speaking to both sides of an issue.

Promoting this idea, Bryan (2012) maintains that it seems prudent to involve a greater understanding of teachers and their beliefs and ‘actual working lives’ (Cotton, 2006). This is especially important when considering the literature’s broad conclusion is that some form of filter or mediation and interpretation is a nearly unavoidable and consistent aspect of implementing new curriculum policy.

2.4.3. ISSUES, LIMITATIONS, AND POTENTIAL FOR FUTURE RESEARCH

Teachers’ beliefs without question are a necessary reference for any study that looks across school differences. Timberlake et al. (2017) provides a useful parallel to my study in that it also forgoes a full investigation into individual teachers’ personal beliefs toward teaching, but the provision of an understanding of teachers’ belief research was imperative.

A full investigation of my participants’ implicit beliefs (Skott, 2015) and the effects on the way they implement curriculum is not a matter of primary consideration in my study. I accept that it leaves some unanswered questions. A study of this scope cannot in good faith claim to produce answers to why teachers’ beliefs affect implementation without extensive additional data and analysis.

Research provides support for the fact that to some extent one can be reasonably confident that teachers’ beliefs have an impact on practice (Fives & Buehl, 2012; Skott, 2009). That being said, the literature also suggests that beliefs do not affect implementation in any standardized way (Priestley, 2016; Timberlake et al., 2017). Several studies have demonstrated that the same beliefs have not resulted in the same implementation (e.g. Cotton, 2006; Timberlake et al. 2017). While there is a consensus that teachers’ beliefs impact classroom behavior, there is very little uniform way these beliefs can be interpreted.
These beliefs sometimes translate to agentive classroom choices, but other times their personal beliefs contradict their actions in the classroom.

The review by Fives and Buehl (2012) also put forward the problematic issue of studies on teacher belief primarily being looked at with respect to a specific curricular intervention. I consciously approach my own observations with the understanding that curricular reforms are continuously changing, but the very presence of standardized curriculum is a basic component of a public school classroom in contemporary United States. They (2012) also comment on the distinct lack of methods that can be used to meaningfully explore teacher beliefs if (as in many definitions) they are considered ‘unconscious guides’ (Fives & Buehl, 2012: 474). Richardson (1996) claims that teachers are entirely unaware of the values that are filtered through to affect implementation. The consequence of this position is that once a teacher is informed of these unconscious beliefs, they immediately become aware, and these may become explicit beliefs, circularly causing a methodological issue with the notion of studying unconscious belief systems.

Fives and Buehl (2012) describe the beginnings of research in the field of teachers’ beliefs, developed as research that would optimally produce, “an explanatory and predictive mechanism for explaining differences in teachers’ practices” (471). The complex and contradictory findings over the years have proven that the explanatory and predictive nature of this avenue of research has never come to fruition. However, as Fives and Buehl maintain, it is clear, “the pervasive conviction in the literature, schools and teachers education programs is that teachers’ beliefs matter” (Fives & Buehl, 2012: 471; see also Borko & Putnam, 1996; Clark & Peterson, 1986; Grossman, Wilson & Shulman, 1989; Legerman, 1992; Pajares, 1992; Skott, 2009).

Beliefs are expected to sufficiently influence the ways in which teachers interpret and engage with the problems of practice, sometimes as an explicit part of their definition (e.g. Mansour, 2008; Op’t Eynde de Corte & Verschaffel, 2002). Yet even when the impact of teachers’ beliefs is relegated to a formally less influential position, they are generally expected to be influential (Cross, 2009; Levin & Nevo, 2009; Nathan & Knuth, 2003; Pajares, 1992; Rokeach, 1969; Schoenfeld, 1998). The knowledge that teachers’ beliefs are decidedly meaningful to implementation to some extent, leaves ample room for future investigations into teachers’ beliefs and curriculum implementation.

My thesis however, provides a narrowly focused view of teacher talk and lessons across schools in the middle class. The participating teachers’ personal beliefs may undoubtedly impact they way they teach, answer interview questions and relate to their students. The idea that their beliefs, both implicit and explicit, impact on their day-to-day practice is not in question and implementation of the curriculum is no doubt affected by the assumedly
diverse belief set of each of the teachers. Still, it is the position of my thesis that even without an in depth understanding of the participating teachers’ individual beliefs, an assessment of the differences in language, lessons, and instruction may provide insight into schools and classrooms. Thus, I chose to focus not on teacher’s beliefs but on a comparison of the way lessons are carried out.

An extended study of teachers’ beliefs with respect to social class stratification would add insight into the reasons behind teachers’ responses and classroom actions. This would be especially welcome in an area so fruitful for exploration as the middle class. The study could pose questions in the reflexive interviews that could be compared to enactment in the classroom and contribute to a well developed analysis of teachers’ beliefs in a similar study.

The major role that teacher beliefs’ play in understanding motivations and classroom decisions of teachers has the potential to inform a rich and insightful observational ethnography of high schools within the middle class.

2.5 Concluding Comments

The literature review has provided a basis for the study undertaken to observe middle-class high school classrooms. I have described, both here and in the introduction, the terms I used within this thesis and how they operate throughout. Anyon’s Social Class and the Hidden Curriculum of Work, the motivation and influence for the thesis, has been described in detail, as well as some of her other works. Additionally, proponents and critics who have officially responded to Social Class and the Hidden Curriculum of Work and several researchers that form the foundation for her research have been acknowledged and considered.

I then move to a review of the literature on standardized curriculum and curriculum theory research and its relevance within my study. First, I mention standardized curriculum’s role in both abating and perpetuating Inequality. With regards to curriculum theory, Young’s 3 Futures are specifically used to guide an explanation of the Massachusetts Curriculum Frameworks and its underlying foundation of curriculum theories. I then provide a short summary of the way in which a major debate within the field of curriculum theory reflects on standardization, curriculum creation and its implementation. Finally I touch upon teachers’ belief literature, its pertinence to the study, and some limitations and potential for future research.
3A. METHODOLOGY

The first portion of this chapter presents the recruitment process and selection criteria and acts as an introduction to the participating schools and teachers. Following this introduction is a discussion of the methods used for enacting and gathering data. In the second section of the methodology I describe the process of data analysis and give details on the three analysis methods employed throughout.

Schieffelin and Ochs state that, "language serves several functions in social life and that consequently spoken and written messages have not only logical (truth-functional) but social meanings" (1986: 165). Deriving from the notion that all spoken and written messages have social meaning, an analysis of teacher talk, instruction and lessons as carrying latent social meaning is supported by educational research as well as applied linguistics and sociolinguistics (Bartlett; 2014; Bartolome, 1994; Fairclough and Wodak, 2005; Freire, 1970).

Teacher talk and classroom lessons are considered in three ways: a corpus linguistics analysis of word choice, frequencies and lexical richness measures, an ethnographic observational analysis of classrooms as well as reflexive interviews reviewing preliminary findings with teacher participants. While the specific language-only analysis portion of the research is limited to a corpus analysis, an exploration of teacher talk remains central to the aims of the thesis alongside explorations of lessons, instruction and context. These aims work toward filling a gap in the research that has been called for by both applied linguistics (Block, 2013) and educational researchers (see full discussion in Reardon, 2014; 2016).

While an educational research foundation plays a significant role in an introduction to the analyses, there abides a strong basis in applied linguistics as discussed in terms of Brumfitt's (1997: 93) often-cited description of applied linguistics as, "the theoretical and empirical investigation of real-world problems in which language is the central issue." My thesis can be described as an in depth exploration of classroom observations and interviews across incremental inequalities in socioeconomic class where teacher talk, instruction and lessons play a central role.
This portion of the Methodology chapter is divided into two main parts. ‘Enacting the research’ details the processes used and developed in order to enact the research; ‘Collecting the data’ explains the processes and methods used to collect data.

An overview of the methods used can be found below:

<table>
<thead>
<tr>
<th>Schools</th>
<th>Five high schools in one county in Massachusetts, USA:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Justinian High</td>
</tr>
<tr>
<td></td>
<td>● Emily Proctor High</td>
</tr>
<tr>
<td></td>
<td>● Arthur Miller High</td>
</tr>
<tr>
<td></td>
<td>● Hansberry High</td>
</tr>
<tr>
<td></td>
<td>● Harper Lee High</td>
</tr>
</tbody>
</table>

| Classes | ● Two classes each school                           |
|         | ● ~14 hours per class (around 3-4 weeks)            |
|         | ● Social Studies/history and English Language Arts   |

| Teacher Participants | ● All Highly Qualified Teachers                     |
|                      | ● Chosen by senior administrator (principal/vice-principal) |
|                      | ● Briefed on some of the project’s goals             |
|                      | ● Given initial research proposal                    |

| Students | ● Participating in class, but student data not recorded, as per consent procedures. |
|          | ● Teacher language only during interaction with students |

3A.2. Enacting the Research

3A.2.1. Recruitment process

The process of selecting schools relied on publically available data on schools and cities. The inception of No Child Left Behind\(^9\) while arguably problematic (Gamoran, 2007), provide for greater resources in each state to have the school-specific information publically available, such as greater transparency in teacher qualifications, student graduation rates and standardized test scores. The accessibility of this information made the location of academic-based statistics and school profiles a simple process. Additionally city, district, and state census data was freely available from multiple sources.

The initial process of school selection included all mainstream public high schools serving only one district in Hereford County, MA\(^10\). This excluded all high schools that are categorized as vocational, fine arts or alternative. Thirty-two public high schools in the county fit these requirements and were considered for participation. The schools were then placed on a spectrum using a 10 point analysis (discussed in detail in the following

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\(^9\) A now overturned education reform act

\(^10\) Anonymized – Counties and school names have been changed, as well as some additional indicators, for the protection of the participants. Place names from the United Kingdom that are not already Massachusetts cities or towns were used for ease and realism.
sections). The spectrum measured the data points against the Massachusetts state average, and placed each city or town’s position on this spectrum.

The Massachusetts state average falls squarely into the definition of middle class. The data points for looking at schools are compiled from a selection of research surrounding social class measurements (Pew Research, 2008; 2015; 2016; Reardon, 2011; 2014; 2016). Some of the data points are approached in terms of the absence of poor or working class indicators, for example these cities and towns in general are not high poverty areas, not predominantly rentals, not primarily English as a Second Language speakers, as well as points that positively indicate middle classedness such as high graduation rates, higher education attendance as well as household and per capita income.

The schools in the county were then divided into three categories using the ten data points and how similar they were to the Massachusetts average:

- Above Massachusetts Average
- Near Massachusetts Average
- Below Massachusetts Average

In order to eliminate huge gaps in income, I used the Massachusetts average as a starting point for my schools and added about $10,000 on to the average in three increments. I then included only schools that had approximately $60,000 to $30,000 in per capita income in order to keep the gaps in income small but substantive. These numbers are in line with Pew Research (2008) and Atkinson and Brandolini (2013)’s research on the middle class. Other studies provide support for the idea that a small differences in income have an impact on students’ education as an increasingly larger portion of middle class parents’ expendable income is used on their children’s education, intellectual development and academic pursuits (Ball, 2003; Lareau, 1987; Lipman, 2013; Smyth, 2009).

Also any and all schools that were a Level 4 or 5 on the Massachusetts Accountability and Assistance Framework were eliminated. These were excluded on the advice of a member of the School Committee (and close friend) who provided extra insight into the recruitment process. He informed me that Level 4 and 5 schools were subject to over thirty ‘surprise’ observations by the Department of Education to assess progress, and that this would greatly reduce my chances of their willingness to participate.

The remaining schools were contacted to request their voluntary participation with the intention of observing two schools in each category for four weeks at a time. I purposefully contacted top-level administrators first, as their permission was necessary, but they were

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11 All Massachusetts districts and schools with sufficient data are classified into one of five accountability and assistance levels, with the highest performing on Level 1 and lowest performing in Level 5 as a result of action by the Board of Elementary and Secondary Education. [http://profiles.doe.mass.edu_report/accountability.aspx](http://profiles.doe.mass.edu_report/accountability.aspx)
difficult to meet face-to-face, while in-school administrators were easily accessible. A basic and introductory recruitment letter (see appendix) was sent to schools and used my local capital as an “Eastsider” and my social capital as a PhD student from Scotland in the hopes that this could procure more participants.

Upon receiving a reply from a recruited school I sent along more details (such as tentative dates and times) and my completed PhD proposal as well as explaining the permissions and consent processes. I sent this first to allow the administration full access to my research aims. The necessity of them being fully informed was to allay a fear of many educators that observers are there to discover the failures of schools. In my proposal it states clearly that I am looking for successful examples of teacher talk and that the teachers were not being assessed on their teaching abilities. An ancillary benefit to handing over the official proposal was that it provided me with academic credence, and was a step towards proving that my request was based in the context of academic inquiry, rather than school assessment or discrediting public school education.

Eight schools (3 Upper Middle Class schools, 2 Middle Middle Class schools, and 3 Lower Middle Class schools) that fulfilled the criterion of the study continued contact with me after the introductory emails, and documentation on my proposed study was sent. I met with senior level administrators at each of the eight schools to discuss my research and the viability of the project taking place at their institutions.

From these eight, six schools (2 Upper Middle Class, 2 Middle Middle Class, and 2 Lower Middle Class schools) were mutually agreed upon to continue with the project. The other eligible schools were not used in data collection because of scheduling conflicts and location issues. The subsequent withdrawal of schools (one for an administrative reason, the other without comment), and a large, unforeseen break in the research allowed me to reconsider the previously eligible schools, as there were no longer any scheduling or location conflicts. One alternate school was used, however I was unable to replace the final school. By scheduling the classroom observations so I was able to do two schools concurrently this amounted to about six months of observations and interviews, as well as an extra two months on each end of the six months for initial introductions to the schools, interviews and make-up days for any unforeseen circumstances. The only formal request of compensation by the schools was a reflexive and informative presentation given to the administration and teaching staff of my findings. I have been in touch with the administrations of the participating schools and will undertake an additional series of teacher development talks after the final submission of my thesis.
3A.2.2. SCHOOL AND CITY CHOICES

Five public schools in Hereford County, Massachusetts participated in the project. There are about forty cities and towns in the county and thirty-two public high schools. Each participating school is the only mainstream public high school in its district. In Massachusetts, public schools are state funded, though in some instances student/parent supplementation (i.e. $50 a year for a school-issued laptop) may contribute to a portion of the amenities that I refer to. The schools are divided into three categories on a spectrum of social class that I will discuss later in the chapter. These categories are: Upper Middle Class school, Lower Middle Class schools, and Middle Middle Class schools. These delineate where the schools fall relative to each other on the socioeconomic spectrum and are not meant to be finite classifications of each cities’ socioeconomic status.

Ten main statistical data were used in selecting the pool of schools to observe. Below are the profiles of the participating schools. These numbers are publicly available and most are published in the official Department of Education report and the government census. In addition, the Massachusetts Department of Education’s District Analysis and Review Tool (DART) was used to confirm a general consistency of my analysis with the state’s.

The ten statistical data¹² used were:

1. Median household income of city
2. Per capita income of the city
3. Percentage of city that is college graduates
4. Poverty level of the city
5. Graduation rate of the high school
6. Student drop out rate
7. MCAS Proficiency Scores for the high school
   ○ Math
   ○ English Language Arts
8. Racial makeup of the high school
9. Low income graduates (free or reduced lunch)
10. Percentage of students going on to higher education

### 3a.2.2.1. School profiles

Table 3a.2. School profiles

<table>
<thead>
<tr>
<th>Justinian High</th>
<th>Arthur Miller High</th>
<th>Elizabeth Proctor High</th>
<th>Hansberry High</th>
<th>Harper Lee High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UPPER MIDDLE CLASS</td>
<td>MIDDLE MIDDLE CLASS</td>
<td>LOWER MIDDLE CLASS</td>
<td></td>
</tr>
<tr>
<td>1. median household income</td>
<td>96,494</td>
<td>73,980</td>
<td>77,404</td>
<td>60,229</td>
</tr>
<tr>
<td>2. per capita income - city ($)</td>
<td>54,272</td>
<td>39,471</td>
<td>37,784</td>
<td>37,005</td>
</tr>
<tr>
<td>3. % city college graduates 25+</td>
<td>56.8</td>
<td>45.4</td>
<td>41.5</td>
<td>32.7</td>
</tr>
<tr>
<td>4. poverty level - city</td>
<td>4.7</td>
<td>8.6</td>
<td>4.9</td>
<td>9.7</td>
</tr>
<tr>
<td>5. % graduated (4yrs)</td>
<td>96.7</td>
<td>93.1</td>
<td>95</td>
<td>93</td>
</tr>
<tr>
<td>6. % dropout</td>
<td>1</td>
<td>1.2</td>
<td>0.9</td>
<td>2</td>
</tr>
<tr>
<td>7a. MCAS Math % proficiency</td>
<td>90</td>
<td>80</td>
<td>86</td>
<td>75</td>
</tr>
<tr>
<td>7b. MCAS English Language Arts % proficiency</td>
<td>99</td>
<td>92</td>
<td>97</td>
<td>94</td>
</tr>
<tr>
<td>8. % non-white students</td>
<td>15.9</td>
<td>15.1</td>
<td>10.6</td>
<td>11.8</td>
</tr>
<tr>
<td>9. % low income graduates</td>
<td>100</td>
<td>83.3</td>
<td>87.9</td>
<td>56.6</td>
</tr>
<tr>
<td>10. % on to higher education</td>
<td>92.5</td>
<td>74.4</td>
<td>79</td>
<td>73</td>
</tr>
</tbody>
</table>
A short review and discussion of the data points follows:

Point 1. Median household income of city and Point 2. Per capita income of the city
These data points show that there are clear differences in income on an incremental sliding scale from the city with the Upper Middle Class school, to the cities with Middle Middle Class schools and finally, cities with the Lower Middle Class schools. These differences amount to an almost $20,000 gap in income, both per capita and per household. This income gap is the most salient of the ten points, but the incomes all remain squarely within what most would be considered ‘middle class’ in most uses of the term (Pew Research, 2008; 2015; 2016).

Point 3. Percentage of city that are college graduates and Point 10. Percentage of students going on to higher education
The data points representing the percentage of the city that are college graduates, as well as students going on to higher education show the incremental socioeconomic differences between cities very clearly. The percentage of college educated adults in each city decreases quite rapidly from one social class category to the next. We may be able to make assumptions from looking at the numbers across the schools that there is something taking place between graduation and age twenty five that makes a difference in these college education rates (i.e. movement of graduates to the Middle Middle Class schools, movement of non-graduates to Lower Middle Class schools or attendance of university later on).

Point 5. Graduation rate of the high school, Point 6. Student drop out rate and Point 9. Low income graduates (free or reduced lunch)
The graduation rates in particular show the effect of using schools who are not classified as in need or failing. In the 2015 Massachusetts Department of Education report, students from one failing school in the county were almost 16.6% less likely to graduate than students in the Lower Middle Class schools in the study, and the likelihood that they would drop out was more than double 2% at 4.5%\textsuperscript{13}. These numbers serve to indicate that while these may be incremental inequalities across the schools, they are all far above any threshold for failing or in need\textsuperscript{14}. Points six and nine, again show only slight variation across the schools. The percentage of low income graduates in point nine, seems to decrease rapidly and in the final school, returns to levels that look more similar to the Middle Middle Class schools. Within this measurement there is a very low 56.6% low income graduation rate from Hansberry High, one of the Lower Middle Class schools. Although a point of interest on its own, this large difference is not reflected in any other of the statistics, and seems to be an outlier for Hansberry High.

\textsuperscript{13} All statistics are based on 2014-2015 Massachusetts Department of Education Accountability Reports
\textsuperscript{14} As per measurements of Level 4 or 5 schools in Massachusetts Department of Education Accountability and Assistance Reports
Point 8. Racial makeup of the high school

All five schools are largely Caucasian in comparison to the state average of 62.7%. As discussed in the Literature Review, one of the criticisms or limitations of Anyon’s study is that it does not take into consideration the different ethnicities involved in the study of social class. My work acknowledges this limitation, though I hope I have addressed some of this concern in a short discussion in the Introduction and Literature Review where I provide a look at previous research on how much (if not almost all) of racial differentials in achievement can be explained by socioeconomics. Despite this, it has been proven time and again on the whole, “white children get better educations, and that is a calculable advantage” (Harriot, 2017). It is not my intention to dispute this claim, but to look at this advantage of socioeconomic status from a different angle. Thus, in order to make adaptations to the research to circumvent major considerations of intersectionality, the schools were chosen for their largely white student body to allow for the study to focus primarily on social class as a factor.

A last comment is a reminder that these schools were chosen as a spectrum of social class across a combination of factors. While some statistics seem anomalous i.e. Hansberry High’s significantly lower percentage of low income graduates, these choices of schools and subsequent categorization reflect a holistic consideration of the entire body of statistics and are in line with a computational analysis of the schools.

3A.2.2.2. Comparing and categorizing schools

In order to make a well founded comparison I have used five schools in the same county in Massachusetts. Anyon’s research (1980; 1981) compared five schools in two adjacent districts; Ramsay (1983) looked at thirty schools in two neighborhoods. While it is common to have many elementary schools in the same district or neighborhood in Massachusetts, it is an uncommon occurrence to have more than two high schools. Thus, it was necessary to find a community grouping that would offer research subjects (in this case, high schools) that share a local and cultural identity, the way Anyon and Ramsay’s populations did, but who lived in varying socioeconomic conditions. Counties in Massachusetts seemed a prudent choice. Choosing schools in the same county allowed for a sizable pool of area schools and socioeconomic positions to choose from. The schools chosen to participate were the only public high school in their city or town. This fact further enabled the use of income and city based socioeconomic indicators as proxies for the indicators of the schools themselves. It is notable that despite the study spanning five cities, each school is within ten miles of another participating school.
As an additional indicator of their shared community, the cities and towns in the county all generally are considered themselves a part of a group called “The Eastside”\(^\text{15}\). Thus while many of these cities and towns are economically and socially diverse, there is camaraderie in being from this particular part of Massachusetts, social class notwithstanding.

This holistic method of choosing schools may appear to be subjective, yet though there are data point anomalies in a few cases this categorization of schools is empirically validated. The Massachusetts Department of Education website puts forward District Analysis and Review Tools (DARTs) that categorize schools by educational and socioeconomic similarity. The tool has several functions, the Massachusetts Department of Education website states that DARTs provide “snapshots” of data and allow users to:

- Look at trends over several years
- View school and district data in charts that are easy to interpret
- Evaluate and reflect on districts and schools and their progress
- Find comparable districts and schools based on demographic characteristics
- Make comparisons with a similar district(s) that has shown promising trends

This study focuses primarily on the function of “find[ing] comparable districts and schools based on demographic characteristics”. Rather than use this tool upfront, I used it as a validity checking measure in order to gather a greater understanding of the social, educational and economic backgrounds of the cities, and by proxy the high schools. Additionally, there was far less flexibility in exclusively using this analytic tool as does not allow for exclusions and searches based on specific data points. The DART tool also may not take into consideration more macro contextual data for the entire city such as higher education attendance of residents 25+. Thus, I used DART analysis to confirm that my more comprehensive and holistic analysis was well founded and based on statistical evidence as well as qualitative evidence.

The comparability tool, “provides snapshots of district and school achievement, allowing [one] to make sound, meaningful comparisons to the state or to 'comparable' organizations” (http://www.doe.mass.edu/apa/dart/). The verification process was done in view of the fact that empirical research using small samples provides the researcher with the need to be, “[c]oncerned with the consistencies and inconsistencies within and across forms of data, and mindful of the implications of researcher perspectives” (Talburt, 2004: 81). A DART analysis was conducted for all of the schools recruited for the study. The data elements for a DART analysis “cover a broad range of district and school interests including demographic, assessment, student support, educator, financial, and achievement gap data” (http://www.doe.mass.edu/apa/dart/). In order to verify the groupings from the initial analysis, each of the participating schools were input into the DART analysis tool to confirm

\(^{15}\) Anonymized
the schools chosen were, in addition to being placed together in the study, “comparable” organizations using an institutional based criteria. This also verified that in addition to their comparability that the schools were being ranked in an order that matches my categorizations of the schools.

Another finding on achievement across socioeconomic classes also assists in supporting my categorizations of the schools. Public schools across the United States were looked at (Reardon, 2016) for the achievement gaps across race and socioeconomic status. The study compared data from hundreds of millions of standardized tests given to students across all districts in The United States. Reardon (2016) explicitly states that this data “should not be used to rank districts or schools”. Thus, I will make the clarification that this data is used as supporting evidence of my original categorization of districts and should be looked at supplementarily. Moreover, my categorizations should not be taken as any sort of ranking of school quality, as again, the categories are attributed to the schools and cities, not individual student experiences.


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16 an interactive version of which can be accessed at: https://www.nytimes.com/interactive/2016/04/29/upshot/money-race-and-success-how-your-school-district-compares.html
Table 3a.3 School district comparisons

<table>
<thead>
<tr>
<th></th>
<th>Justinian</th>
<th>Arthur Miller</th>
<th>Elizabeth Proctor</th>
<th>Hansberry</th>
<th>Harper Lee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade level over United States average</strong></td>
<td>2</td>
<td>1.3</td>
<td>1.4</td>
<td>0.06</td>
<td>0.07</td>
</tr>
</tbody>
</table>

The graph and table above represents the level at which the school districts participating in my study perform using standardized tests as measurement. As I will discuss further, it is not surprising that middle class Massachusetts public schools are achieving above their average grade level. I have not indicated where on the chart the individual district data points are as the public availability of the graph and the interactive tools could compromise the anonymity of the participating schools.

Massachusetts is frequently designated among the top three public education systems in the United States, alternating with Maryland and New York for the top three spaces from 2008-2015 according to Education Week, US News and The Washington Post. The higher education attendance rate of students graduating from Massachusetts public schools was 74.3% in 2012 (http://www.doe.mass.edu/infoservices/reports/), and standardized test scores are regularly in the top five in the country (according to the National Assessment of Educational Progress or NAEP http://nces.ed.gov/nationsreportcard/). It was an intentional decision to conduct a study in the top tier of public education. My thesis looks only at observations among middle-class schools in this top tier of academic achievement among states. It may very well be the case that the differences observed within the middle classes in less educationally successful states could be even more apparent in further research.

3a.2.2.3. Defining and labelling schools ‘middle class’

This section will attempt to not define middle class itself, but define and describe the importance of its use in this thesis. In research on the middle class, it may seem vital to pin down a definition of middle class. Much of the critical research on the middle class centers around this very debate, and many of the definitions center around specific studies. One study helpful for understanding the general ambiguity around the term was conducted in 2008 by the Pew Research Centers and found: 53% of Americans considered themselves middle class. Those self identified as middle class included people whose incomes were from $25,000 up to $95,000. When they opened the question as to allow people to identify themselves as upper and lower-middle class, the range was from income near $10,000 up to almost $250,000 (Pew Research Center, 2008; Pew Research Center, 2015; 2016).

The approach this study takes does not rely on any one definition of middle class. There may not be one specific definition of middle class but there are indeed many indications of middle-classedness. It is these indications that allow me to use the term middle class and
refer to the schools as such. The use of upper, middle and lower class are only used relatively. Depending on the inclusion of alternative schools, these categories could be changed drastically owing to the extreme variation in the labelling of middle class in the United States (Pew Research Center, 2008; for a more recent discussion see Pew Research Center, 2015; 2016, Atkinson and Brandolini, 2013 and Fry and Kochhar, 2016).

In order to eschew traditional connotations with class name labels, I have given the schools a place in a spectrum of social class with reference to the other schools in the study by substantiating their statistics. The three terms used in this thesis are: Upper Middle Class school, Lower Middle Class schools and Middle Middle class schools. I have not categorized these districts in terms of individual student socioeconomic category (i.e. the school district is categorized as lower-middle class with reference to the other two schools, but the students are not necessarily lower-middle class). This allows the reader to imagine a diverse body of students that are being taught in a similar fashion, rather than either ‘lower-middle class’ students or ‘upper-middle class’ students label that conjures up stereotypical parental occupations, incomes, parental involvement and ideas that may not be indicative of the true heterogeneity of these classrooms. I do, however, use these terms to clarify where the classrooms lie on the spectrum for ease of understanding that there are in fact socioeconomic inequalities (however small or incremental) between the schools. Unfortunately, the terms themselves, like most words, (Bartlett, 2014) carry with them connotations, be they societal, personal, or cultural.

My thesis, while using these terms, asks that the schools are seen individually, and consideration is given to the idea that there are many schools above the Upper Middle Class school, and many below the Lower Middle Class that very well may be considered middle class. It may be helpful to understand the terms as ‘the lower/middle/upper of these middle class schools’ rather than the more common terms that espouse so much meaning. These labels are used primarily to both clarify the different groupings of the schools and demonstrate the idea that middle class is not easily definable as one homogenous group.

I have also included rich, detailed narrative descriptions of the schools to provide a glimpse into the schools’ appearances, the range of amenities available to students and the atmosphere that I observed in each school. Yet, even with extensive descriptions it is not my objective to claim that school and city are the ultimate, exclusive or overriding influences on students. These narrative descriptions are written with the aim of providing ‘a feel’ for the small differences and similarities and to some extent provide a way to look at the schools as part and parcel of the participants. These descriptions are meant as an introduction to the schools from the point of view of my observations. Their placement at the end of this chapter, and before the data chapters serves to provide as a more personal preface before the data and observations.
3A.2.2.4. Use of social class

For purposes of this study, social class is looked at in a way that appreciates that “while occupational status and income level contribute to one’s social class, they do not define it” (Anyon, 1980). Using socioeconomic categories to distinguish school groups allows us to observe the ways in which classroom lessons and teacher talk are different across the schools.

The study also does not make the argument that a social class analysis of differences is able to be the sole defining variable. My research takes into account Ramsay's (1983) commentary on Anyon’s work and observations on students in New Zealand where he found ethnicity to be a paramount concern in addition to social class. In my research students in the selected schools did not represent an array of races, yet the notion that these two are inextricable remains in the background. Using this and other past research with similar conclusions the study is based on “understanding that social class is a necessary, but not always sufficient or comprehensive explanatory category for the analysis of educational practice and attainment” (Luke, 2010: 19).

The lack of concrete deliniations of social class categories allows consideration of the schools separately and specific to the study. That being said, the cities and towns these schools are located in are, as a whole, all arguably in the spectrum of self-defined and other-defined ‘middle class’. Using both the wider definition of middle class to choose a pool of schools, while looking at a subset of the middle class, produces a study that looks at this variation of the middle class.

3A.2.3. Ethical processes for observation and ethical concerns

The county, cities’, schools’ and teachers’ names have all been changed. Despite my intentions to include student participation their ‘vulnerable population’ status, and the logistical inability to collect informed consent meant that student data was not used, as explained at the end of this section. Teachers, who volunteered for the project, signed informed consent forms, and were told they had the right to terminate the observations at any point. They were also informed they could request my absence during any period they felt my presence would have been detrimental to lessons, classroom participation or for personal reasons. None of the participants exercised this request for my absence at any point.

In order to move forward with the study I was told I was required to have an advisor at an American university. I proceeded to connect with Lisa (Leigh) Patel Stevens at Boston College’s Lynch School of Education and she advised me throughout the Institutional

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17 In the appendix some of the IRB documentation has Boston College logos, signatures and documentation. The same application was used at The University of Edinburgh for which I was granted full permission to observe classrooms and gather teacher talk data.
Review Board (IRB) process. I then applied to the Boston College institutional ethics review board, and was subsequently informed that the University of Edinburgh approval was sufficient. The process of submitting an IRB whereby all of the documents, waivers of consent and informed consent forms were produced prior to the approval took nearly a year and a half (see appendix for IRB documents).

For the review board applications, permission was required through the Superintendent of Schools in each district to move on to get official permission from the principals, whose signatures I would need, along with an invitation to observe the school on official school letterhead. Contact with high school principals proved more demanding than previously imagined. The process of obtaining permission required hundreds of emails to administrators, presentations, informal and formal meetings, phone interviews and finally scheduling the observations and completing the necessary paperwork.

Most of the concerns of an observational study such as mine include the interruption of an observer's presence on the natural running of a classroom, the discomfort with a stranger's presence and the compromising of student or teacher identity. As I did not participate in classes there would have been no direct or overt physical or mental ethical concerns, only residual issues with the discomfort of my presence and my presentation and publication of sensitive data. In order to mitigate the classroom concerns in the following sections I explain the efforts made to make both teachers and students comfortable while I was present. I also describe the methods used to detail the purpose of my study to students, teachers, parents and administrators in order that no one felt in any way that my objective was to judge the quality or correctness of teaching. Finally I made myself both flexible and available to the teachers to cancel my observations or reschedule so that my intrusion on the classes would be minimized. Anonymization of schools, cities, teachers, etc. has been conducted throughout.

3a.2.3.1. Informed Consent for observations

Because children under eighteen are considered a particularly ‘vulnerable population’ within human research, I took precautions to keep them informed, to get their parents’ consent as well as theirs, and to create a space where they felt comfortable and my presence was unobtrusive. I also received an official government Criminal Offender Record Information (CORI) background check to allow me to work in the public schools which was presented to each of the schools before beginning observations (see appendix for CORI form and informed consent forms). Informed consent from the students required all students’ parental consent. I was unable to gather the requisite student documentation to be able to use student data, so while the following may include discussions of student permissions, the project went forward with no student data.
I personally conducted the informed consent procedure. Teachers were introduced to me prior to commencement of the project and then debriefed on the final day before the interviews and presentations. All of their students were informed both in writing, and explained at the properly graded language level, the premise of the project. As in the piloted methods, the students were given a very general idea about the research and were told that the observations were about 'Teacher Talk in the Classroom'. Both the students and the teachers were assured that they would remain anonymous in these observations, and all research was being done looking only at teacher talk and lessons rather than on the quality of teaching or student input. There was time for questions during the informed consent procedure and I made myself available for questions throughout observations. In addition, those teachers selected for the group interviews had critical reflection on the project's aims allowing for a participatory role in the analysis of the findings.

Orb, Eisenhauer and Wynaden discuss consent “… as a negotiation of trust, and it requires continuous renegotiation” (95; Field and Morse, 1992; see also Kvale, 1996; Munhall, 1998). On account of the fact that I was in the class for three or more weeks this “continuous renegotiation” was ascribed to the teachers and they were informed that there was an ongoing space for questions.

3A.2.3.2. Confidentiality
All observation and interview data continues to be stored on a password protected University of Edinburgh computer. The computer was kept at my personal residence throughout the fieldwork until which time I was able to return to the University of Edinburgh where it is stored in a research office inaccessible to the public. The teachers, schools, cities and county are anonymized, with only the supervisors of the project, the ethics review board and myself having access to their identities.

3A.2.4. Issues, Complications and Limitations
3A.2.4.1. Disclosure
Exercising caution, I opted to use Patton's recommendation of full disclosure of the purpose and direction of the study. He declared that a past experience led him to be convinced that, “false or partial explanations are too risky and add unnecessary stress” (1990 in Orb, Eisenhauer and Wynaden, 2001: 95).

On account of Patton's thinking on the matter, my teacher volunteers for observations and administrators were given considerable amounts of information regarding the subject of my thesis. The instructors were informed that the focus of the study was a comparative look at social class in education through teacher talk. The indication of the topic was a possible influence on the teacher’s in-class language and the conducting of lessons. It is feasible that this extended information may have influenced their desire to express their political stances, beliefs and open-mindedness more than if they were left with the same
information the students had. Although it may have caused some level of undue influence on the teachers’ actions, it is my belief that the benefits of the teacher’s comfort and feeling of involvement with my project outweighed the possible negative influence (Patton, 1990).

3A.2.4.2. Student data
The previous section on informed consent is a description of the Informed Consent process as it was undertaken initially in 2012. The language used, at times references the initial attempts to include students in some parts of the original study. Strict guidelines for participation of vulnerable persons (persons under 18) created a large barrier to including student data. Efforts were made in earnest to allow for student participation, including pre-observation visits to the classrooms, smaller focus groups, a written self-introduction to parents before distributing consent forms, and teacher assistance in collecting the forms. In the end, the guidelines are clear about full classroom student consent and I was unable to gather enough full classroom consent for inclusion of student data in this study. The end result of the IRB processes has required the exclusion of all student data. This is mentioned and reinforced throughout the analysis methods.

As the project was created around student participation, but only in terms of interviews and reflections on findings, the nature of the study has remained mostly the same. However, a study using student talk and the student’s perspective on classroom observations seems a fruitful direction for further research.

3A.2.4.3. Justinian High (Upper Middle Class schools) limitation
The largest, and most significant limitation throughout the thesis was the weight that Justinian High carries in making generalizations about Upper Middle Class schools. The recruitment process was thorough and I contacted all area schools that fit the criteria. Unfortunately, the second Upper Middle Class school pulled out at the last minute and I was unable to secure another comparable school resulting in the Upper Middle Class being comprised of only one school. As such, the observed trends across the ‘Upper Middle Class school’ lacks the strength of being able to observe a common thread across more than one school and four separate classrooms that the Lower and Middle Middle Class schools have. It should be noted though that Anyon also observed isolated classrooms as indicative of an illustrative category of social class, thus, while not ideal, there is some precedent to the data’s usefulness in understanding the objectives of the study. This is undoubtedly a weakness of the research. Despite this, it is important to note the depth and length of the observations at Justinian gives an extensive view of the way the classes in this, a school in a city in a higher socioeconomic position than the other schools, is conducted. During the interviews, the very perception of schools that are incrementally higher in socioeconomic status seem to reflect some of what was observed at Justinian High. This is not in any way a claim that Justinian is in fact illustrative of all Upper Middle Class schools, it may however
strengthen its usefulness as a potentially representative example of a Upper Middle Class school.

3A.3. COLLECTING THE DATA

The Massachusetts Curriculum Framework: Before entering into details about the data collection, a discussion of the Massachusetts Curriculum Frameworks 18 for English Language Arts and history is presented. A more indepth survey of the literature surrounding standardized curriculum, curriculum theory, implementation and mediation as well as curriculum itself, can be found in the Literature Review. I will not attempt to make an extended judgment or analysis of the quality of the Massachusetts Curriculum Frameworks, which is the standardized framework used in the classroom observations, nor will it ask whether the implementation aligns with the original intent. These are matters beyond the scope of this research. The research looks only at how the teachers’ language and lessons differ. Thus, falling in line with a tradition of inquiry into the ways teachers differ in terms of pedagogy, language, expectations and classroom management (Denton, 2013; Good, 1981; Good, & Brophy 1987; Marzano, Marzano, & Pickering, 2003; Van Manen, 2016), my thesis is an exploration of teacher talk and lessons using the standardized curriculum as one aspect of classroom teaching that can be controlled for to some extent.

The thesis presents the use of five academically successful schools. I use successful carefully, as success here is judged only by the production of:

- Proficient test scores
- Student graduation rates
- Higher education attendance
- School ranking across the state

This measure of success is of course subjective and it is contested in large bodies of literature (DiMaggio, 1982; Geiser, & Santelices, 2007; Grossman, Cohen, Ronfeldt & Brown, 2014; Ravitch, 2016).

One limitation that requires mentioning here is Cuban (1998: 457) reminds us that even standardized testing bodies were initially against the use of these tests as measurements of student success. Nevertheless, defining school success using national standards of achieving average or proficient scores as one aspect of success, seems a reasonable choice, as there are very few alternative measurements of student achievement. I have used these measurements of standardized scores in good faith while still holding the belief that a successful Massachusetts school in these terms does not automatically equal a successful school in other measurements, as well as acknowledging that a 'successful school' does not translate to individually successful classrooms or students.

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18 The Massachusetts Curriculum Framework for all grades and levels is available for review at: http://www.doe.mass.edu/frameworks/
In each of the classes the teachers instruction was based on either the history or English Language Arts (ELA) Massachusetts Curriculum Framework (MCF) following Schiller's (2013; 2015) work in social studies classrooms. Massachusetts sets out a long, broad curricula for each grade and subject detailing the requirements of each teacher's lesson plans. For this reason we can make assumptions and comparisons of classroom activity based on this "fairly standardized curriculum", likening it to Anyon's study and other notable observations of classrooms (Anyon, 1980; 1981; Kozol, 1991; Rist, 1970).

In this study the classrooms use two curriculum frameworks prepared and distributed by the Massachusetts Department of Elementary and Secondary education:

- English Language Arts and Literacy and;
- History and Social Science

The framework outlines the point that:

While the standards make reference to some particular forms of content, including mythology, foundational U.S. documents, and Shakespeare, they do not –indeed, cannot- enumerate all or even most of the content that students should learn. The standards must therefore be complemented by a well-developed, content-rich curriculum consistent with the expectations laid out in this document (MCF, 2011: 6).

The first portion of the standards contains what it has termed Guiding Principles. All Guiding Principles begin with the phrase "An effective English language arts and literacy curriculum ___________”

Some examples include:

- An effective English language arts and literacy curriculum... Draws on literature in order to develop students' understanding of their literary heritage.
- An effective English language arts and literacy curriculum... Draws on informational texts and multimedia in order to build academic vocabulary and strong content knowledge.
- An effective English language arts and literacy curriculum... Builds on the language experience, knowledge, and interests that students bring to school (MCF, 2011: 7-8).

Additionally, the framework includes standards for four major proficiencies in history and English – reading, writing, speaking and listening. It also provides a(n) (impressively) 19 diverse list of suggested texts, authors and other works that include artists and paintings. Finally, it adds at the conclusion of each section (including for pre-kindergarten through fifth grade) a list of College and Career Readiness Anchor Standards.

Nevertheless, the Massachusetts Curriculum Framework is not without its limitations, as indeed some of these standards tend towards Priestley (2011) and Young's (2008) critique of a new wave of curricula that champions generic skills over specific content.

19 From my personal experience with textbooks, classrooms, and knowledge of the field as a teacher of 12+ years.
As the sole in-class researcher on the project, after reading the Massachusetts Curriculum Framework documents, it is evident that the framework has some foundation in up-to-date, socially conscious, inclusive educational research as I discussed at length in the Literature Review section on Curriculum Theory. The curriculum employs methods and strategies invoked in the research of Ladson-Billings (1995), Villegas and Lucas (2007), Mitchell (2014), Cochran-Smith et al. (2015) and Gee (2015). This could potentially serve as a demonstration of the Massachusetts public school system provisions that require higher teacher standards and advocate research-based methods more often than other states.

The Curriculum Framework does not, however, prescribe the manner in which the subjects be taught, the specific content, supplemental activities or classroom management style of any specific classroom to attain these objectives. It is normal practice for school principals and/or subject departments to develop a curriculum within the school. These interschool curricula (which works within the confines of the Framework) in some instances, are adjusted as a collaborative process among the department’s teachers. Thus, the teachers are not given free rein to choose texts and classroom materials, but may have reasonable levels of input. The students, teachers, parents and administration thus have cause to make the assumption that students are getting similar educations across public schools in the state. This is the focal contentiousness of the research, as, “What people accept as natural and self evident” is exactly what becomes “problematic and in need of explanation” (Angus & Jhally, 1989; King, 1991).

3A.3.1. Conducting Observations

For my Master’s dissertation I conducted ethnographic observations at a language school, similar to those in this study, which were able to serve as a pilot for the transcription methods used. Understanding and piloting the recruitment process for the language school study was also a key factor in allowing the administration contact choose teachers for the project. In the pilot, as with my thesis, the teachers were comfortable being observed, inclined to participate in a research project and were superlative teachers. They created the environment that allowed for classes to go on naturally and with little to no disruption because of my presence.

Additionally using a pre-tested transcription strategy helped to ensure the validity of data collection methods used. The initial study for my dissertation was conducted at two language schools in Edinburgh, Scotland in 2012. Although classroom content and language proficiency of the students differed, the method of creating classroom transcription was similar. Recording devices were not permitted in the language classes, which coincided with the regulations set forth by Hereford County Public Schools. In both studies, I was fully capable of writing down nearly all of the student and teacher interaction.
As a member check, a method of ensuring accuracy and corroboration from participants, the notes in the initial study were reviewed by the teachers several times throughout observations and the teachers were asked if they believed the notes were a legitimate and fairly complete depiction of the day's lessons. With participant confirmation, I continued the observations with the expectation that note-taking was regarded as a faithful reproduction of the classroom interaction. Because of this successful application of a note-taking method, I was then able to translate this note-taking method with participant confirmation to my thesis observations.

To conduct the observations at language schools, plans were made for me to be a silent observer of the class documenting teacher talk and student/teacher interactions, then analyzing the classroom discourse and topics. The main issue that needed to be worked out was the students’ and teachers’ feelings of discomfort about being observed. In order to allow for maximum comfort, but to safeguard my research topic, a small summary of the project was given to the students. The students were told the class would be observed for *What Happens in English Classes* and assured beyond all doubt that I was not doing any observations concerned with grammar, ‘correctness’ or the language ability of the students.

I began the language schools observations with the intention of being a non-participant observer. As the study worked with adult students it was paramount to my communication with them that they not see me as an authority figure and that they understand that there would be no judgements on their English. The teacher seated me among the students as the rooms were small and did not provide for an isolated observation area. The allowance of idle chatter and small instances of participation was decided on after the first day of observation. The students attained the greatest level of comfort when I was both approachable and spoke to them as equals during the observations. If the students asked questions I responded, and the instructor referred to my insight on a few occasions when the issue of dialectical and cultural differences were of note.

This manner of observation falls roughly in line with Keane’s research referring to, "a move away from seeing the researcher as passive or neutral with an emphasis instead on the researcher-participant relationship" (2011: 451). While the emphasis was not on the researcher-participant relationship here, it was an integral part of the success of the observations in my study. Although the use of this strategy was integral to the success of the pilot, it could not translate to the larger study conducted for the thesis, as no student data was recorded.

Observations within my thesis, which I explain in greater detail in the next section, were non-participant observations. Nevertheless Stone and Kidd’s above stance on neutrality is pertinent as my interactions with teachers outside of class gave rise to this possibility of partiality. Teachers’ interest in my prospective PhD topic and the day-to-day niceties of
sharing their classroom gave me a substantial inroad to their input and assistance. This assistance was imperative to the realization of the project as so many adjustments needed to be made on the spot, including a visiting lecturer, snow days, make-up classes and Christmas parties. Without having embraced Stone and Kidd’s (2011) suggestion of potential for a positive aspect of lack of neutrality, any or all of these could have hindered the completion of the project.

Another aspect of the language school study that I adopted in my thesis was that the director of the language school was given full autonomy to select which teachers, within the selection criteria, I would observe. During the pilot, this left me under the impression that I was observing the classes and teachers that were perceived as ‘the best’ by both the director. It also suggested that the teachers themselves, who were asked if they would like to participate by the director, have a high level of comfort and confidence in their teaching abilities. As with my high school teacher participants, this may have had its limitations, but it was also a clear path to looking at notable differences among ‘the best’ classes.

The expectation is that this issue also emerges in the current project, by using schools from Massachusetts, consistently ranked one of the top public school systems in the country. In addition to using some of the best public schools, allowing the principals to decide to ask specific teachers to participate, it is anticipated that the selection of teachers will at the least be among “the best” in the eyes of the administration, ergo, ‘the best’ of ‘the best’.

3A.3.2. Teachers

Talburt (2004) draws on Le Compte & Goetz’s (1982) claim that, “External validity is the degree to which such representations may be compared legitimately across groups” which helps to support my selection criteria of outside certification and requirements as a justifiable method of finding sound comparability among participants with this common ‘external validity’.

The primary participants for this study are high school teachers all certified as Highly Qualified Teachers\(^{20}\), as required by No Child Left Behind (NCLB), in six Massachusetts high schools. The focus of this study is on participants who are certified to some of the highest standards of education certification in the country.

The official United States NCLB requirement for Highly Qualified Teachers mandate the following:

- Full state certification,
- A bachelor’s degree, and
- Demonstrated competence in subject knowledge and teaching

For better or for worse, No Child Left Behind offered a further stipulation, one that allows states to raise the HQT requirements in order to compete for additional funding. This competition among states is known as “Race to the Top” or RTTT. Schools compete by upping the requirements of HQTs, satisfying testing requirements and affixing additional reforms (Gamoran, 2007). Massachusetts competes yearly for some of the $4.35 billion extra in public school resources.

To be a HQT certified under Massachusetts statutes requires:

- All NCLB HQT requirements and,
- A Master’s Degree in your field or in Education (within 5 years in some instances)
- 150 Professional Development Points every five years,
- Massachusetts Teacher Education Licensure and MTEL Subject Exams

All twelve of the main participants teach English or history classes (Schiller, 2013; 2015) in 10th and 11th grade in the Hereford County, Massachusetts in the United States. Two classes in each school, one history class and one English class, were asked to participate. Each of the twelve classes had more than eighteen, but less than thirty students. School principals in Hereford County are given the authority to set the class schedules for their high school. This meant classes ranged from fifty minutes to eighty-four minutes. In order to have comparable observations, each classroom was observed for 13-15 hours (780-900 minutes) of class time, or about four to six weeks. This amount of class time allowed for sufficient amounts of adjustment at the outset of the observations, enough time to create a composite picture of the classroom atmosphere and a well-rounded view of each teacher’s individual style.

The classes observed were college preparatory, mid-level classes for students with average grades and test scores. The principals were given the selection criteria for teachers and classes then asked to find volunteers for the observations. I made the decision to give autonomy to the principals to choose teachers as research access to public schools is quite restricted and it seemed the more control the principal had over the situation, the more likely he was to cooperate with the project. This autonomy allowed for the criteria to be adjusted slightly on one occasion. An honors class (students with scores of 80-100 the previous year in that specific class) was observed in Arthur Miller High rather than a college preparatory class.

As mentioned, because of the strengths and success of pilot language school observations, I chose to again allow the administrator contact (in this instance the principal or vice principal) from the high school to decide which teachers to observe. These choices presumably were due to the quality of teacher, their suitability in terms of teaching approach and either comfort being observed or reluctance to reject the request. Unfortunately, without giving the principals the freedom to choose the teachers they wanted to be observed, the project would most probably not have been able to proceed.
of these factors need to be considered and approached as limitations of the study. Nevertheless, each of the two teachers in the five schools were chosen in this manner. While the generalization of the findings to teachers is open to vulnerability, the suitability of the comparison of the teachers' classrooms across the schools in the study remains strong as all teachers were chosen within this criteria.

3A.3.3. CLASSROOMS

Before commencing the observations I spoke with the teachers and principals about their use (or lack thereof) of the Massachusetts Curriculum Framework. The framework mandates that teachers employ the aims and objectives of the framework, but schools, departments, and individual teachers have some flexibility as to what they choose to include in their curriculum.

The teachers claimed they were all teaching well within the Massachusetts Curriculum Framework. This was confirmed in my initial week of observations. The classes were comparable in size, level and student make-up. Even with the flexibility of curriculum given by the framework, the themes of lessons and topics were similar throughout. Many times the same texts, assignments, and lessons were used across schools. Lessons for the week were planned and broadcast in a variety of ways including on whiteboards, in packets of worksheets and verbally on a daily basis (i.e. 'in the next few days we'll be starting The Crucible, so we'll finish up this last chapter today and tomorrow we'll have a quiz').

Lesson topics and themes that were observed included:

- Details of revolutions and revolutionaries in history
- Western Europe
- Holocaust survivors stories
- Pre-Civil War history
- History of Slavery
- To Kill a Mockingbird – Harper Lee
- A Raisin in the Sun – Lorraine Hansberry
- The Crucible – Arthur Miller
- A selection of canonical short stories
- A selection of nonfiction essays
- Writing a five-paragraph essay (based on the literature)
- Writing an essay – based on historical information
- Othello – William Shakespeare

While I do not discuss all of these topics in the analysis, these topics and books are all included in as options within the Massachusetts Curriculum Frameworks of English Language Arts and history.

3A.3.4. STUDENTS

In this section I will present an explanation and discussion of the students' involvement in observations conducted for my thesis in five high schools in one Massachusetts county. The students were all native or near-native competence speakers, and none of the students took
any supplementary English language education. There were no other criteria for individual students besides those previously implemented by the schools for the classes they were attending. The selection criteria was based only on the original publically available statistical data, which led to school choices. All participating students were judged capable of attending the standard level (college preparatory) classes that I observed. As explained there is no individual student data involved in this study. All data gathered is solely the teachers’ language and the classroom environment they provide as well as observations on the school community as a whole.

3A.3.5. Observation participation
The observation methods that were employed in the pilot were not replicated in the high schools as being considered an 'equal' among high school students was not a realistic option. I was designated a desk or table in the back of the room. In most rooms the students were unable to see me if they were facing the front of the room, which aided in my relative inconspicuousness during observations.

My position as an observer was complicated at first as the objective of the observations was to understand what is taking place in the classrooms in terms of teacher talk and lessons (Stone & Kidd, 2011: 65). My intention was to replicate the semi-silent participant observations that had been conducted with the adult students in the language schools. Unfortunately, this proved to be problematic for many reasons (reasons mainly typical of high school students). While I knew my presence would initially have some effect, the teachers were concerned that the sitting among the students would not be prudent. I agreed and relegated myself to the seat in the back of the classes, separate from the students. Gayton’s (2014) research on high school language classes also made the choice to refrain from participant observation as directed by King (1979), who explains that it is impractical for an adult to attempt to integrate in a high school classroom as a participant observer.

Citing Tusting and Maybin (2007) it was evident that “the researcher is inevitably part of, and shapes, the research that is being produced” and the location and visibility of my presence mattered in the high school classes, more so than in the adult language classes (578). Here in these classrooms if I wanted to get a more honest observation of how the class ran, my presence, as an adult, in the middle of young people (10th and 11th graders are usually 14-16 years old), would be too conspicuous and would create more questions about methodologies and the role of adults or authority figures in the classroom than I am prepared to go into in this project as a silent observer.

Noting that I had made this decision outside of my original plans to be a participant observer, its impact on the observations is not ignored. My lack of integration into the
classroom (most of the students ignored me entirely) was a decision that in effect, created a fishbowl type investigation into teachers’ classroom language and lessons. This distance between the students and myself gave way to a different dynamic in the classroom than was previously created in the pilot study. This dynamic had potential effects on the observations such as student reluctance to participate in class activities or my presence giving the appearance of assessing the students’ performance. Unfortunately, in fieldwork the researcher “cannot escape choices” such as these (Dorr-Bremme, 1985: 66). Focusing on teacher talk and lessons was appreciably more important than the sense of comfort and familiarity with me personally that may have inhibited the students in a different way, a way which may not have worked to my advantage as it did in the pilot, and this different but additional benefit contributed to the smooth running of the observations.

The teachers were directed to teach classes as they would on any normal day with no alterations to testing (teacher-authored tests, not standardized), group work, or any other classroom activity. They were also instructed that piquing my interest was not their concern, and to go ahead with any silent activities, movies, and any testing that they may have considered ‘uninteresting’ to observe.

The students’ reactions to the teachers’ language is of little consequence in this study as there is no student data. The teachers are all Highly Qualified Teachers, which, as I previously described, allows for a comparison using information that the Massachusetts Department of Education finds relevant in the hiring of its educators. The students were repeatedly reminded the observation was of the teachers and that their interaction and class participation was in large part, not the concern of the study.

3A.3.6. TEACHER INTERVIEWS

Throughout the process of fieldwork I had to rely on the teachers’ and other staff members’ openness. Negotiation of access to the schools was vital to the success of the project. I adopted Patton’s (1990) stance on research disclosure. Patton recommended a complete description of the study proposed, with no exceptions, leading to an honest discussion with the principals and teachers about what was being looked at specifically during the class observations. With that knowledge, the point of contact (usually a principal or vice principal) was less reluctant to open the school to my observations. Additionally, it added both comfort and naturalness to the teacher’s classroom when they were informed that it was language, and not teaching skill that was of interest to my research. This benefit was experienced throughout the month of observations, as the teachers felt assured that they were not being observed in terms of their teaching quality. Many researchers agree with Patton that full disclosure is vital to create a level of trust, and that level of trust needs to continue throughout the research project in order to sustain consent (Orb et al., 2001; see
also Field & Morse, 1992; Kvale, 1996; Patton, 1990). The necessity and benefits of trust and the continual negotiation of consent was evident in my research.

Three to four weeks is a significant amount of time, and my relationship with some of the teachers became friendly. Conversations about the students, lessons, classes and the project occurred on most days. Orb, Eisenhauer and Wynaden explain that this is a natural part of research negotiation and this rapport is an integral part of the study, as these relationships "may facilitate or inhibit access to information" (2001: 94). Daily conversations allowed me to get a sense of the teachers, for this reason the reflexivity of the project in general is reflected in the findings. The ideas discussed in the presentation and semi-structured interviews were all touched upon by the teachers during both the informal chats (Menard-Warwick, 2008; Slembrouck, 2011; Yang, 2015) and the scheduled interviews.

The interviews became more of a chance to sit down and discuss the issues that were mentioned during informal chats between classes, rather than our first time speaking about any of these topics. When the interviews were conducted I already had some level of understanding of the teacher’s points of view on some of the topics in the interview, and the interviews allowed me to have them explain or expand on these preliminary observations and ideas. These informal conversations happened in all ten classes, and while the missing Justinian High teacher interviews are a limitation of the study, the deeper understanding and knowledge of each teacher’s class management, language and points of view during informal conversations took place there as well.

The interviews had two main objectives, 1) To get the teachers’ impressions of my initial findings, and discuss any misconceptions I may have drawn from the classroom observations and 2) To draw out novel information that I may have overlooked in the data. These reflexive interviews were planned at the start of the project as a primary objective, but with access, scheduling and consent issues, and with the abundance of findings during observations, the interviews became a secondary supplement to the three to four weeks of observation.

3A.3.7. Presentation and interview questions

The interviews were conducted with teachers during lunch breaks or after classes, and depending on the teachers’ schedules the interviews varied from individual one hour sessions to two and a half hour combined sessions. There were three parts of the interview process:

- Short presentation of preliminary findings
- List of factors that may affect a student’s education
- Open-ended questions
First, the teachers were given a short presentation of preliminary findings. During the next portion of the interviews the teachers were given a sheet with two parts to discuss: A list of factors that researchers believe have an impact on student education and a set of open-ended questions. The teachers were given the interview sheet and ample time to look it over before beginning the interview. This strategy was used to allow the teachers time to discuss their answers, while guiding the discussion so as to keep it within the general area of social class and educational research. It also allowed the teachers to have large amounts of freedom to bring up issues and skip around to connections that were most salient in their mind. This method (Menard-Warwick, 2008; Yang, 2015) was used to inspire a flow of conversation about students and ideas rather than answers to specific questions.

The presentation, list of possible effects, and questions were all considered prominent themes in the previous ethnographic observations (see Baker M., 2004; Eisner, 2017 and Pantopolous, 2012). Informed by the understanding that choices and construction of the questions and "... the accumulating of data always reflect the investigator's perspective of what is important" (Dorr-Bremme, 1985: 67). Again, the teachers' positions in the schools, their confidence in their teaching, their job security and similar matters were not discussed or assessed, so all answers should be understood with this in mind.

Below is a sample of a slide used in one of the presentations. While the bullet points are in the form of statements, the teachers were asked their opinions on whether or not they agreed with the findings and to what extent.

**Sample Interview Presentation Slide:**

<table>
<thead>
<tr>
<th>Group Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Most of class is spent working either in groups, pairs or individually.</td>
</tr>
<tr>
<td>2. The teacher only lectures occasionally.</td>
</tr>
<tr>
<td>3. The teacher gives directions, then roams around the room checking up on students 4. and answering questions.</td>
</tr>
<tr>
<td>5. Teachers are there to support students not to tell students what to do.</td>
</tr>
<tr>
<td>6. Teachers assume this is better than lecturing.</td>
</tr>
<tr>
<td>7. Student opinions are pretty important to group assignments.</td>
</tr>
</tbody>
</table>

Figure 3a.2: Sample interview presentation slide

Below is a sample interview sheet. The first section of the sheet is a list of research-based topics that may in some respect or other play a role in student success and achievement. Others in the list are discussed as possible complements to student success along with other strategies and methods.

The full length questions were constructed before the observations, then edited slightly for continuity and to add specificity. Each question was chosen to elicit long, continuous responses. As was discussed previously in the chapter, the primary focus of the interviews was to gather information on the teachers' perspectives on my findings in order to get a more complete picture. However, the overarching themes of the thesis are that of social
class and teacher talk. Thus, these questions used the frame of social class to ask subtly about curriculum, teacher education and teacher perception in addition to explicitly asking about social class, materials and teacher talk differences.

The teachers were given this document and a broad explanation of how the interview was to go forward, explaining to them most of the aforementioned reasons for giving them the sheet of factors and questions rather than directly asking them the questions in an order. As with all interviews, there is some level of explicit order to the way the teachers read the list and the way questions have been constructed (i.e. numbered list, bullet points) (Shor, 2012). In order to counteract the order as much as possible the participants were given a free rein over the format of answers and discussion. No questions within this list were specifically focused or expanded on as the interview method required that the discussion be guided by the teachers once they had seen the interview worksheet.

**Sample Interview Worksheet:**

Figure 3a.3: Sample interview worksheet

<table>
<thead>
<tr>
<th>How do you think the following things affect your students’ education, if at all?</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Desire to learn</td>
</tr>
<tr>
<td>● Income</td>
</tr>
<tr>
<td>● Diet and Exercise</td>
</tr>
<tr>
<td>● Social Class (Poor, Middle-Class, Rich etc.)</td>
</tr>
<tr>
<td>● Education of parents</td>
</tr>
<tr>
<td>● Parental involvement in your education</td>
</tr>
<tr>
<td>● School Spirit</td>
</tr>
<tr>
<td>● School amenities (Technology, stadium, school supplies provided by the school etc.)</td>
</tr>
<tr>
<td>● Politics/Government</td>
</tr>
<tr>
<td>● Self-esteem</td>
</tr>
<tr>
<td>● Teacher’s Education</td>
</tr>
</tbody>
</table>

1. Tell me about your teacher education. What did you study in terms of theory and practice and how have you employed this in your classroom?
2. How prepared did you feel when you finished your degree? Were you able to see the reasons for your PG classes?
3. Do you consider Social Class in your everyday life? How would you define it?
4. How often do you discuss class relations, either present day, historical or fictional, in school?
5. What types of things do you think I observed at your school? At other schools?
6. What do you think would be the difference, if any, in the way teachers talk between a failing school and an elite private school?
7. What types of things do you expect of your students? In the future?
8. The school rankings put XXXXX High at number XX in Massachusetts (as of September 2012). What do you think that means? What do you think it would mean to be #1 or #239?
9. Do your books discuss social class issues: either fictionally, historically or presently?
10. What do you think about the books you teach from? Do you like them? Are there other books you’d like to assign in classes?
11. What’s the purpose of getting an education? What do you learn – as a whole – in school?
12. Is there a difference between knowledge and information? Which do you teach in class?

Each participating teacher was presented with a short presentation of my preliminary analysis as well as a short questionnaire that they were told to use as a ‘guide only’ for the discussions. The flow of the interview was never difficult, I did not spend much time directing the teachers to the questions or asking them to focus on any specific points. As a
rule, throughout all of the interviews there was a free flow of conversation, with very little prompting on my part.

“The interview is not some magical path to the “Truth” but sometimes researchers portray it as such” (2011: 611), Gearity notes in his discussion of Alvesson’s theory of reflexive interviews. Although it may not be a ‘magical path to the “Truth”, the interview has also been called, “a pipeline to truthful knowledge” (Silverman, 2011). Without reflexivity, the investigator’s decisions about what is compelling and of interest goes mainly unchecked. Admittedly, the data will always partly reflect the primary researcher’s interests (Dorr-Bremme, 1985: 67), but a reflexive interview allows the interviewer to question their own bias on the data and use “reflexivity as self-critique” of their analysis (Alvesson & Sköldberg, 2009).

The reflexive interviews added richness and validity to the observation data and allowed the teachers to describe their thoughts in depth. Their additional insights provided for an insightful supplement to the data.
3B. Methodology

3B.1. Analyzing the data

This chapter provides a comprehensive description of the data analysis process. It may appear to primarily discuss the qualitative portions of the study, but these observations and interviews led to questions about patterns and trends in the corpus analysis.

The overall analysis was divided into two sections. First, I will describe the analysis throughout the fieldwork, which follows reflexive methodologies that allowed me to adjust and integrate new information on a day-to-day basis. In the second section, I explain a more in-depth analysis on the entirety of the data including: observations, interviews, field notes and prominence of language. The data was analyzed inductively to a great extent, as is common in qualitative research but were guided by a general set of research questions (Bogdan & Biklen, 1997; Creswell, 2007; Miles, Huberman & Saldana, 2013). The overarching themes of classroom differences across social classes from Anyon’s (1980) Social Class and the Hidden Curriculum of Work informed the initial inquiries into the data.

In large part the steps in the analysis are drawn from Tong, Sainsbury and Craig’s (2007) 32-item checklist for interviews and focus groups, but the employment of it here is drawn from its wider use in qualitative social research (Wu, Wyant and Fraser, 2016).

An analysis based on Tong, Sainsbury and Craig’s (2017) checklist also grounds itself in a reflexive methodology citing validity checking by participants as a vital component of any analysis. In reference to Anyon’s (1980) research, these reflexive methods tend to go further than in the past literature as a means of capitalizing on the use of meaningful information gathered from participants and their points of view. Anyon stopped short of this level of reflexivity in her 1980 Social Class and the Hidden Curriculum of Work, but only in the sense that this method fed back and informed the outcomes of analysis.

The analysis also relies on additional descriptions of qualitative analytical frameworks from Eisner (2017), specifically that of the method of formulating themes (see examples in Orr, 2016). Eisner’s (2017: 177) description of a “prefigured focus” in qualitative analysis in classrooms explains my initial research questioning, and the desire to look specifically at teacher language across these schools. Eisner’s (2017) "emergent focus" which he describes as much like Dewey’s (1938) “flexible purposing” provides the background for the shift in focus to an analysis of lesson type as these themes emerged as salient throughout my observations. Eisner’s reluctance to pin down specific questions prior to the study is reinforced in his explanation,
The idea that one knows beforehand what significant variables and can predict their magnitude in cells describing the anticipated effects of some treatment is simply inappropriate for qualitative research. That does not mean there is no rhyme or reason to qualitative research but rather that the course of its development is contingent upon the features of a future no one can fully anticipate (Eisner, 2017: 170).

<table>
<thead>
<tr>
<th>Corpus Data</th>
<th>Ethnographic Observations</th>
<th>Interviews</th>
<th>Validity Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Using verbatim notes only</td>
<td>● No interaction with teachers or students during class</td>
<td>● Ten minute presentation</td>
<td>● Reflexivity</td>
</tr>
<tr>
<td>● Initial common analysis of lexical richness</td>
<td>● Verbatim notes of teachers only</td>
<td>● 10-20 minute discussion and evaluation of presentation</td>
<td>● Triangulation</td>
</tr>
<tr>
<td>● Reflexive analysis after data collection</td>
<td>● Field note summaries after class</td>
<td>● Teachers’ asked to validate, reject or add to findings</td>
<td>● Member Checking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● 60 - 90 minute open discussion surrounding questionnaire</td>
<td>● Rich, Thick, Descriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Teachers’ choice of space and time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Logistical limitation: Absence of one school representing an entire category</td>
<td></td>
</tr>
</tbody>
</table>

Table: Data Analysis Overview

Description of the analysis begins at data collection from each school. The data collection commenced once the recruitment, scheduling, and consent procedures were completed. The process of the initial analysis that led to school choices using publically available data is detailed earlier in the Methodology chapter. This earlier analysis was used only to choose and categorize participating schools within the middle class. The specific indicators of social class such as per capita income or higher education attendance helped to indicate where these schools fall on the socioeconomic spectrum with respect to each other. The information is indeed meaningful, but any specific indicators of socioeconomic status do not play a role from this point on, and will not be a factor in the analysis of the data collected within the schools. Their contribution to the understanding of the data is of course relevant, but as stated the observations are done with a view to look at differences among these schools, and not use their specific socioeconomic indicators to make judgements on the effectiveness or quality of these differences. This division is complex, but hopefully the distinction is made clear.

3B.1.1. FIELDWORK DATA ANALYSIS

The data was collected from one or two schools at a time, depending on schedules. This provided ample time for travel and taking fieldnotes after class. These fieldnotes were a summary of the day noting general observations about student-teacher interaction, the
classroom atmosphere, school amenities and the community. After the 14+/- hours of each classroom observation were complete I consulted the fieldnotes from the past weeks and explored the daily transcripts for themes, ideas and patterns as well as noting questions I had about the classroom strategies, presentation and management.

These themes, ideas and patterns were extracted from the data from each school, then used in developing presentations and interviews for each set of teacher interviewees. The presentations were individual to schools, while the interview worksheets were uniform across the participants. Although the questions were the same, the teachers were given rein over which questions were answered, to what extent and which topics they segued into. The presentation and questions were posed with a view to checking the validity of the extracted themes, as well as gathering supplemental new data.

The interview was formally divided into two parts, a presentation on general themes I extracted from the observations and field notes and an open interview where the teachers were given a set of questions and encouraged to answer them in a manner that suited them. The presentation involved 5-7 slides with one main theme and then general examples of how this was observed in the classroom or elsewhere. The slides were developed to cite general themes (i.e. Group Work) and then follow up statements regarding those themes (i.e. most of class is spent working either in groups or pairs). Both the slides and statements were designed to enable a platform for the teachers to express their opinions on the validity of these findings, and add anything that they believed was important.

The second part was decidedly less formal. The teachers were all presented teachers with the interview worksheet. There were no other directions given as to how/what order they should answer. They all began by answering the first question, and then were more comfortable moving on to answer the questions and themes they found most relevant and interesting.

The interview data from each set of two interviews was compiled and divided into two sections: participant validity checking and confirmation/rejection of themes, and new data. Once all of the interviews were complete I compiled all data from the seven teachers' insights into themes. They were divided into previously derived themes that the interviewees either confirmed or new themes extracted from the interviews questions. I then went on to compile and organize both the observation data and interview data from each school for ease of post-data collection analysis.
The following figure typifies the research process for data gathering throughout my fieldwork:

Fieldwork Data Analysis

Figure 3b.1. (See enlarged figure in appendix)

3B.1.2. POST DATA COLLECTION ANALYSIS PROCESS

The next step, once the observations and interviews were complete was to arrange the larger body of research, from interviews, to field notes and observations into one and begin to organize the data. There were several different means of organizing.

First, the observations were developed into suitable formatting for a corpus of teacher talk, this entailed removing my notes, lesson titles, dates, and times. The corpus, a compilation of around 90,000 words was then divided into smaller subcorpora by social class, school and finally individual teacher. A full description of the construction of the corpus can be found in the Methodology section on data analysis.

Next, the observations were organized by class and lesson. A review of the transcripts of each of the classes enabled me to carefully label and name the lessons, and the class number for each day of observation, noting that many lessons were completed over more than one day. I then organized each individual teacher's observations into school observations. From this I extracted the most salient school-based themes from the observation data that held through validity checks.
The next step was to analyze these school-based themes and focus on the themes that remained consistent across the social class categorizations. Finally, the lessons were organized by the most salient examples of these prevalent themes and were developed for presentation in the thesis.

The interview data was initially systematically organized first by teacher, then by school. Presentation responses were listed first, as each school’s presentation was particular to the prior observations. The portion of the interview where the teachers answered the uniform questionnaire were then arranged by responses, noting that these categories varied as each teacher answered only the questions they felt were the most relevant.

This manner of categorization allowed for the markedness of themes to emerge. The commonalities and differences of the teacher’s answers gave way to clear points of interest across schools and social class. Categorizing these emergent themes was merely a process of drawing out meaningful insights from the interviewee’s responses, and as with the observations organizing them into illustrative examples. A final step in the analysis was the discussion of similarities and differences as well as peculiarities in themes across all three types of data and how that reflects on the findings.

The following figure typifies the research process for the post-data gathering analysis:

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**Post Fieldwork Data Analysis**

Figure 3b.2. (See enlarged figure in appendix)

(Figures and analysis based on Carroll & Booth, 2015; Eisner, 2017; Tong, Sainsbury & Craig, 2007)
3B.1.2.1. Limitations and Considerations

Problematically heavy snow resulted in several schools cancellations and delays which caused the interviews at Justinian High (Upper Middle Class school) and one interview at Hansberry High (Lower Middle Class school) to be postponed and subsequently cancelled. The result of this is a limitation of the interviews that I discuss further in the reflexive interview chapter. There was however, extensive conversation before and after class between myself and the teachers, so while the interviews are only focused on teachers from four of the schools, some of the information and excerpts used in the chapter on teacher interviews covers a discussion using information from all teachers.

3B.2. Analysis Methods

In an effort to explore the data in several ways, I employ three separate methods of inquiry combining both qualitative and quantitative approaches. As quantitative research is seen by the public as more comprehensively empirical, I chose to use a corpus analysis to look at the observations in a way that allowed me to take some of the subjectivity out of the analysis. Modelling my analysis on Murphy’s (2007; 2010; 2012) sociolinguistic/corpus research, I took several small corpora and explored traditional measures of difference across the schools as well as salient themes within and among each of them.

As the project initially focused on a more language-based analysis, Murphy’s methods were well suited to my study. Additionally corpus analysis being applied to individual classroom data had begun to produce interesting results, specifically in the field of language teaching (Adel, 2016; Flowerdew, 2014, 2015; Nation & Coxhead, 2014). The first method is a corpus analysis of classroom observation transcripts. In an attempt to quantify the differences in language across these incrementally unequal schools, I created a small-scale corpus of the observational data. I cite supporting literature in an examination of how corpus linguistics is relevant and useful for this type of study.

I then took a more common approach to classroom data and used the complementary methods of observation and interview data. Specific forms of these two methods were chosen in an effort to reduce subjectivity and add a member-checking and reflexive aspect to the project. The second method I explain is the use of Anyon’s ethnographic observational analysis, which she developed in concert with her work in New Jersey schools in the 1980s. The approach Anyon takes is supported by Lather (1986) in that it minimizes subjectivity by creating distance and limiting commentary, using primarily her choice of exemplar data as an analytical output.

Ethnographic observation was also the method of analysis developed and employed by Anyon (1980) in Social Class and the Hidden Curriculum of Work, and allows parallels between the two projects to be more apparent. The following are short reviews of the
literature surrounding these methods and their implementation and relevance to my thesis. Reflexive interviews and member checking are the final methods used in my thesis. In the section explaining these practices, I touch upon some of the literature surrounding reflexivity and its emergence in research in recent years, as well as its importance to data collection as insight into participant point of view.

The analysis is divided into three sections using three distinct methods:

- A **Corpus Analysis**, exploring the specific linguistic word choice, frequency and lexical richness across schools
- An **Ethnographic Observational Analysis** that aims to provide a ‘show, don’t tell’ approach to observation data
- **Reflexive interviews** that serve to inform my findings and integrate teacher perspectives and act as a validity measure

### 3b.2.1. Corpus Linguistics

While the quantitative/qualitative mixed method is somewhat less abundant in educational research (Rist, 1980; Levinson & Holland, 1996; Niglas, 2000), there is a long history of influential complementary qualitative and quantitative work in corpus linguistics (Biber, Conrad & Reppen, 1998; Gregory, 2011; Meyer, 2002; Tognini-Bonelli, 2001).

In particular, Murphy (2010) uses dual sociolinguistic and corpus approaches in much of her research on All-Female Talk (2010) and Irish English (2007; 2009; 2012). Her work uses data sets similar to those adopted in this chapter using spoken data from informal talks, and division, then re-division of categories. As exemplified in her work on All-Female talk where Murphy subsequently divides the groups of conversation transcripts into age cohorts. Her use of self-created corpora is a perfect example of small-scale corpus research, and I have largely used this research as my model for corpora construction. Murphy also advocates for a complementary qualitative sociolinguistic analysis, particularly with Critical Discourse Analysis, along with corpus analysis and indeed even discusses the complementary intersection of the two in much of her work (2010; 2012).

Literature on corpus analysis is abundant, but the specifics of subject-based corpus research adds to the complexities of using corpus tools in research (Gregory, 2011; Jones, 2013; Slatcher et al., 2007). To a great extent corpora research focuses on the combination of linguistics and education: language education and the use of corpora or corpus creation for classrooms and student learning. The analysis that surrounds this type of research asks what words and phrases are most common, necessary or sufficient to be worth exposing language learners to, depending on the students’ needs. These corpus tools are well suited to the analysis that follows. In this study a combination of corpus tools and measures employed in several fields such as critical discourse analysis and translation are used to investigate the corpus.
A corpus linguistic analysis with a focus on word choice, frequencies and lexical richness was chosen as a way to comparably analyze language use quantitatively. Corpus linguistics has been regularly used to look at classroom discourse and has shown to be an optimal source of quantitative data working effectively in concert with qualitative methods (Baker, 1996; Clark, 2016; Gabrielatos and Baker, 2008; Gregory, 2011; O’Keeffe & Walsh, 2010; Walsh & O’Keeffe, 2007).

Frequently, corpus linguistic analysis has centered on language classroom research. In this study the focus continues to be on language, but in classrooms teaching traditional school subjects to native speakers. However, the purpose of the corpus analysis suits the research as its primary aim is to use computational tools to process and compiled large amounts of language data quickly (Walsh & O’Keeffe, 2010: 142).

This use of corpus linguistics fits the purpose of the research as the analysis explores specific word use comparatively. The analysis seeks to determine the lexical similarities and differences across classrooms across the different socioeconomic categories included in this study. Importantly corpus linguistics provides a decontextualized analysis of words, frequencies, lexical variety, density and sophistication. Gregory (2011) claims that out of its context these initial analytical processes are useful primarily for gaining a general overview of language use, in this study specifically in terms of individual word use. Pantopoulos’ statements are in accord with Gregory as she maintains that these first tests provide a starting point with which to approach the data (2012: 97).

For these reasons a corpus analysis was used as an initial glimpse at the dispersion of similarities and differences in teachers’ talk across classrooms. The results of which served as a springboard for the ethnographic analysis.

3B.2.1.1. Construction of Corpus

Before addressing the research question, the construction of the corpus is described in detail. The collection of the corpus was almost identical to the class observations, detailed in the Methodology chapter, documented over four to six weeks of the Hereford County school year.

The speakers are ten English Language Arts (ELA) or history teachers in five different high schools in Hereford County, Massachusetts. The observations were conducted silently and recorded by hand on a password protected institutional laptop in the teacher’s classrooms as well as school libraries and computer labs (when classes were held in the library or labs). Student talk is not included in the corpus. The focus of the research was on teacher talk and the standardization of lessons within the Massachusetts Curriculum Framework (MCF). The student side of interactions has been omitted from the research for reasons of both research focus and ethical consideration. The topics covered in the corpus are mainly
limited to lessons and subjects referred to in the Massachusetts Curriculum Framework for both English Language Arts and history, but the transcripts do not exclude teacher talk not related to lessons and should be considered a full documentation of the entirety of classes.

3B.2.1.2. Transcription

Because of regulations prohibiting use of recording devices, audio or video, the method of transcription was detailed note-taking in real time. Student and teacher interaction, slowed pace, and graded language (a method of changing vocabulary and grammar to suit the audience) allowed for a record of nearly all teacher talk. The successful use of this method, for similar regulatory[^2] reasons, was demonstrated in a previous pilot and subsequent study conducted in language schools in Edinburgh, Scotland (DeMarco and Gayton, 2016; under review). The notes are written in a way to be as exactly representative of the teacher's words as possible but in some instances I have attempted to identify mumbles or have excluded a word that was indistinguishable. This is in line with standard practices of machine transcription (Bailey, 2008; Jenks, 2011). While it is not a common practice to use by-hand transcription, there are notable exceptions including the Hansard Corpus which is not a word-for-word record of Prime Ministerial questions in the Houses of Parliament, but a set of notes compiled into a report. Hansard is relied upon for research as a representative account of the speech that takes place at these events (Alexander and Davies, 2015--; Bachmann, 2011; Gabrielatos and Baker, 2008). It should be noted that while it is considered representative, it is not considered exact or verbatim, this is also the case with my transcription.

Included in the full corpus is board work, notes, and PowerPoint presentations as they can been seen as an extension of the teacher's language as they are entirely teacher-authored. Not included here are the worksheets and packets handed out by teachers during class (although several of which are discussed in the Ethnographic Observational Analysis chapter).

Exclusion of worksheets from the corpus was necessary because schedules did not allow me to participate in every class that the worksheets pertained to. This problem was due to time constraints of the observations set forward by the initial proposal presented to the school administrator. These worksheets sometimes covered large spans of classwork, notated grading rubrics that involved entire quarters (one half of a semester), reviewed past lessons and future activities that I was not or would not be present to observe. Including these worksheets seemed to undermine the purpose of a classroom observation and the language differences between the teachers. Information from the worksheets and activities are not ignored, and are to some extent considered in other chapters, but are not compiled in the corpus data. The worksheets were also not all teacher authored, which did not lend itself to the project's corpus work which focuses solely on teacher talk.
In reading the text of the corpus it is important to reinforce that in each sub-corpus the teacher's language only is recorded, and all student data is omitted. Observing the entire class aided in analysis of the teachers' class-directed speech and on occasion, as well as the teacher portion of one-on-one interactions with students (heard by the entire class) but any comments or questions from students have been left out. Occasionally this leads to the text data reading awkwardly and the language sounding stilted, but is in accordance with students' privacy and anonymity strategies undertaken in the study.

Teacher speech is printed as full words and written as they are heard. Non-standard words such as gonna, wanna, yep etc. have been included in all classroom observations to allow for the teacher's natural language to be a subject of the analysis (in the end it was not salient enough to discuss).

3B.2.1.3. CORPUSS TYPE AND COMPUTATIONAL ANALYSIS

Each of the corpora created have been classified as a specialized corpus, defined by its construction specifically for this one study. I have defined them each as a genre-specialized corpus of 'lesson observations of teacher talk', which assists in providing support for its comparability across each of the sub-corpora.

The constraints of its specificity in time and the definitional and contextual parameters require that the present project be a static corpus[3]. Leech specifies that “total accountability” is necessary when analyzing a corpus. One way of confirming this type of accountability from a much larger corpus that aligns with Leech’s total accountability model is taking a smaller sample data set and analyzing it in its raw data form. As my corpus of teacher talk is under 100,000 words I was able to use the entire corpus in lieu of a sample and take account of all instances (Leech, 1992).

The observations (thirteen to fourteen hours of class time) were reformatted and converted to text files and then uploaded to SketchEngine21 (Kilgarriff et al., 2014) and AntConc 2 (Anthony, 2011) corpus and concordance programs. For a large portion of the analysis I use the SketchEngine tool. SketchEngine allows for the quick upload and general ease of sorting through data without formatting and tagging problems. SketchEngine also provides a method of analysis for comparing and contrasting both the main corpus and the numerous subcorpora in a variety of ways (Kilgarriff et al., 2014).

One of the limitations of SketchEngine is that it cannot produce full, printable word lists of an entire corpus. This is due to the nature of many corpora which can be millions of words making a full list impractical. This is not the case with my corpus. Thus, for a small scale analysis such as this one, AntConc (2011) is used for producing more complete frequency

21 The numbers for AntConc are slightly larger. This is discussed further in the section on lexical density and lexical sophistication.
lists and the two complete word lists that required by-hand categorization: lexical density and sophistication and the analysis that follows those sections.

The corpus\textsuperscript{22} was first uploaded as an individual teacher sub-corpora, then grouped into individual high schools, and subsequently divided into different socioeconomic categories which are defined at length in the Methodology chapter. The entire corpus in this study thus consists of ten separate classroom subcorpora, five school-based corpora or three socioeconomically categorized corpora. The reason for this initial breakdown to the smallest corpus then re-grouping is to analyze the data in a way that attempts to find aspects that help us understand why or how these classes are linguistically different. It provides a method of looking at the variability both between and within each set of subcorpora.

Following Stone and Kidd’s suggestion that researchers “need to simplify real life in order to attempt to explain it” (2011: 332), the broader socioeconomic divisions open the analysis up to a macro-social explanation, while the individual analysis looks within each teacher’s classroom language for salient lexical features.

A look at the dispersion of words throughout the corpora is key to understanding how interesting or meaningful any of the findings may be or whether the numbers tend toward one instance or individual. For this reason, each sub-corpus is an individual teacher’s classroom observations. Once the dispersion throughout the entire corpus has been accounted for, the re-grouping of the schools into more general categories can give us a more comprehensive analysis of the data (McEnery et al., 2006).

The main research question posed in this chapter asks:

\textit{Is teacher talk across these middle class schools different when analyzed for lexical richness and word use?}

\textbf{3B.2.2. ETHNOGRAPHIC OBSERVATIONS}

In order to gather data for this thesis I undertook a substantial amount of classroom observation across five schools and ten classrooms. A review of the method of observations is presented in this section. Following Anyon, as was appropriate for the project, the method used for analysis of the classroom observation data was an ethnographic (descriptive) observational analysis.

Anyon’s ethnographic, descriptive observational model is used most prominently in her seminal work \textit{Social Class and the Hidden Curriculum of Work} (1980), and is the method of analysis used in this chapter. Ethnographic descriptive observational analysis\textsuperscript{23} is

\textsuperscript{22} The details of all corpora and subcorpora counts can be found in the corpus chapter.

\textsuperscript{23} Sometimes Anyon refers to the method as an ethnographic descriptive observational analysis, but in most instances I use the shorter ‘ethnographic observational analysis’. 
compatible with the view that qualitative research subjectivity is already present in “how to focus inquiry, what to include as data, and how to describe what they [researchers] have seen (Dorr-Bremme, 1985: 66)”.

The descriptive nature of Anyon’s analysis method allows observers to choose the points that are highlighted in their work, but also allows readers to form their own theories and opinions on what those highlighted points may mean, if anything, for the researcher’s purpose (Stone and Kidd, 2011: 331; also Dorr-Bremme, 1985). The analysis is limited to the construction of the comparisons, and the demarcation of “critical moments of interest” (Stone & Kidd, 2011: 333), both researcher’s decisions. Some remarks are provided to demarcate where observed differences seemed notable. The reader is then asked to consider if the comparisons are valid and meaningful, and if the “critical moments of interest” are indeed sites deserving of examination (Stone & Kidd, 2011).

Anyon’s method keeps a fairly distanced view in the analysis, preferring to show, not to tell. This is in line with Lather’s (1986; see also Creswell & Miller, 2000; Morse, 2015) discussion of ways to bolster empiricism in qualitative research, and following Lather (1986), where there are subjective choices, they are explained.

Several of Anyon’s other articles (1979; 1980; 1981) have proven to be consequential for the foregrounding of educational research on social class inequality. Anyon’s work observed specific instances of Keddie’s contention that “different kinds of students get different kinds of knowledge” (1971: 63). Anyon’s article laid the foundation for the view of social class stratification that I sought to re-evaluate in this study.

The analysis of observations are described in full in this section. An ethnographic observational analysis is used to analyze the classroom observation data following Anyon’s use of this method. As stated because subjectivity is a major consideration for ethnographic research (Lather, 1986), the decision on methods was done in a manner designed to minimize this subjectivity. No method can completely prevent it in researchers’ choices, so the ultimate goal is to limit it to the point where meaningful information can be extracted from the data.

Anyon’s methodology is very hands-off and minimalist with regard to commentary and discussion. The analysis conducted in the chapter on Ethnographic Observational Analysis adheres to this practice, with a basic description followed by brief commentary following each illustration from the data. The analysis is limited to the construction of the comparisons, and the demarcation of “critical moments of interest” (Stone & Kidd, 2011: 333), both researcher’s decisions. Some remarks are provided to demarcate where observed differences seemed notable. It is in the choice of excerpts that enables consideration of the comparisons as valid and meaningful, and whether the “critical
moments of interest” are deserving of examination without producing extensive commentary.

My research aims to move away from issues of teacher effectiveness, teacher ability and teaching methods and attempt to observe the classes in a way that documents teacher talk in the classroom as the students experience it, without an assessment of the teaching. Hopefully, maintaining this posture toward classes allowed for a clearer depiction of classes by focusing on the way the class was conducted in terms of language and lesson types, rather than the direct impact on students. Focusing on teacher talk and lessons rather than evaluating teacher skills or merit helps to foreground beliefs about educational standardization, classroom inequalities and discrepancies in foundational knowledge. This is in no way to step away from teacher talk or classroom language, but to keep the observations centered on the teacher talk and lessons themselves, and not on their impact, effect or ability to engage students. The impact or effect of teacher talk or the teacher's ability to engage students is crucially not the object of analysis in this study. The sheer difference in teacher talk and classroom lessons that is evident among the classes is the primary focus of the thesis. The absence of the middle class within the discussion of socioeconomic variation across schools provides an initial look at classrooms that were previously not sites for research. Further research on the direct and indirect impact of these classroom differences would be a welcome addition to the field.

This look at differences, without looking at student impact, allows us to confront what Angus and Jhally (1989) claim that “people accept as natural and self evident” and are exactly the issues that become “problematic and in need of explanation” (12). This supports the argument that these beliefs about educational standardization as a product of a mandated curriculum and the absence of any inequalities among the middle classes are the very things that need scrutinizing.

Since the Education Reform Act in 1993, curricula in Massachusetts have been standardized across the state in several different incarnations of the Massachusetts Curriculum Framework for each subject and grade. The Massachusetts Curriculum Frameworks are meant to be integral pathways to the students’ final assessments. In large part because of this, the topics of lessons I observed were not substantially different. Occasionally teachers were conducting lessons on nearly the exact same subject matter or text according to the days’ plans.

The absence of differences in topics and curriculum may suggest that these policy implications are standardizing classroom lesson topics to some extent. Anyon may have never intended for her presentation of the what to be sufficient; her conclusion and findings were that ‘work’ (the what) is different in schools with students of different socioeconomic backgrounds (1980). Her research focused specifically on the mirroring of parental careers,
and the findings shed enormous light onto classroom inequalities in 1980. This does not mean that Anyon’s work is beyond expansion or improvement. Talburt, a proponent of qualitative data, challenges all researchers involved in qualitative and observational projects to engage themselves with the “consistencies and inconsistencies within and across forms of data” (2004: 81), allowing the consistencies to be more significant through having acknowledged and scrutinized the inconsistencies.

Scrutiny of Anyon’s article begs the question I ask at the start of this data chapter: 

**How is the classroom ‘work’ being done? And if it is being done differently, in what way?**

An ethnographic observational analysis avoids long commentary on the data and attempts to give as much of an untouched account of specific instances and examples as possible. The main researcher subjectivity lies in the choice of the illustrative instances and examples (Dorr-Bremme, 1985:66).

It is still also my position as researcher and observer to pose the initial research questions, descriptions and some explanations. However, an understanding of inevitable research subjectivity enables me to create provisions and choose methods that attempt to minimize this subjectivity. As Talburt argues, the researcher explores observations for possible interpretations, “rather than as recorders of verified data” (2004: 80).

In order to provide a platform for a variety of possible interpretations, an ethnographic observational analysis keeps a distanced view of the data, adding only minor comments and suggestions. Lather (1986; see also Creswell & Miller, 2000; Morse et al., 2002) also advocates for more validity checking and triangulation and Talburt echoes this with her concern for investigating the “consistencies and inconsistencies across all forms of data” (2004: 81).

Long and detailed excerpts are presented in full, as Anyon championed a -- show, don’t tell - - approach to observations. Anyon once stated that, “one cannot understand or explain x merely by describing x” (2009: 2). The data discussed in the corpus chapter aims not to understand the differences in teacher talk or lessons, but to describe them with the ultimate objective of demonstrating some level of the inequalities. To do this the observations are laid out in a way that exhibits the salience of these differences. A full understanding and explanation of these differences is far too extensive in its scope; However, I have added short comments to the transcripts and posed questions throughout the thesis to contribute to a discussion that may help in understanding. Other than these, I have employed the method that aligns best with the idea of showing and not telling, a largely descriptive ethnographic observational analysis.
Recent research has begun to take up the discussion, in particular in terms of quantitative analysis (Chetty et al., 2014; Reardon, 2011; 2016). Yet it is still uncommon to see qualitative studies looking at the middle class exclusively for potential inequalities, particularly because they are usually among those who are not considered lacking in resources.

3B.2.3. REFLEXIVE INTERVIEWS

To follow up the classroom observations of the teachers, I held interviews with each of the participating teachers to discuss some of my preliminary findings as well as gather more data on their perspectives of differences in classroom practice and language across social class.

As I had spent at least a month with each of the teachers prior to the interviews, my working relationship with them made the interviews both more informative and subject to the limitations of any personal connection they had with me. Aligned with that of Tusting and Maybin (2007) this work benefits from recognizing that researchers cannot extricate ourselves from the research: “the researcher is inevitably part of, and shapes, the research that is being produced” (578). Any study should be fundamentally informed by this fact. This information does not make the results into a “magical path to the Truth” (Gearity on Alvesson’s work, 2011), but does enable a sense of reflection on what biases we may or may not be introducing into our analysis of the respondents’ words, and indeed before that on the choice of words to analyze.

The reasons reflexivity in research are important, in particular in interview data, are well explained by Alvesson, who provides the framing of reflexive and reflective research as “interpretation of interpretation” that “encourages critical consciousness of the problems of interviewing” (Alvesson, 2010: 7). These interpretations help to free researchers to express, rather than suppress, their implicit interests or aims. The suppression of these explicit interests can create a false sense of flawlessness or belief in a lack of bias in the interactions (Reinharz, 1985: 17). The Anyonian Ethnographic Observational Analysis is meant to be as removed from explicit interests as possible. My interviews, however, are unable to take this stance, by virtue of my involvement in the creation of the presentation, interview questions, conducting of the interviews and the ideologies that are inextricably linked to these activities (Reinharz, 1985).

However, these choices of what questions to ask and what information to present, along with what may be called the interviewer’s ‘dialogical instincts’, are an inescapable aspect of interviewing, which it is a strength of reflexive research to bring to the surface. Every action and every usage of language can be scrutinized for meaning if Freire (1970) is right that language is never neutral. With the constant knowledge that these choices are possibly
affecting the research, reflection in itself provides an avenue for exploration (Dorr-Bremme, 1985).

Within this frame of reference, researchers should avoid trying to verify unverifiable ‘facts’ (Talburt, 2004: 80, 147), and allow the data and analysis to speak through a filter of reflexiveness. This aligns with Talburt’s admission that no research can guarantee finding some amount of concrete facts in order to support some undefined outcome (2004: 147), and that the infinite stream of data leads only to another continual stream of new interpretations, data and insight. To acknowledge this is not to fall into a facile nihilism, but to rise to the challenge posed by the reality that the information gathered is at a fixed point in time in a fixed context, which means that its analysis and interpretations either have to be constrained temporally and contextually in the same way, or extrapolated through an act of reasoned imagination.

Being informed by the utopian need to extricate oneself from the immediate time and context requires that researchers reassess their understandings on a continual basis throughout the interview process (Calas & Smircich, 1992). The outcomes and responses from the interviews serve as a reminder of the initial path of research, and the point at which it was necessary to rethink theories that were originally meant to be tested. Only then is the research able to move forward and, as Hand (2003) encourages, “begin with an area of inquiry and allow relevant theory to emerge” (16). This procedure allows researchers to make sense of the data and interpret it honestly, rather than pretending to have discovered timeless, context-free certainties (Calas & Smircich, 1992).

Reflexive qualitative approaches acknowledge that the researcher and research cannot be meaningfully separated, and that neutrality is impossible. Researchers and participants both influence and are influenced by the process of research (Hand, 2003; Lather, 2001). Dorr-Bremme (1985) discusses this as a positive aspect of studies where there is continual observation and interaction. In these studies the perpetual stream of data and fluid research questions grant the researchers a choice to refocus on newly compelling findings as they are discovered within the constant flow of data. Furthermore, both the participants and the researcher are engaged in a construction of reality that can be adjusted and informed by both myself and each of the participating teachers to create a more meaningful collection of insights (1985: 65-67).

The final data chapter uses teacher input in reflexive interviews. Alvesson and Sköldberg (2009: 6) claims that this revisiting of data assists in the pursuit of understanding, rather than truth (2009: 8) and leads to a more informed interpretation of the data. He even calls this type of data, “interpretation of interpretation” (Alvesson & Sköldberg, 2009: 9). The primary objective of these interviews is to create a version of the observations that subsequently allows me to address whether the participants believe it is a good
representation of what they believe is reality. If not, they can dismiss it as inaccurate, augment it in their own words so it is a good representation, or reinterpret the results for themselves, all of which informs new findings (Dorr-Bremme, 1985: 68).

Hand (2003) maintains that, “Creating the ‘joint account’ is a complex but worthwhile task” (15) because the point of view of the participants is integral to a deeper understanding of the data (Gearity, 610: 2011). This method, however does not lead to a more complete version of reality. The teachers too, are relying only on their understanding of the truth, or their version of reality. Still Canagarajah (2014) emphasized that this does not matter, what is important about these interviews is that what they say, “shows what they value, what their ideology is” (BAAL Plenary, 2013).

The interviews considered one research question in particular:

How do the teacher’s reflexive understanding of the observations and awareness of their classes help to make sense of the classroom differences across socioeconomic categories?

3B.2.3.1. Conducting Interviews

In order to continue with the concept of a partial/inspired replication study of Anyon’s Hidden Curriculum of Work (Anyon, 1980; Irving & Martin, 1982), interviews were conducted with the classroom teachers, as they were in Anyon’s study. This chapter uses these reflexive interviews with teachers to aid in understanding the findings of the observations and to add credence to the corpus-based work and categorical choices in the resulting theory. The chapter specifically looks at the teachers’ viewpoints on foundational education and teaching methods, student motivation and different aspects of social class including parental involvement and education.

Jackson’s thoughts on interviews offer a similar viewpoint to the one taken in this portion of the study. He takes the stance that interviewing “extends the critique of rationality and empiricism” and, to some extent, “...reveals the ‘hidden curriculum’” (Jackson, 1968). The hidden curriculum, a major focus of Anyon’s 1980 work, is an important starting point for understanding classroom language differences, so revealing the hidden curriculum is in essence a continuing goal of my research.

3B.2.3.2. Logistical considerations and limitations

My extensive efforts with scheduling observations and interviews, including supplemental visits to the field when necessary, were greatly frustrated by the New England weather. Snow days changed class times, lesson timing, test rescheduling and produced days with large numbers of student absences, as a result of which scheduled classwork was postponed. Observations and interviews were continually cancelled, postponed and rescheduled. The greatest limitation of the study was that I was unable to do final teacher
interviews at Justinian High because of these scheduling problems, and getting consistent amounts of classroom observations was prioritized. For other reasons I was only able to interview one teacher from Hansberry High. This undoubtedly creates a regrettable limitation to the interviews, as Justinian High represents the Upper Middle Class schools in their entirety in this study and observations of these classes were integral in developing the resulting framework of Content, Practice, Direction. This consideration is noted in the interview chapter and efforts are made to continually reflect on the impact of these absent voices.

However, the comparative discussion with the Middle Middle Class schools and Lower Middle Class schools in reference to perceived Upper Middle Class schools touches on the real and perceived differences between the schools. The missing interviews undeniably leave a gap in our understanding of the students at Justinian High. It was fortunate that the long term observations and significant time spent in classrooms gave me a large enough body of data that the ethnographic observations assist in filling some of the gap.

The interviews were done as a collaborative conversation, where the teachers who participated in the interviews had different reactions to my presence as a researcher. Only one seemed uncomfortable at first, as if my observations were a judgment on her teaching. This dissipated over the next few days of observations as we had much discussion about the focus of my research before and after class. She later became an enthusiastic participant and advocate and many of her insights are reflected in the findings. It remains that, to some extent, each teacher's opinion of me and the research itself will undoubtedly be reflected their responses.

3.b.2.3.3. Quantitative and qualitative methods

The combination of quantitative and qualitative methods is a familiar approach in education research. An important aspect of qualitative research is many times contributing a more detailed investigation into quantitative results. Research undertaken by sociologists and anthropologists for qualitative data is not done in a vacuum. Often it is only after years of finding long term of quantitative data effects that reveal a continuing statistically significant trend that a qualitative analysis seems needed.

The predilection for numeric data in educational policy needs to be viewed for what it is, clear and tangible reasoning for policy change, and a provision for educational researchers to investigate further by additional methods, not a silver bullet of insight without bias. It is with this knowledge that a mixed method, openly ideological approach was seen as the most effective. Lather believes that, "Once we recognize that just as there is just no neutral education there is no neutral research, we no longer need to apologize for unabashedly ideological research and its open commitment to using research to criticize and change the
status quo” (Lather, 1986: 67). While I agree, to some extent, I am reluctant to make such a proclamation that research should be “unabashedly ideological”. Research that observes environments with human participants, specifically classrooms and teachers must be *abashedly* ideological, which is to say decidedly rigorous in its choices and explanations in order to keep control of, rather than be controlled by its ideological underpinnings. Conscientious researchers must remind themselves that research that strives for neutrality (while recognizing that it is unattainable) creates a far better platform from which to construct an argument.

3B.2.4. VALIDITY CHECKING

The inclusion of this section is to address the importance of validity checking and self-awareness in ideological research. Validity is a concept that assists researchers in adopting research procedures that validate both the integrity of the methods and findings but also reliably recount the participants’ version of the research outcomes (Creswell & Miller, 2000).

As previously mentioned some subjectivity is an inevitable part of all research. In order to ensure this subjectivity is kept to a minimum, and checks put in place so that an analysis is subject to rigorous empirical standards, Creswell and Miller (2000) propose a selection of validity checks and discuss the most apt for each type of study. In this study three types of Creswell and Miller’s (2000) checks are employed and are discussed in detail below.

Lather (1986), while advancing triangulation and other validifying methods, maintains that a crucial quality of producing sound empirical qualitative research is that it be openly ideological. Lather supports the notion that our inability to be neutral creates the space for researchers to discuss their biases explicitly. She goes on to claim that researchers, “no longer need to apologize for unabashedly ideological research and its open commitment to using research to criticize and change the status quo” (1986: 64).

I use both validity checks and an openly ideological research perspective to different extents in my research. The validity methods taken are discussed throughout the thesis (though not always using Creswell and Miller’s terminology). The three validity checking measures are discussed below:

3B.2.4.1. Triangulation

By using three methods: corpus analysis, observations and reflexive interviews I use one form of triangulation suggested by Creswell and Miller (2000), and also encouraged by Lather (1986) in order to enrich and reinforce the data. I use two sources of data with which to base my research findings. Additionally, I look at one of these sources, the observational data, in two different ways. These continuous attempts at considering data in numerous ways align with Cronbach’s statement that, “The job of validation is not to
support an interpretation, but to find out what might be wrong with it. A proposition deserves some degree of trust only when it has survived serious attempts to falsify it” (Cronbach, 1980 in Lather, 1986: 66).

3b.2.4.2. Researcher reflexivity/Member checking

The combination of these two checks provides a balance of self and participant reflection. Guba and Lincoln (1981) claim member checks are “the most crucial technique for establishing credibility” (314). The process of using these two checks in combination facilitated not only a reanalysis that “refines [the results] in the light of the subjects reactions” (Lather, 1986: 64), but also one that discusses both accounts from two different viewpoints.

The reflexivity of the interviews in themselves and the presentation of preliminary findings for their reevaluation provides a platform for both perspectives to be understood as intrinsically subjective, but remain meaningful interpretations of the data. (Creswell & Miller, 2000; Lather, 1986)

3b.2.4.3. Rich, thick, descriptions

The final validity check used is a rich, thick description (Creswell & Miller, 2000). In some sections for the sake of the specific methodological choices I avoid commentary and description in order to maintain a less subjective analysis. However, the overall thesis is given lengthy descriptions of the participating schools. The literature review details previous research and social issues that have personally impacted the study and an introductory discussion of the motivations and inspirations for large portions of the study are detailed and expanded upon throughout. I have presented a summary discussion of the communities rather than specifying the cities in order to keep anonymity. A central aim of this thesis is to use a combination of methods that are validified and empirically sound. Furthermore, the various interpretations of the data I have presented invite a continually developing analysis to add to richer perspectives on the data.

3b.2.5. School descriptions

As explained, all of the schools have been renamed in order to protect student anonymity. The project’s exact times and dates have not been stated here in order to protect students and teachers to an even further extent. While I have gone to great lengths to make sure the identities of the cities, schools, teachers and students remain anonymous, a major news event took place in one of the schools during this research project, I have excluded all discussion of this event from the data, as references to it compromise anonymity. All efforts have been made to keep continuity and comparability of the classes. A short hiatus was taken at the school where the event took place, this served to complete my research as done on average school days.
The following is a detailed description of the schools. I have used names for the schools that correspond to particular lessons in each classroom:

- Justinian High - *Justinian and the Byzantine Empire*.
- Arthur Miller High and Elizabeth Proctor High - *The Crucible*.
- Harper Lee High - *To Kill a Mockingbird*.
- Hansberry High - *A Raisin In The Sun*.

This strategy of naming allowed me to organize the data without using complicated codes and numbers, which feel impersonal, and are not fitting for this type of qualitative research. In line with these attempts to lessen the impersonal feeling of the research, the following are rich, thick, narrative descriptions of each of the schools and I have hopefully given each of the schools so called ‘personalities’. At each school I was given a tour, never having been there before. Thus, the reader is privy to first impressions, and my perspective of the school is created through the hallways, classrooms, libraries, and cafeterias and the way these impressions are confirmed or altered throughout my time at the school. These impressions are my own, yet will of course color the reader’s understanding of my choices in the following chapters.

I have also named the lessons when referring to a set unit, day or week's plan in the text that I go on to discuss in examples and excerpts. These serve to further connect the classes to the lessons, but also to orient the reader to the task at hand. Alternatively, the teachers have been given the generic labels Teacher One and Teacher Two. This is for anonymity purposes in the event that a reader is particularly familiar with the Hereford County public school systems, the anonymity will, at the very least, extend to individual teacher participants.

### 3.2.5.1. Context of Teaching in Hereford County, MA in 2013

The Hereford County Public schools vary in rankings among Massachusetts public schools from top ranked to near bottom. The schools range from levels 1-4, 4 being a failing school in terms of the Massachusetts Accountability and Assistance rankings, a statewide measure of school progress. The county boasts wealthy estates and high income housing and is also home to some of the most disadvantaged residents in the state. Schools in this county range from 94% white, 44% university educated (over 25), 88% homeowners, and a 1.6% below poverty rate to the other extreme of a city that is 25% white, 15.6 university educated (over 25), 27.4% homeownership and a below poverty rate of 23.7.

Among these cities in this county are all of the public high schools that were chosen for the study, though neither of the schools at the end of the extremes were observed. As mentioned in the Introduction and Literature Review, the main focus of this research is the spectrum of those considered “middle class”, so all five schools are levels 1, 2 and 3 (on the
scale from successful to satisfactory) on the Massachusetts Accountability and Assistance Report.

All of the schools are situated in medium-sized towns or small cities. They all could, to some extent, be considered suburbs of Boston, Massachusetts though some are more accessible to public transport than others. Two of the communities surrounding the schools are primarily residential, based around large shopping centers or commercial highways. The others are considered resort towns, built around attractive seaside locations with quaint town centers. In each place there is a combination of community-owned areas that boast small businesses and restaurants, alongside the standard Massachusetts staples of Dunkin’ Donuts, CVSs, 7-11s and pizza places. Cities in Massachusetts all possess an historical legacy that is reflected in the local identity of the city, and none of the cities in the study are an exception. New England, Massachusetts and city-based local historical figures are seen in the names of shops, schools, buildings as well as statues and plaques that grace the parks and squares. Many of the places in the study border one another so their specific characteristics overlap to a great extent, but each has their own community and identity that intermingles with their identity as “Eastsiders” as mentioned previously.

3b.2.5.2. THE UPPER MIDDLE CLASS SCHOOL:

Justinian High: 10th grade (Modern) History and 9th grade World History

Justinian High School is brand new. The cafeteria is encased in glass at the front, so I see students immediately as I walk in. There are student designed posters everywhere advertising clubs and sports teams, community-based events, and volunteer school trips abroad. Students are the ultimate focus of the school at first glance. During my tour I notice that the initial student-centered feel continues. The halls are full of polite levels of chatter between students. There are hardly any staff in the hallway, the walls are plastered with advertisements for student councils, student trips and student social events. The lockers and classroom doors are partly decorated by the students themselves. The theme remains that at Justinian the students are the owners of the school and this is apparent throughout the classrooms, cafeteria and hallways. As I walk into the classrooms the feeling changes to that of students who are comfortable in the presence of an adult, but the teacher is seen as an authority figure.

3b.2.5.3. THE MIDDLE MIDDLE CLASS SCHOOLS:

Elizabeth Proctor High: 9th grade English and 10th grade English

Elizabeth Proctor High is another newly built school in the county. Its pristine new cafeteria and halls look untouched. The front door is daunting and gives the appearance of walking into an office building. In the front of the school, there is a food court-like cafeteria with numerous options, (including lattes). There is constant presence of at least 2-3 staff members in the cafeteria, and a permanent staff member at a front desk that I check in with
and show my ID to every day. There are flyers for volunteer work and after school jobs. The front of the school is libraries, offices, computer rooms, and other non-classrooms, while the back hallways are all classrooms organized by grade and subject. The teaching staff is inviting and the tour of the building is led by the teachers, not the principal as it is in many of the other schools. It is welcoming and there is a sense of interconnectedness and community among the faculty and students.

**Arthur Miller High : 10th grade (American) History and 11th grade English**

Arthur Miller High is also a newly built school, it is beautiful and has more amenities than you could imagine (in fact I would say I was humbled by it because my high school experience differed so greatly). The library alone is the size of some small university libraries and the hallways and classrooms are kept pristine, with very few flyers and posters. Students are given computers in their first year and each class has a pull down projection screen. Artfully constructed bulletin boards include student work, but posted with labels and in a decorative and organized fashion. The school is so large that unlike the other schools outside of the offices and the initial tour, I only ever saw one wing of the school. Ceilings are high, and there is plenty of space in classrooms for teachers and students to walk around. The classrooms are noticeably uncluttered, which gives the air of fluidity to the teacher’s position among the students. Unlike some of the other schools, teachers do not seem to be in ‘their office’ and teacher desks are empty of personal effects, student pictures and gifts.

**3b.2.5.4. THE LOWER MIDDLE CLASS SCHOOLS**

**Hansberry High: 10th grade (World) History and 10th grade English**

Hansberry High is one of the oldest public high school buildings in the state. The paint is peeling, and it smells musty. It has the look and feel of the typical American high school in an 80’s movie and understandably reminded me of my high school. The oldness also lends itself to some of the sturdiness of the place. Its walls are made of brick and stone, and the hallways seem as if they would last for another 60 years. The students (as art projects) have been given liberties with the hallways, bathrooms, and doors to decorate the walls presumably to spruce the place up. There are paintings of the school mascot, team names, and in some instances, pop culture icons. School spirit is plastered on the walls of every classroom. Sports are huge at Hansberry High, and the walls, student clothing, and morning announcements reflect that. Classrooms are full of everything from footballs to old textbooks. Student work covers most of the walls. Teachers and students know each other in a very neighborhood-like way, and it is not unusual to hear students and teachers asking about family members and life updates from each other.
**Harper Lee High: 10th grade (American) History and 9th grade English**

Another older school, Harper Lee High is similar to Hansberry High with stone and brick walls decorated by student art. The classrooms are teacher decorated, and each class has the signature of the person that teaches there. Space is at a premium so the storage is all in the classrooms. Books - old and new - papers - old and new, are piled high on the edges of the classrooms. The back bulletin boards are plastered with student work. The teacher's desks are covered with personal pictures and letters from previous students. There is little space between desks. The feel is that of an old school where past students become staff and teach and work in the very classrooms they were taught in, and it very much is. Many of the staff members boast such a reputation, including one of the observed teachers and the school's principal, of having graduated from Harper Lee High, gone to university and then returned to teach there.
4. CORPUS ANALYSIS

4.1. INTRODUCTION: WHY CORPUS LINGUISTICS?

This chapter takes a first look at the observational data gathered at five Massachusetts high schools from a linguistic and quantitative angle. In doing this, I wish to strengthen the empirical soundness of the findings throughout the thesis. I have triangulated the data using three separate methods of analysis, each complementing one another. I also apply other noted methods of strengthening arguments made throughout the thesis including reflexivity, member checking and rich, thick descriptions (Creswell & Miller, 2001; Lather, 1986, 2001). Additionally, I use the concept of prominence, commonly found in translation literature (Baker, 2006) to develop questions directly from perceived impressions of the observations and test them for quantitative significance. The testing of prominence works specially as an effort to understand the benefits of integrating quantitative and qualitative data.

The chapter demonstrates one way in which to make use of corpus linguistics analysis, a now widely used method of quantitative analysis (made so specifically because of new technology and ease of use and access). With a corpus analysis I hope to demonstrate differences and similarities across incrementally socioeconomically unequal schools in terms of their lexical richness. To do this I have employed several methods used in corpus linguistics to analyze comparable texts.

First, applying quantitative methods to the observational data required a breakdown of each of the texts (transcripts of an individual teacher's class observations) in a way that allowed for a look at the language used - independent of its specific context or lesson. Corpus linguistics' primary strength as a research tool is the "(rapid) quantification of recurring linguistic features" (O'Keeffe & Walsh, 2010: 142). It enables researchers to process their data in a way that is "accurate and consistent, fast and without human bias" (O'Keeffe & Walsh, 2010: 142). The ability of corpus tools to isolate words and calculate counts for each individual teacher corpus lent itself to analysis within this particular study. It is worth noting the corpus counts and production of data within the program itself is not subject to human bias, the compilation of the corpus, the choice of corpus tool, the sorting and dividing of subcorpora all are subject to human biases.

Many corpus linguistics studies, particularly ones using small-scale data, use a mixed-method approach implementing both a quantitative aspect and then applying qualitative methods where corpus findings leave off (Baker, 1996; Clark, 2016; Gabrielatos and Baker, 2008; Gregory, 2011; O'Keeffe and Walsh, 2010; Walsh and O'Keeffe, 2007). In much of the research, corpus-based data works as a complement to qualitative data, presenting some
evidence of the patterns found in the quantitative data in a more detailed and comprehensive manner. The preliminary findings here demonstrate that that is not always the case.

The results are measurements of the difference in word use and lexical richness across socioeconomic category, school and individual teachers. The figures and results from this chapter demonstrate the limitations of small-scale projects when using quantitative data and support past research claims that many measures of corpus analysis are highly dependent on the size of the text or corpus (Laufer & Nation, 1995: 309 refer also to McEnery et al., 2006; Olsson, 2009).

The chapter’s discussion of the analysis and subsequent findings is divided into sections. First, a discussion of the construction of the corpus and subcorpora, then its definition as a specific genre for comparability. To begin the analysis section of corpus data the next section looks at two frequency lists and findings from their production.

The numerical data sections are divided into three measurements of lexical richness, which in this instance work as a series of measurements that help determine the level and degree of unique words, lexical words vs. grammatical words and advanced vocabulary. The three measurements of lexical richness used in this analysis are:

- **Type to Token Ratio** – The ratio of unique vocabulary to the entire text
- **Lexical Density** – The percentage of lexical words in the text (as opposed to grammatical words)
- **Lexical Sophistication** – The percentage of advanced vocabulary among all of the lexical words

Finally, I take an exploratory look at using qualitative information from close readings of the complete corpus in order to inform potential future mixed-methods analysis of the observational data. These findings in turn facilitate a discussion on whether this type of analysis has merit for future studies.

### 4.1.1. Why quantitative?

In the past, prominent educational researchers such as Lather (1986), Apple (1980-81), Giroux (1981) and Bowles and Gintis (1976) encouraged the use of qualitative methods that are more objective, rigorous and subject to validation, to offset a bias for quantitative data. It is with the desire to employ more objective, rigorous methods to attain a higher level of validity in my findings that the decision was made to employ quantitative methods as well as qualitative methods. This chapter demonstrates some of the strengths and weaknesses of using quantitative data and statistics in this type of small scale observational study.

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24 Confusingly, lexical richness is sometimes used interchangeably with lexical density. My thesis employs the more common usage of lexical density as one measurement (percentage of content words) of lexical richness, and lexical richness as an umbrella term that covers many measurements.
data. It draws attention to something that in the end, appears to require a more in-depth closely read analysis.

4.2. RESEARCH QUESTION

The research question addressed in this chapter is:

Is teacher talk across these middle class schools different when analyzed for lexical richness and word use?

I will focus on a corpus analysis of classroom observations using quantitative methods that attempt to work as a precursor, and later a complement, to the Ethnographic Observational Analysis and Reflexive Interviews chapters. While the quantitative/qualitative mixed method is somewhat less abundant in educational research (Levinson & Holland, 1996; Niglas, 2000; Rist, 1980), there is a long history of influential complementary qualitative and quantitative work in corpus linguistics (Biber, Conrad & Reppen, 1998; Gregory, 2011; Meyer, 2002; Tognini-Bonelli, 2001).

In particular, Murphy (2010) uses dual sociolinguistic and corpus approaches in much of her research on All-Female Talk (2010) and Irish English (2007; 2009; 2012). Her work uses data sets similar to those adopted in this chapter using spoken data from informal talks, and division, then re-division of categories. As exemplified in her work on All-Female talk where Murphy subsequently divides the groups of conversation transcripts into age cohorts. Her use of self-created corpora is a perfect example of small-scale corpus research, and I have largely used this research as my model for corpora construction. Murphy also advocates for a complementary qualitative sociolinguistic analysis, in particular using Critical Discourse Analysis, along with corpus analysis and discusses the complementary intersection of the two in much of her work (2010; 2012).

4.2.2. CORPUS METHODS

A description of the corpus construction, corpus type and explanation of the computational analysis are carefully detailed in the chapter on Methodology, the following is a shorter overview.

The corpus 'lesson observations of teacher talk' was produced using two different online computational corpus analysis tools, AntConc (Anthony, 2011) and SketchEngine (Kilgaraff et al., 2014). The tools are used in concert for specific analysis types and help to reduce the issues that come about from each tools limitations. Fourteen +/- hours of class observation transcripts in each of ten classes across five schools totalling almost ninety thousand words were uploaded to each of these online corpus programs.

Constructing the corpus, I organized it in such a way that the larger corpus of ‘lesson observations of teacher talk’ could be broken down into its component parts by
socioeconomic category, school and individual teacher. This was in order to enable a more targeted analysis and to ensure any generalizations about a specific subcorpus were valid. The corpus did not require samples to be extracted for analysis as the corpus size of about 90,000 words and could be analyzed in full.

The transcripts consist of teacher talk from the observed classes as well as any teacher-authored notes, boardwork or PowerPoints. There is no student data in this corpus. Class observations generally stayed within the curriculum frameworks provided by the Massachusetts Department of Education, but the corpus does not exclude any teacher talk whether it is part of the prescribed curriculum or not. The transcripts were handwritten and not recorded as per Massachusetts regulations, which were strictly enforced by administration. Much of corpus-based research centers around recorded data, though there are notable exceptions, specifically the Hansard Corpus of Prime Ministerial Questions (Alexander & Davies, 2015+).

4.3. THE CORPUS

A look at the dispersion of words throughout the corpus is key to understanding how interesting or meaningful any of the findings may be or whether the numbers tend toward one instance or individual. For this reason, each sub-corpus is an individual teacher's classroom observations. Once the dispersion throughout the entire corpus has been accounted for, the re-grouping of the schools into more general categories can give us a more comprehensive analysis of the data (McEnery et al., 2006).

There are 85,560 total words in the full corpus according to SketchEngine. As mentioned previously, the corpus is made up of ten sub-corpora, one for each teacher's classroom observed (a total of 14+/− hours per classroom teacher).

The ten sub-corpora are then grouped by school (two classes in each school):

- Justinian High
- Hansberry High
- Harper Lee High
- Elizabeth Proctor High
- Arthur Miller High

The five school sub-corpora are then divided into three social class categories:

- Upper Middle Class school – Justinian High
- Middle Middle Class schools – Elizabeth Proctor High and Arthur Miller High
- Lower Middle Class schools – Harper Lee High and Hansberry High

The numerical disparities in corpus size between the classes, schools and social class categories in the final two analyses of specific word type are dealt with by calculating relative frequencies (per 1000 words), while others are discussed in terms of ratios and percentages to protect the comparability of the sub-corpora. In addition to relative
frequencies and percentages, the numerical discrepancies in corpus size themselves are interesting.

Tables show the numbers more clearly:

<table>
<thead>
<tr>
<th>School</th>
<th>Word count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper middle class school</td>
<td>23,076</td>
</tr>
<tr>
<td>Middle middle class school</td>
<td>22,772</td>
</tr>
<tr>
<td>Lower middle class school</td>
<td>39,712</td>
</tr>
</tbody>
</table>

Table 4.1a Social Class Categorization Corpus Count

At first glance, Table 4.1a may seem to show teachers in the Lower Middle Class schools speak far more than the others but, as noted in the discussion of the limitations of this study, the Upper Middle Class category is made up of just one school, so the number of classrooms being observed needs to be accounted for. A clear difference in Table 4.1a. is that teachers in the Middle Middle Class schools, on average, seem to speak less than teachers at other schools. The four Middle Middle Class schools’ teachers in fact speak slightly less than the two in the Upper Middle Class school together.

<table>
<thead>
<tr>
<th>School</th>
<th>Word Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justinian</td>
<td>23,076</td>
</tr>
<tr>
<td>Arthur Miller</td>
<td>10,952</td>
</tr>
<tr>
<td>Elizabeth Proctor</td>
<td>11,820</td>
</tr>
<tr>
<td>Harper Lee</td>
<td>27,083</td>
</tr>
<tr>
<td>Hansberry</td>
<td>12,629</td>
</tr>
</tbody>
</table>

Table 4.1b School Corpus Count

In Table 4.1b. The difference in how little teachers in the Middle Middle Class schools speak remains steady when looking at the numbers in terms of school. Harper Lee proves to be more interesting once the counts are separated into schools as Harper Lee has the highest word count of all of the schools.
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Word Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justinian Teacher One</td>
<td>9,493</td>
</tr>
<tr>
<td>Justinian Teacher Two</td>
<td>13,583</td>
</tr>
<tr>
<td>Arthur Miller Teacher One</td>
<td>4,339</td>
</tr>
<tr>
<td>Arthur Miller Teacher Two</td>
<td>6,613</td>
</tr>
<tr>
<td>Elizabeth Proctor Teacher One</td>
<td>7,401</td>
</tr>
<tr>
<td>Elizabeth Proctor Teacher Two</td>
<td>4,419</td>
</tr>
<tr>
<td>Harper Lee Teacher One</td>
<td>16,982</td>
</tr>
<tr>
<td>Harper Lee Teacher Two</td>
<td>10,101</td>
</tr>
<tr>
<td>Hansberry Teacher One</td>
<td>6,251</td>
</tr>
<tr>
<td>Hansberry Teacher Two</td>
<td>6,378</td>
</tr>
</tbody>
</table>

Table 4.1c Individual Teacher Corpus Count

In Table 4.1c while the Middle Middle Class schools’ teachers consistently speak less than the Upper Middle Class school teachers, the word counts among the schools are too varied to make any strong conclusions. Qualitative observations might explain the relative similarity of the Middle Middle Class schools by noting a more group work and student-centered classroom atmosphere and lesson types discussed in both the Ethnographic Observation Analysis chapter and the Reflexive Interviews chapter.

Consideration must be applied to one particular point because the results are based on word counts within these corpora. One element of the analysis that should be taken into account as a limitation that cannot be controlled for in this specific study is the additional input of (absent) peer language in a classroom that may be filling the role and time (and indeed the word count) of the teacher talk. More group-work oriented classes (as described in a later chapter detailing the Content, Practice, Direction framework) are both investigated and discussed in several parts of the project, and this distinction of teacher word count must be kept in mind as we look at data in this section of the study.

### 4.3.1. Observation timing issues and limitations

In general, in Massachusetts’ schools the principal is given the autonomy to create the school’s class schedule depending on the needs of the students. Of the five high schools observed, none had the exact same class schedule. Some employed ‘drop scheduling’ where the classes rotated and they ‘dropped’ the final class of the day. This allowed for longer periods of one class each day, so the teachers could do large projects or have extended lessons.
Figure 4.1 Example of a ‘drop’ schedule:

<table>
<thead>
<tr>
<th>Time</th>
<th>4 Day Rotating Schedule for High School - Sample Drop Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minutes</td>
</tr>
<tr>
<td>08.00-09.00</td>
<td>60</td>
</tr>
<tr>
<td>09.00-10.00</td>
<td>60</td>
</tr>
<tr>
<td>10.00-11.00</td>
<td>60</td>
</tr>
<tr>
<td>11.00-11.30</td>
<td>Community Lunch and Learn</td>
</tr>
<tr>
<td>11.30-12.30</td>
<td>60</td>
</tr>
<tr>
<td>12.30-13.30</td>
<td>60</td>
</tr>
<tr>
<td>13.30-14.30</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Drop Class</td>
</tr>
</tbody>
</table>

One school used ‘block scheduling’ which consists of long 80 minute periods, allowing teachers to meet with each class fewer times a week, but for longer periods at a time. This scheduling strategy is backed by some research (Lewis, Dugan, Winokur & Cobb, 2005; Trenta & Newman, 2002) and employed by many private schools. However, there are also large scale studies that dispute claims that block scheduling has much effect on student achievement as a whole (Paulson & Marchant, 2001; Zepeda & Mayers, 2006).

Thus, while this alternate schedule could have minor implications for the findings of the project, the probability that class activities and teaching would have remained static than would have been altered by block scheduling allows me to investigate these classes as comparable in spite of this scheduling difference.
Figure 4.2 Example of a ‘block’ schedule:

<table>
<thead>
<tr>
<th>Block</th>
<th>from</th>
<th>to</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1</td>
<td>08.30</td>
<td>09.50</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>09.50</td>
<td>09.55</td>
<td>5</td>
</tr>
<tr>
<td>Block 2</td>
<td>09.55</td>
<td>10.45</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>10.45</td>
<td>10.50</td>
<td>5</td>
</tr>
<tr>
<td>Block 3</td>
<td>10.50</td>
<td>12.10</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>12.10</td>
<td>12.15</td>
<td>5</td>
</tr>
<tr>
<td>Block 4</td>
<td>12.15</td>
<td>14.05</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>14.05</td>
<td>14.10</td>
<td>5</td>
</tr>
<tr>
<td>Block 5</td>
<td>14.10</td>
<td>15.30</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>End of Day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lunch</th>
<th>from</th>
<th>to</th>
<th>mins</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12.15</td>
<td>12.41</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>12.43</td>
<td>13.09</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>13.11</td>
<td>13.37</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>13.39</td>
<td>14.05</td>
<td></td>
</tr>
</tbody>
</table>
The final schedule is relatively standard, each student attends all classes in a given day.

Figure 4.3 Example of an average class schedule:

<table>
<thead>
<tr>
<th>Period</th>
<th>Class start</th>
<th>Class length</th>
<th>Class end</th>
<th>Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>07.40</td>
<td>51</td>
<td>08.31</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>08.35</td>
<td>48</td>
<td>09.23</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>09.27</td>
<td>48</td>
<td>10.15</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>10.19</td>
<td>48 A Lunch</td>
<td>11.07</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>11.11</td>
<td>48 B Lunch</td>
<td>11.59</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>12.03</td>
<td>48 C Lunch</td>
<td>12.51</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>12.55</td>
<td>48 D Lunch</td>
<td>13.43</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>13.47</td>
<td>48</td>
<td>14.35</td>
<td>DISMISSAL</td>
</tr>
</tbody>
</table>

In an effort to make these classes comparable I used hours, not class periods, as a measurement for the observations (see Methodology chapter). It is prudent to again note in some of the schools the scheduling may be reflected in the observations, and allow for some activities that other schedules do not. This is considered and discussed in some sections of the qualitative analysis of classes (see Ethnographic Observational Analysis chapter) but set aside for the initial corpus analysis as lesson types and specific activities do not play a role in the analysis of word use.

None of the three groupings of schools by socioeconomic category have the same schedule. This is significant because none of the schedules are exclusive to only one school, meaning that in both the Lower Middle Class schools and the Middle Middle Class schools there are a variety of schedules. Hence, suggestions made about word use are not based on one class with a unique schedule except in the case of the Upper Middle Class school. The grouping of these schools by socioeconomic category and the summary of findings are analyzed with this in mind.
In addition to scheduling, there are problematic instances that fall out from the three major characteristics of the corpus data in this study:

1. The transcripts are one-sided (a complete explanation of which is found in the Methodology chapter), thus they do not allow for an analysis of interactions. Despite this acknowledgement, the research was focused principally on teacher talk.

2. The speakers/teachers are all using a mandated curriculum, so the teacher talk is produced through a standardized curriculum. This follows that the similarities expressed are not always due to chance, but to the context of the Massachusetts Curriculum Frameworks.

3. The context of the study is on language differences, specifically individual word choice (Bartlett, 2014) within teacher talk during classroom lessons. These word choices are again considered only within the context of Hereford County, Massachusetts high school history and English classes, and the precise results cannot be generalized beyond the classes involved in the study. However, the point of the analysis is rather to provide a detailed understanding of the differences across teacher talk and lessons across middle-class schools, a group that is infrequently researched with respect to socioeconomic class.

4.3.2. Corpus comparability, type, and size

Genre analysis

The initial basis for the comparative analysis relies on the definition of each of the sub-corpora as part of a genre. Defining them as such allows the analysis to agree that there are a significant amount of similarities and are able to focus on the differences. In order to define the sub-corpora as a genre in itself, the genre category “classroom lesson observations of teacher talk” is used for this research.

By using Swales’ definition to create the category “classroom lesson observations of teacher talk”, the sub-corpora can stand equally as comparable documents and texts. These sub-corpora include all of the components of Swales’ (1990: 58) definition:

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style.

Key components here are that each sub-corpus is a “communicative event” and does share the same “communicative purposes”. Though not in the way a movie review is indicated by a title and a star rating, each text would be largely recognizable by members of an educational or linguistic research body or “expert members of the parent discourse community” (ibid, 1990: 58). The text within the sub-corpora falls broadly into a comparative genre as the vocabulary can all be associated with a similar concept: school and/or lessons within the Massachusetts Curriculum Framework. Subsequently, the vocabulary for each lesson falls into an additional genre of a history or English lesson.
These sub-corpora, as with other items in genres, are imperfectly classified as reinforced by Bax, 2011) who maintains, “Genres... are ideal, whereas texts are actual” (45). Additionally, it is agreed by Bax and others (2011: 45; Renkema, 1993; Unger, 2006) that compartmentalizing a genre is nearly impossible, and most texts are ‘hybrids’ combining elements of several genres (Bax, 2011: 47). The defining of these texts as a specific genre engages with methods of corpus analysis as a way to compare the teacher talk of each sub-corpora using elements of the texts; namely words.

4.4. Analysis of Corpus

4.4.1. Frequency lists

The first type of analysis is a look at the frequency lists of individual classroom corpora. Using frequencies is a common way to get an overall view of the differences between sub-corpora before quantitative data is analyzed. Frequency lists compiled from each corpus provide teachers with the knowledge of the most commonly used words, while also indicating the differences among subcorpora. Initial views drawn from frequency lists should accompany other methods of data analysis, as frequencies themselves are insufficient indicators of any meaningful trends.

This use of frequency as an initial indicator of trends has broad support in the research. Halliday (1971) regards the usefulness of investigations of overall frequencies as important starting points for analysis (though he acknowledges it is not sufficient). This is reinforced by Baker (2004) when she notes that overall frequency “is merely a starting point, but one we cannot afford to ignore” (Baker M, 2004: 176). She suggests a combined analysis using various methods to provide more valuable insight than one method on its own. Importantly, addressing the issues associated with frequency lists reinforces a need for various methods, Gregory’s (2011) research warns that frequency lists and word counts have their limitations as she demonstrates in her analysis of professor ratings, and that it is necessary to be cautious about making generalizations based solely on either of these factors. However, frequency lists continue to provide an interesting and necessary first inquiry into the consideration of a corpus.

Even Pantopoulous adds that “the very notion of corpus work places emphasis not only on what is observable but also on what is regular typical and frequent” (Pantopoulos, 2012: 86). In corpus-based studies the numerical data provided subsequent to the frequency lists are crucial to the understanding of the text, but production of these lists develops an initial glimpse at the trends within each school.
The sole aim of the production of frequency lists is to investigate patterns and features that are pronounced within each individual teacher’s word list so we can gather an initial perception of the corpus. Frequency lists could lead to an understanding of individual teacher’s distinctive lesson style but could also aid in looking at the distribution of frequencies among school and social class divisions (Pantopoulos, 2012). Frequency lists were developed for each of the subcorpora on AntConc (Anthony, 2011). The lists were produced both with and without a custom stopword list that included:

1. The COCA25 Top 100
2. Formatting exclusions

Stopword lists are generally lists of common, usually frequent function words that are excluded from lists as their frequencies add little to analysis. Many times stopword lists are included in corpus programs, or you can create your own in order to exclude formatting issues or to look more carefully at a specific set of words. In this study I have created a custom stopword list with 100+ exclusions as is common with self-created corpora (Baradad & Mugabushaka, 2015). I also look at the frequency lists without a stopword list in order to look at possible differences in function words (words with only grammatical function such as articles and auxiliary verbs). These words were excluded in the second analysis to open the data to the maximum amount of analysis of content rather than function.

4.4.2. Analysis of Frequency Lists

The two frequency lists were constructed in order to analyze two different aspects of individual teacher’s word use as explained above. The first list was constructed without a traditional stopword list. For this first view of frequencies I look at function words (i.e. grammatical words) as indicative of themes or patterns of grammatical structure. In the second list a custom stopword list has been applied that excludes most function words to get a closer look at the content words (words with semantic function such as nouns, verbs and adjectives) that were most frequent. The second list is looked at in an attempt to see patterns and themes within specialized topics and information that is discussed in these classrooms.

The results revealed that in both lists the major differences are mainly individual teacher-based. Frequency lists for schools and socioeconomic categories were misleading as individual teacher variability was the primary factor for all notable differences. Although a look at teacher language on an individual basis is interesting in its own right, the individual teacher variation is not generalizable to the schools and less so about the socioeconomic

25 COCA (Corpus of Contemporary American English) is the largest freely available corpus of English and contains more than 520 million words of text (Davies, 2008-). Its top 100 can be regarded as a good indication of the 100 most common words in the English language.
differences of teacher talk which was ultimately the primary focus of the analysis in this chapter.

The first examination of frequencies are done with no stoplist, meaning all words are being looked at, including the most common words. As is expected in looking at a frequency list with no stopwords, the top words are consistently the most common words used in spoken English. In particular, there is almost no variation in the words in the top ten across any of the frequency lists including socioeconomic categories, schools or individual teachers.

There is one point of interest, and that is the inversion of the frequencies of the words 'we' and 'I' at Arthur Miller High in comparison to the other schools. One theme that I explore in the chapter on the Content, Practice, Direction Framework is that of more student-centered lessons in Middle Middle Class schools. Lessons in the Middle Middle Class schools seemed to include a more collective and collaborative classroom where the teacher is less of an authority, and more of a mentor. This inversion of the frequency of 'we' and 'I', where 'I' comes before 'we' in all of the other schools' frequency lists could aid in our understanding of the way in which Arthur Miller High conducts more collaborative, less-authoritative classrooms. However, this inversion is not seen in Elizabeth Proctor High, where a more student-centered method of teaching was also observed. The absence of this inversion in Elizabeth Proctor could indicate that this inversion is not so much an indication of a particular teaching methods but of individual teacher variation. Both the suggestion of an indication of teaching methods and the lack of sufficient evidence lends itself to reflection on the potential problems with the size of the corpus for drawing any definite conclusions and the limitations that brings.

The second examination of frequencies is done on a list that included stopwords, meaning I was able to look at content (lexical) words for themes and patterns, as these tend to be less common and are rarely found at the top of frequency lists without stoplists. One point of interest worth exploring once the frequency lists were compiled, was the use of lesson specific words. Lesson specific words can be defined as vocabulary words necessary primarily for the content of that day's lesson (i.e. India would be lesson specific for a lesson on Indian history, while words such as government and country would not be lesson specific). To explore the differences in lesson specific words I initially looked at the top thirty words for lesson specific vocabulary (in bold).

Looking first at socioeconomic category it seems as if the Lower Middle Class schools use substantially fewer lesson specific words. Yet, as with many of the findings throughout the analysis, once the socioeconomic categories are broken down into subcorpora by individual teacher the numbers show that the anomalously low number of lesson specific words is due to relative underuse by individual teachers at Harper Lee High, rather than the entirety of the Lower Middle Class category. These lower numbers from Harper Lee High are not
substantially lower than some of the other individual teacher lesson specific words, but compiled as a socioeconomic class the number stood out. Once unpacked to show individual teacher variation, the difference seems trivial and could very likely be impacted by corpus size.

Although these seem only to indicate variability among teachers, some teachers do show preferences for lesson specific words which are potentially of interest and may indicate a difference in classroom-based ethos that was not observed. While there is a large range of these differences they give little evidence for the variability as indicators of differences across socioeconomic category, and more a quality of individual teacher or subject-based variability. Neither individual teacher or school-based analysis, suggest that the frequency word lists could aid extensively in explaining the classroom differences across incrementally unequal socioeconomic categories.

4.4.3. Numerical Analysis
For the analysis of lexical richness indicators to begin I will discuss the technique and formula used to produce the results. Following that, the results are divided into three sections. First, I present socioeconomic divisions, then school and finally the individual teacher figures. The figures shown are summary descriptive statistics used to provide tangible comparisons between the teachers, schools and socioeconomic categories.

4.4.4. Limitations
Much of the research, while vague about specifics, supports the likelihood that the individual teacher variability and size of the corpus could potentially provide a real problem for small-scale corpus studies and studies using specialized samples from large corpora (Brezina & Meyerhoff, 2014: 2). McEnery and Xiao (2008) claim that there is no ideal size for a corpus, but that “practical considerations” (386) must be taken into account as well as the focus of the analysis and the questions it seeks to answer.

One minimum word count suggestion for viability of a statistical analysis is twenty instances (Sinclair, 2004: 12) another that is used is 50 instances throughout the corpus, 5 for individual subcorpora (Mozaffari & Moini, 2014: 1290). It is clear from the research and introductory corpus linguistics texts that there is no ‘magic’ number. Other studies describe the methodological process of corpora analysis and explain that exclusion of some shorter texts is required for proper comparability in order to keep those texts from skewing results (Cuskley et al., 2014), though this methodological choice was not a viable option for this study.

Pantopoulous maintains that during corpus research one must continually remind themselves that they need to make these types of methodological choices regarding work with the corpus (2012: 97). She goes on to state that while not sufficient in itself, “an
overview of frequencies and overall statistics gives a good idea of the general texture of the corpus” (2012: 97). After preliminary significance testing of the figures, the decision was made to use summary descriptive statistics to discuss the numerical findings in hopes that it portrayed “the general texture of the corpus”. This quantitative analysis is supplemented by the subsequent qualitative analysis in the Ethnographic Observation and Reflexive Interview chapters.

4.5. LEXICAL RICHNESS

The three measurements used for the primary analysis are all examples of lexical richness indicators. Lexical richness is considered a sufficient indicator of the ‘richness’ of language in a text. Richness includes how content dense, vocabulary rich, and advanced the text is according to word choice. Here, its use signifies an umbrella term for a number of measurements of textual analysis of a corpus. There are many such indicators of richness, including originality, variety, sophistication and density (Laufer & Nation, 1995; Tweedie & Baayen; 1998; Van Gijsel, Speelman & Geeraerts, 2006) three of which are relevant to the data and discussed below.

4.5.1. Type-Token Ratio

The first indicator of lexical richness is a Type-Token ratio, sometimes called lexical variability, a common analysis technique used for looking at language data in terms of language variety within a text. The higher a text’s TTR the more variety and diversity of vocabulary is being utilized in the text (Retherford, 2000). In linguistics the term token is used to refer to the number or words in a text. Type is used to refer to the number of different, distinct types of words in a text. For example, in the sentence – The little dog sleeps on the massive duvet on the bed. – there are 11 tokens, but only 8 types, as the and on are repeated.

While the TTR is not often used as the definitive measure of lexical richness (Karlgren, 1999; Laufer and Nation, 1995; Miller and Biber, 2015), it is nonetheless a measure that is commonly used alongside other measures, as I have done here. It is important to note that its status in the field is controversial, not all researches see the TTR on its own as a reliable measure of vocabulary diversity or lexical variation. The stance taken here is that the TTR alone is not a conclusive indicator of lexical variation, and must be looked at with scrutiny. The use of this indicator for the purposes of this study is not to engage in this debate, but to use the TTR figures as one of several measures of lexical richness and that can be looked at collectively in order to assist in understanding the difference in word use between the socioeconomic categories, schools and individual teachers.

A Type-Token ratio is calculated by: Type-Token Ratio = (Number of types/Number of tokens) x 100 (Laufer & Nation, 1995: 310).
In Table 4.2a, the TTR value shows that the Upper Middle Class school has a larger TTR, indicating that it may have a higher level of vocabulary diversity. This slowly trends toward a lower TTR in the Lower Middle Class schools.

Table 4.2b is the first indication that the variation within the socioeconomic categories is greater than across them. Here we see that the highest TTR is from a Lower Middle Class school, rather than the lowest as in Table 3.2a, while the Upper Middle Class school has a lower TTR in comparison to some of the higher TTRs.
Finally in table 4.2c, you can see the inconsistency persists throughout the individual teacher TTRs and the variation within schools explains the difference in TTRs across socioeconomic category. This leaves us to draw the conclusion that the TTR is not indicative of any socioeconomic category difference in word use, but is a product of individual teacher variation.

As you can see even the difference in socioeconomic category, or indeed school, seem to have very little bearing on the TTR. The opinion of many researchers is that the TTR continues to be dependent on sample and text size (Karlgren, 1999; Laufer and Nation, 1995; McEnery & Hardie, 2011; Miller & Biber, 2015). Of course this raises the possibility that while the full corpus provides a significant amount of data, the much smaller, individual corpora are insufficient for looking at comparatively for larger themes. Or it could support the idea that the variation is indeed somewhat indicative of a level of similarity in vocabulary diversity across socioeconomic category if we accept that the analysis is a sound measurement when used in concert with other measurements.

4.5.2. **Lexical Density**

Lexical density, the second measurement of lexical richness considered, describes the percentage of lexical (or content) words within a text, as opposed to function words. Content words are generally nouns, verbs, adjectives and adverbs while function words are articles, auxiliary verbs and most common prepositions. This analysis looks at the percentage of words with tangible lexical meanings as opposed to words that are used almost solely for grammatical function as a measure of how dense a text is in terms of content. The lexical density of a text presents a measure of how much information is packed into a text using content words as a proxy for information (Johansson, 2008: 65).

Lexical density, like Type-Token Ratio, is another measurement used in both language teaching and authorship analysis (Grieve, 2005; Olsson, 2009; Stamatatos, 2009). Many analyses of lexical density involve the language use of non-native speakers and language teaching and learning analysis (Braun, 2007; Chang, 2014; Laufer & Nation, 1995) language testing and vocabulary knowledge. Other studies have built on the use of lexical density in order to look at translation (Baker, 1996), textbook analysis (Liu & Zhang, 2015) and an analysis of language on social media (Hu et al., 2013).

In my thesis lexical density is looked at (as with TTR) as one of the many possible indicators of a difference in lexical richness in teacher word use. The analysis of lexical density and lexical sophistication involved an alternative corpus program process to that of the TTR and frequency lists as the categorization of content and function words needed to be done by hand. For the analysis, the file of each subcorpus was uploaded to AntConc (Anthony, 2011).
and a list of each word and its frequencies was produced. Then, each word was categorized into content or function word by hand.

Though there are software programs that are able to do this process, the small size of the corpus and the notation style of the teacher talk, semantic tagging by freeware programs failed to produce sufficiently accurate tagging (i.e. CLAWS WWW tagger). AntConc (Anthony, 2011), is occasionally problematic when data is not formatted specifically for the program, but it does allow for the individual analysis of each of the subcorpora. It also enabled an analysis of the entirety of the word counts. It was then possible to account for all categorizing limitations and make attempts to minimize them. The initial possibility of tagging the corpus semantically and syntactically before analysis was considered, but the task was not possible within the time constraints. Each of the words was organized into two categories 1. Content (e.g. revolution, thing, Muslim, battle, usually) and 2. Function (e.g. the, of, and).

I will flag up two issues in the numerical counts that come about within the AntConc program, that result in longer total word counts. 1. In AntConc lemmas are counted as individual words (i.e. walk, walks) will be counted as two different content words. 2. Formatting issues cause AntConc to divide contractions (i.e. can’t will be counted as ‘can’ and ‘t’).

However, the corpora that are being compared are receiving equal analysis under similar conditions, and each corpus will be analyzed under these conditions. Thus, the numbers can be regarded as faithful representations of percentages within that specific analysis.

The numbers were then calculated: Lexical Density % = (Number of lexical tokens/Total number of tokens) x 100 (Laufer & Nation, 1995: 310).

<table>
<thead>
<tr>
<th>Socioeconomic Category</th>
<th>Content</th>
<th>Total</th>
<th>Percent Lexical Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Middle</td>
<td>12876</td>
<td>24,901</td>
<td>51.7</td>
</tr>
<tr>
<td>Middle Middle</td>
<td>12004</td>
<td>24,541</td>
<td>48.9</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>20588</td>
<td>43,211</td>
<td>47.6</td>
</tr>
</tbody>
</table>

Table 4.3a Differences in lexical density among social class

Table 4.3a gives the impression that the Upper Middle Class school's language is more lexically dense than the other two socioeconomic categories. If true, this aligns well with the findings in the Ethnographic Observational Analysis chapter, where the findings support the idea that the Upper Middle Class school has a larger proportion of lessons that contain large amounts of academic information.
In Table 4.3b Justinian continues to have the largest percentage of lexical density, however, this difference is slightly less pronounced when the socioeconomic categories are separated by schools.

In Table 4.3c the variability within schools suggests that Justinian’s higher numbers are less indicative of more information and content heavy lessons in terms of word count, and more the product of individual teacher variation, as both schools in the Middle Middle Class schools and the Lower Middle Class schools have similar lexical density percentages. Although it is of note that the Middle Middle Class schools and Lower Middle Class schools remain lower than the Upper Middle Class school.

Again, as would be expected, there is apparent individual teacher variability but these variances do not divide among school or socioeconomic lines. They do indicate that most of the schools are providing what looks like similar lexical density in classes. These similarities across the Upper Middle Class schools, Middle Middle Class schools and Lower
Middle Class schools may be either indicative of the limitations of a sample size or supportive of the idea that to some extent teacher word use across schools generally provides students with similar input, but it can vary greatly by individual teacher.

4.5.3. **Lexical Sophistication: The Academic Word List**

A final measure used lexical richness is measurement of the amount of advanced level vocabulary. This is often called lexical sophistication (Alam, 2012; Kyle & Crossley, 2015; Laufer & Nation, 2009; Lindqvist, Gudmundson & Bardel, 2013) and can be measured in several ways, but generally, with a similar formula. Lexical sophistication measures the corpus for the percentage of advanced vocabulary within the content words. The higher percentage of, the higher the sophistication level of the text.

Lexical Sophistication is calculated by:  

\[ \text{Lexical Sophistication} \% = \left( \frac{\text{Number of advanced tokens}}{\text{Total number of content words}} \right) \times 100 \]  

The main variant is the way in which the ‘advanced tokens’ in each corpus are defined. Here we use the first two sublists, representing the most frequent of Coxhead’s Academic Word List (AWL) and the most commonly used. The AWL was created from a large corpus of academic texts (Coxhead, 2000; 2011) and is widely used as a resource for teaching and a source of analysis in language teaching research (Burkett, 2015; Coxhead, 2015; Römer, 2011; Smith, 2015). Rather than for language teaching, I use it here for an analysis of the language used by teachers in public high school teaching and employ it as a measure of advanced vocabulary similar to the work of (Lauffer & Goldstein, 2004; Lemmouh, 2008; Stæhr, 2009). As the academic word list was borne out of a corpus of 3.5 million words from academic texts, its usefulness as a list of advanced words is not be employed solely in language teaching classes as it provides a comprehensive list of words students need for advanced academic words.

Mozaffari and Moini (2014: 1291) found that these AWL words can have quite a strong subject specific bias. Still, the findings in Mozaffari and Moini’s study maintain that the first two sublists were the most frequent even with the subject bias, which reinforced the choice to use the two most frequent sublists in the AWL.

<table>
<thead>
<tr>
<th>Socioeconomic Category</th>
<th>AWL Words</th>
<th>Content Words</th>
<th>Percent Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Middle</td>
<td>36</td>
<td>1876</td>
<td>.59</td>
</tr>
<tr>
<td>Middle Middle</td>
<td>53</td>
<td>2004</td>
<td>.1</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>78</td>
<td>3588</td>
<td>.83</td>
</tr>
</tbody>
</table>

Table 4.4a. Differences in lexical sophistication among social class
In Table 4.4a interestingly, it appears that the Upper Middle Class schools have the lowest level of lexical sophistication, with the Middle Middle Class schools having the highest. This seems counterintuitive to the observed classes and does not complement the qualitative analysis later on in the chapter on Ethnographic Observational analysis.

<table>
<thead>
<tr>
<th>School</th>
<th>AWL Words</th>
<th>Content Words</th>
<th>Percent Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justinian</td>
<td>206</td>
<td>12876</td>
<td>1.59</td>
</tr>
<tr>
<td>Arthur Miller</td>
<td>145</td>
<td>5954</td>
<td>2.43</td>
</tr>
<tr>
<td>Elizabeth Proctor</td>
<td>118</td>
<td>6050</td>
<td>1.95</td>
</tr>
<tr>
<td>Harper Lee</td>
<td>244</td>
<td>13891</td>
<td>1.75</td>
</tr>
<tr>
<td>Hansberry</td>
<td>134</td>
<td>6697</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4.4b Differences in lexical sophistication among schools

In Table 4.4b the variability within the schools shows that a higher level of lexical sophistication can still be seen in both the Middle Middle Class schools and the Lower Middle Class schools. Justinian High, the only Upper Middle Class school, remains at the lowest percentage of lexical sophistication.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>AWL</th>
<th>Content</th>
<th>Percentage Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justinian Teacher One</td>
<td>77</td>
<td>5336</td>
<td>1.44</td>
</tr>
<tr>
<td>Justinian Teacher Two</td>
<td>129</td>
<td>7540</td>
<td>1.7</td>
</tr>
<tr>
<td>Arthur Miller Teacher One</td>
<td>80</td>
<td>2329</td>
<td>3.43</td>
</tr>
<tr>
<td>Arthur Miller Teacher Two</td>
<td>65</td>
<td>3625</td>
<td>1.79</td>
</tr>
<tr>
<td>Elizabeth Proctor Teacher One</td>
<td>91</td>
<td>3697</td>
<td>2.46</td>
</tr>
<tr>
<td>Elizabeth Proctor Teacher Two</td>
<td>27</td>
<td>2353</td>
<td>1.1</td>
</tr>
<tr>
<td>Harper Lee Teacher One</td>
<td>144</td>
<td>8675</td>
<td>1.65</td>
</tr>
<tr>
<td>Harper Lee Teacher Two</td>
<td>100</td>
<td>5216</td>
<td>1.91</td>
</tr>
<tr>
<td>Hansberry Teacher One</td>
<td>72</td>
<td>3216</td>
<td>2.23</td>
</tr>
<tr>
<td>Hansberry Teacher Two</td>
<td>62</td>
<td>3481</td>
<td>1.78</td>
</tr>
</tbody>
</table>

Table 4.4c Differences in lexical sophistication among teachers

Once more, as soon as the socioeconomic categories and schools were broken down into individual teacher corpora, the variability within the schools is too great to make generalizations about language differences across socioeconomic categories. As you can see, the Middle Middle Class schools in Table 3.4a had the highest levels of lexical sophistication, while in this table one of the Middle Middle Class schools' teachers has the highest percentage of lexical sophistication, and another has the lowest. The two Upper
Middle Class school’s teachers both have relatively low percentages of lexical sophistication, but there is enough variation among all of the individual teachers to suggest that this is an individual teacher trait, at least in terms of the measurements done for this analysis. The results of these findings align with the findings of the TTR measurements and to some extent lexical density in the previous sections. Combined, these three measures provide some level of support for concluding that the teachers are producing output among the three socioeconomic groupings in terms of word use that varies almost exclusively within individual teachers.

Once each of the measurements of lexical richness are separated by individual teacher there was very little suggestion that socioeconomic class affected the amount of lexical richness used in classrooms for any of the three indicators. Interestingly, the trends in variability were that there may have been some level of heavier use of advanced vocabulary in the classes lower on the socioeconomic spectrum indicating that if these trends continued, they may in fact produce more advanced language than the Upper Middle Class school. However, it remains important to note, the numbers and data available may not have been sufficient for such conclusions to be drawn without more data.

4.6. Analysis of Prominent Themes

The previous analysis of lexical richness is primarily focused on frequency figures and richness percentages and leaves little room for qualitative specificity. I did, however, conduct a short exploration of one possible combination of qualitative measures that posed some meaningful questions. The figures in the following section use prominent themes that were originally observed in the classrooms in an effort to ask qualitative questions about the corpus figures.

Prominence is a concept used primarily in corpus translation which allows a researcher, or someone who is familiar with the entirety of a text, to raise ideas for analysis that were salient only in a close reading of the texts. An example might be that of a reading of Kurt Vonnegut’s *Slaughterhouse 5* (1991) where neither frequency lists, nor measures of lexical richness would have located the preponderance of the phrase, “So it goes”26. Each of these words in themselves are quite frequent outside of the phrase, thus a corpus would not produce results establishing its frequency, unless you were familiar with the text. Despite this, its role as a set of words that necessarily appear together in this specific text is very prominent as any close reading of the book would tell you.

An in depth analysis of corpus data using qualitative methods as a complement to quantitative measures is not an uncommon practice but mixed methods research often uses quantitative and qualitative methods separately to look at different aspects of the texts.

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26 The phrase “so it goes” is used 106 times by Vonnegut in *Slaughterhouse Five*, while it can only be found in the exact same order 59 times in the British National Corpus, a corpus of over 96 million words.
(Gregory, 2011; Cooper, 2014). The data here uses methods put forward by Tashakkori and Teddlie (2008) and advocated further in Hashemi (2012) employing the qualitative notion of prominence to inform the quantitative measurements (Baker, 1993; Pantopolous, 2009; 2012).

The four to six weeks of observations (14+ hours per class) of these classes provided me with a conceptual impression of many prominent features of the observed teacher language. These prominent features provide linguistic information about the teachers. However, most features that were flagged as perceptually salient such as the use of the word ‘job’ to refer to the students’ school work or the teacher using ‘we’ over ‘I’ resulted from individual variation rather than school or socioeconomic category trends. This individual variation was clear once concordance lines were examined for context on instances of ‘job’ and after an analysis of pronoun frequency as previously discussed.

However, there were two noticeable prominent categories that necessitated a more extensive examination, those were 1) words referring to in-class materials and 2) words used to assign projects or schedule tests. These were observably different among schools in different socioeconomic categories. This portion of the chapter uses the concept of ‘prominence’ to test the perception of frequency against actual frequencies of these two prominent features (Gabrielatos, 2014). It explains the qualitative impressions of prominence of words that I drew from the classroom observations and the quantitative corpus analysis of these assumptions.

The prominent themes perceived during observations:

1. Teachers in the Lower Middle Class schools referred to materials, equipment and tangible classroom needs more often than teachers in the other schools.
2. Teachers in the Upper Middle schools mentioned grades, assignments, homework and assessments more often than the other schools.

To test these perceptions I compiled a list of what I labelled Material words and Assignment words and then reviewed the counts individually within the concordance lines, which expands on the word counts to display more of the sentence in order to provide context. I then narrowed the word list to only words that were used in at least five classes and more than one instance in at least two of the classes. This brief combined quantitative and qualitative look serves to strengthen the argument that qualitative methods combined with quantitative data may be more apt at revealing insights into the language of classroom teaching.

Calculations in these figures are based on relative frequencies (frequency per thousand) in order to control for the different size corpora. Relative frequencies are often used in corpus linguistics to provide a clearer understanding of the differences (or similarities) when different sized corpora are compared. They demonstrate how many instances per thousand
are used, in order to reconcile the difference in corpus sizes (Baker P et al., 2013; McEnery & Hardie, 2012; Pechenick et al., 2015).

**Analysis of Material Words:**

<table>
<thead>
<tr>
<th>Socioeconomic Category</th>
<th>Material Words</th>
<th>Total Word Count</th>
<th>Relative Frequency per 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Middle</td>
<td>109</td>
<td>23,076</td>
<td>4.72</td>
</tr>
<tr>
<td>Middle Middle</td>
<td>77</td>
<td>22,772</td>
<td>3.38</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>125</td>
<td>39,712</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Table 4.5a Differences in Material words among social class

Table 4.5a indicates that the Upper Middle Class school uses Material words slightly more often than the other socioeconomic categories, while the Middle Middle Class schools use the least. This rejects my initial prediction that these words are used most often in the Lower Middle Class schools.

<table>
<thead>
<tr>
<th>School</th>
<th>Material Words</th>
<th>Total Word Count</th>
<th>Relative Frequency per 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justinian</td>
<td>109</td>
<td>23,076</td>
<td>4.72</td>
</tr>
<tr>
<td>Arthur Miller</td>
<td>15</td>
<td>10,952</td>
<td>1.36</td>
</tr>
<tr>
<td>Elizabeth Proctor</td>
<td>62</td>
<td>11,820</td>
<td>5.24</td>
</tr>
<tr>
<td>Harper Lee</td>
<td>88</td>
<td>27,083</td>
<td>3.24</td>
</tr>
<tr>
<td>Hansberry</td>
<td>37</td>
<td>12,629</td>
<td>2.92</td>
</tr>
</tbody>
</table>

Table 4.5b Differences in Material words among schools

Table 4.5b gives the impression that the use of Material words also vary according to school as the breakdown shows the lowest and highest uses of Material words are both in the Middle Middle Class schools, while when they are separated by socioeconomic category the Middle Middle Class schools are the lowest of the three. Still the relative frequencies of Material words in the two Lower Middle Class schools continues to contradict my initial prediction that these schools use more Material words.
Table 4.5c Differences in Material words among teachers

Table 4.5c Variation by individual teacher suggests that the use of Material words is an individual teacher phenomenon, considering the Middle Middle Class schools' variation specifically, as the schools in this socioeconomic category vary from the most relatively frequent to the least relatively frequently in terms of use of these Material words.

Analysis of Assignment Words:

Table 4.6a Differences in Assignment words among social class

Of the two patterns that seemed prominent, the Assignment words seemed the most salient during the observations. The Upper Middle Class schools seemed to discuss assignments, assessments and tests far more often than the others. In Table 3.6a the salience of this difference with regard to socioeconomic category is supported as the Upper Middle Class schools use almost 1.5 more Assignment words per thousand than the Lower Middle Class schools and nearly 2 more than the Middle Middle Class school.
Interestingly, even once separated by schools, the Upper Middle Class school continues to have much higher *Assignment* word use relative to the other schools. The difference is smaller, but it is maintained.

As with *Material* words it seems as if individual teacher variation may play a larger role than socioeconomic category in terms of use of *Assignment* words. However a focus on this particular type of word use by the Upper Middle Class schools displays some level of merit if Harper Lee Teacher One is put aside. Barring a Harper Lee Teacher One’s very frequent individual use of *Assignment* words, the Upper Middle Class schools’ teachers both use *Assignment* words more often than most other teachers, which lends itself to the suggestion that qualitative decisions about prominence ultimately might be a decent indicator of some underlying patterns, as well as a solid method of dispelling first impressions of over/under use.
4.6.1. Summary of Findings

The data in the tables presented show that while the numbers are small, there are a few interesting trends. The prominence of perceived words in the two analyses is not always confirmed. Material words seem to follow the pattern of similarity and intraschool variation that the TTR, lexical sophistication analysis results. It may suggest that the prominence of Material words in the Lower Middle Class schools are more evenly spread than was initially perceived in the observations. Yet, the analysis of Assignment words seems to suggest that the Upper Middle Class schools could be using Assignment words slightly more frequently than some of their Middle Middle Class and Lower Middle Class counterparts. Excluding the Harper Lee High outlier teacher, the two Justinian High teachers continually have the most frequent occurrences of Assignment words, using 1-2 more Assignment words per 1000 words. While this indicator is not definitive, its use adds to the credence to the notion of prominence to some extent and its usefulness in corpus studies.

While these findings are similar to some of the lexical richness indicators, these numerical figures draw attention to the potential of using this type of qualitative categorization in a more combined quantitative/qualitative analysis. This combined analysis would encourage close readings and intimate knowledge of a corpus in order to assist in the analysis of the data. While this is not an analysis type that can be afforded to all corpus studies as its limitation is enforced by corpus size, this intermingled method could be used to look at individual style, words and phrases across teacher talk in a small classroom observation corpus such as this one.

4.7. Basis for Content, Practice, Direction Framework

Though the focus of the corpus analysis was that of the difference in word use and lexical richness, the concept of prominence altered the way I reflected on the observations in terms of trends and patterns in language. The schools had prominent differences across social class, but these differences were not significant in terms of statistics. Nevertheless, the differences gave way to an alternative analysis and a look at themes. The two particular themes were tested in this chapter, that of Assignment and Material words were tested in light of this initial analysis perceiving a prominent use of scheduling and giving assignments in the Upper Middle class schools, as well as a prominent use of language referring to physical classroom items and materials in the Lower Middle Class schools. These two prominent themes are only two manifestations of prominent themes, but they convey the contribution that the interpretation of the corpus can have on the construction of the Content, Practice, Direction framework, and what role a corpus study could play in the framework.
4.8. **Concluding Comments**

Mixed methods research is valuable because each type of data helps to answer questions that the other may be unable to. In this study the quantitative data gives us a glimpse of classroom language and word use and allows for an exploration of the weight of individual teacher language and how it varies.

It also provided a preliminary answer to the initial inquiry and research question:

*Is teacher talk across these middle class schools different when analyzed for lexical richness and word use?*

The interpretation of these results appear to conclude that there is no significant quantifiable difference in terms of lexical richness across the socioeconomic categories. Though a much larger scale corpus would need to be looked at for any definitive claims to be made.

Alternatively, another interesting revelation was found in the secondary inquiries that emerged from the observation data. As the sole researcher in the study, I was present for all of the 140+ hours of observations and noted several prominent themes throughout my time in the classrooms. The themes of *Material* and *Assignment* words drawn from the observations to emerge as potential questions were peripherally related to the resulting frameworks in the chapter describing some of the results of the study. They suggested that the Upper Middle Class school and Lower Middle Class schools were different, not in the use of words that would indicate lexical richness, but in their use of words pertaining to a specific classroom focus. In particular, that the Upper Middle Class school was more grade, assignment and assessment focused and the Lower Middle Class schools were focused on materials and concrete classroom amenities.

Though these too are only preliminary results in an analysis of a small specialized corpus of teacher language and lessons, the resulting numbers may add some support for the potential that an initial qualitative analysis and overview could assist in providing meaningful findings. It could also enable a more comprehensive corpus analysis of these observations. Again, a much larger corpus would be needed to confirm any significant findings.

The methodologies that use corpus methods require extensive clarification of the researcher’s choices and decisions (Pantopolous, 2012). The decisions made here for analyzing the data may not always result in notable or marked findings. These findings (or lack thereof) in themselves provide an understanding of where these methods and choices fail, and what that failure means for the research.

The finding that each subcorpus, when compared to one another, lacks much difference provides some insight toward answering the research question. The first being that the
methods may not be suited to the research at hand, an implication that is explored first in
the analysis of Type Token Ratio and then again in the other lexical richness indicators. This
is proposed by previous research looking at lexical richness and small corpora and
establishes that there is no ‘magic’ number to know whether or not a corpus is sufficient for
analysis (McEnery & Hardie, 2011; Miller & Biber, 2015; Mozaffari & Moini, 2014; Sinclair,
2004).

The other insight is that the results maybe, in fact, demonstrating that there is not much of
meaningful difference in word use and teacher language when looking at this type of data
using word count and frequencies.

This analysis produces findings that suggest three main things.

1. The corpora across schools have very few distinctive differences in terms of specific
word counts and word use.
2. Of those few differences, there is a slight indication that the Upper Middle Class
school has a tendency to use more Assignment words than the Middle Middle Class
schools and the Lower Middle Class schools. Although the analysis establishes little
evidence of the difference being particularly substantive, as mentioned in the
limitations of the corpus size. This may be due to the small scale of the data.
3. Corpus analysis, specifically indicators of lexical richness, with small-scale data,
remains problematic (Laufer & Nation, 1995; Malvern & Richards, 2012; Van Hout
& Vermeer, 2007)

Another important development that emerges from this data is that research needs a range
of studies using corpus linguistics methods and a qualitative analysis that show a range of
findings. In much of the literature the findings of the quantitative data complement the
qualitative analysis (or vice versa). Here, qualitative data is used as a tool to ask questions
about the quantitative data. Many of the figures reviewed in this chapter are difficult to draw
broad conclusions about, but the results of the analysis demonstrate that the findings of
corpus studies are not always particularly supportive of the findings in a second method of
analysis. In fact, these types of mixed-methods studies may result in contrasting
conclusions, or lack of any conclusive findings. The current climate of corpus linguistics
studies (Baker, 2004; Baker P et al., 2008; Chang, 2014; Murphy, 2012; Pantopoulous, 2012;
O’Keefe & Walsh, 2010) gives the impression that corpus analysis is indeed a way to
support qualitative findings with quantitative measures. My thesis, through the
forthcoming qualitative analysis, provides some evidence for corpus findings contradicting
(or at least being insufficient to complement) the qualitative analysis.

Above, I have looked at a corpus analysis of small-scale data and it revealed some
interesting findings. While the results of an analysis of prominent themes may well develop
into something meaningful, it is important to note that the aim of this section was to use
quantitative data to remove some subjectivity from the analysis before moving on to a more
qualitative look. As that is the aim and not a large scale corpus analysis it seems that this is
where the corpus analysis ends, and the more qualitative portion of the research begins. As
with O’Keeffe and Walsh’s (2010) research, they note that the possibility for an in-depth analysis of the specific words does of course exist, but in order to understand the content of the data in a more holistic way, a sound and thorough qualitative analysis is required (147).

The corpus analysis works in concert with the reflexive interviews to look at the findings in several additional ways to the traditional and Anyonian approaches taken in the Ethnographic Observational Analysis chapter. The corpus analysis and reflexive interviews both provide some confirmation or rejection as to whether or not the preliminary findings are backed by a second source of analysis. In the case of the corpus analysis this is done with quantitative methods, while the interviews provide ‘member checking’ of the observed outcomes. Both add a level of empirical support to the analysis and strengthen arguments throughout.
5. Ethnographic Observations

This chapter recounts the process by which I analyze the observational data using salient and illustrative examples of themes drawn from the observations. This method of analysis uses the choice of illustrative excerpts from classroom observations as the primary analytical tool. Qualitative methods are many times criticized for their lack of objectivity, the use of a method with minimal commentary suits an empirically sound look at these classroom observations. That is not to say that the analysis is removed of all subjectivity, it simply allows a more flexible analysis with room to reflect on the salience and meaningfulness of the excerpts chosen, rather than employ a direct explanation of their significance.

The data from this chapter provides the most complete view of the classrooms throughout the thesis. The observations serve to develop a more in-depth understanding of the everyday functioning of the classrooms and teachers in the study. It is this complete view of classrooms, along with the rich, thick descriptions in the Methodology chapter that facilitate an Ethnographic Observational Analysis.

A reminder that the analysis is done with a view to observing differences across schools and classrooms, not as a judgement on the quality or content of teaching. One may reflexively believe one lesson is more effective than another but as student academic achievement is not a factor in the research there is no evidence in in this thesis, real or implied, that any strategies employed by the specific teachers in these observations are correlated with higher or lower levels of academic success.

Along with the Ethnographic Observational Analysis, chapters on corpus analysis and reflexive interviews both have the effect of minimizing subjectivity. Together the chapters depict the classrooms in detail, triangulate the data and member-check the findings, all of which are duly encouraged by qualitative researchers for creating sturdy and sound arguments (Creswell & Miller, 2000; Lather, 1986).

5.1. Ethnographic Observational Analysis

Replicating Anyon’s method of observational analysis was key to making this a more significant revisitaton of her work. Anyon developed the Ethnographic Observational Analysis specifically for her study in New Jersey classrooms which produced, among others, Social Class and the Hidden Curriculum of Work. This study is widely read by teachers, educational researchers and in teacher education courses. Social Class and the Hidden Curriculum of Work has galvanised numerous scholars to respond in publication, both critiquing and reinforcing Anyon’s findings to this day. The longevity of the surrounding discussion of the results from Anyon’s work has left a substantial impression on the field.
Anyon's analytical model of Ethnographic Observational Analysis allows for a robust illustrative look at differences without commentary-laden analysis, enabling individualized conclusions about excerpts. The researcher retains some power in the decisions made concerning which excerpts to include or exclude, and the ways in which the examples are arranged and formatted. The researcher also provides a guide as to which illustrative examples are put in contrast to one another, and which are presented as similar.

The strength of an Ethnographic Observational Analysis is that it takes components from several traditional qualitative methods and combines them. Anyon specifically developed a method that allowed for the distance of non-participatory observations and intimacy of embedded ethnography. Using this analytical method provided a way to both remove myself from student-teacher and other classroom interactions while being present for the physical, emotional and linguistic nuances that may be overlooked in recorded data only.

Additionally, the Ethnographic Observational Analysis also gave me a description of my methods that I was able to explain to the students and teachers without bringing too much of an outside influence on classroom action. As students were used to silent observations as there were many administrative teacher observations and curriculum assessments done throughout the year.

5.2. Research Question

The research question addressed in this chapter echoes the language of Anyon, in calling the classroom talk and the way the lessons are conducted 'work'. Using the term 'work' in the research question to refer to the data being compared assists in demonstrating the parallels in my research to Anyon's Social Class and the Hidden Curriculum of Work. It should be noted though, that 'work' includes a variety of teacher talk and instruction in the classroom, and is best understood throughout the rest of the chapter as lessons.

The research question addressed is:

_**How is classroom 'work' being done across these middle class schools? And if it is being done differently, in what way?**_

5.2.1. The Illustrative Nature of Excerpts from Classroom Observations

The following is observed data from classrooms in five participating schools in Hereford County, Massachusetts. To keep the chapter within a reasonably allotted length, only a limited number of examples are analyzed. The focus of the analysis will be the varying degrees to which different approaches to similar topics within the curriculum are taken by teachers in schools across the middle class.

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27 My observations did not overlap with other observations in any class during the study (to my knowledge).
I refer to the following lessons as comparable, as discussed in the Methodology chapter, these topics were taken directly from the observations where teachers described and exemplified these lesson plans out loud and in writing. The teachers themselves follow the suggested texts and requisite aims and objectives of the Massachusetts Curriculum Framework. As an observer of the lessons and classrooms for four +/- weeks time it was clear that the subject, aims and objectives of these lessons were similar in terms of the way the teachers framed them, though, as will be discussed in detail, they were approached and conducted differently.

In this section there are five example lessons that will demonstrate different aspects of the variety of lesson types observed in classroom instruction. Some emphasize the difference between two lessons, and others emphasize the different approaches taken by each teacher. The final example illustrates a similarly conducted lessons across the Middle Middle Class schools.

Classroom Examples:

1. **Analytical Essay Assignment**
   - Justinian High - Upper Middle Class school
   - Arthur Miller – Middle Middle Class school

2. **Historical Figure Assignment**
   - Justinian High - Upper Middle Class school
   - Harper Lee High – Lower Middle Class school

3. **Literary Devices and Symbolism**
   - Elizabeth Proctor High – Middle Middle Class school
   - Hansberry High- Lower Middle Class school

4. **History Note-Taking**
   - Justinian High – Upper Middle Class school
   - Arthur Miller High - Middle Middle Class school

5. **Contextualizing Arthur Miller's The Crucible**
   - Arthur Miller High – Middle Middle Class school
   - Elizabeth Proctor High – Middle Middle Class school

For each set of lessons a description of the lessons and a discussion of the comparability is provided. The similarities and differences are then detailed alongside minimal commentary as related to the differences across schools. Finally, concluding comments are offered on how these classes are taught and the marked characteristics of each teacher, school, or social class' instruction. Each example uses a slightly different set-up. Although it adds a bit of confusion to the layout, the ability to see the differences with reference to another lesson adds depth to the comparison that would be lost when looking only at individual lessons. Every example is introduced and described before the excerpts and commentary. All efforts have been made to be consistent in the notations wherever possible.

**The practical limitations of the excerpts**

As explained in the Methodology and Corpus chapters the teacher's language only is recorded, and all student data is omitted. The excerpts are thus from a one-sided transcript, where no student talk is included. The result is data excerpts that sometimes seem stilted,
interrupted and lacking continuity. All efforts were made to choose clear, coherent and justifyable excerpts that illustrate the concepts while adhering to demands for students’ privacy and anonymity strategies undertaken in the study. Each teacher’s talk will be explicitly outlined. Unless specifically noted, the talk is the teacher addressing the entire class. The teacher many times responds to or repeats student talk. In the interest of ethical considerations and the students’ anonymity I have carefully chosen excerpts that do not allow for identification of any specific student in these responses and repetitions.

5.3. Excerpts

5.3.1. Analytical Essay Assignment

In this example, I compare the difference in lessons and practice between two classes, one in Justinian High, the Upper Middle Class school and one from Arthur Miller High, a Middle Middle Class school. The following example of an assigned essay is representative of the distinction in characteristics of lessons observed across the schools. The example is indicative of many of the essays assigned over the observations, including in class essays, essay tests, and out of class assignments. It considers the two cases most illustrative of the distinction between a lesson that uses the students’ previous knowledge and implied understanding of a concept and a lesson that gives extensive directives, instruction and step-by-step directions.

The different approaches are exemplified in the lesson transcripts below, where students from both classes are asked to create drafts and then final products of essays on either a literary analysis of a character’s choices (at Arthur Miller High) or an assessment of the success or failure of Latin American revolutions (at Justinian High). The assignments obviously differ in that one is from a class on Modern History and the other an English class, but the Massachusetts Curriculum Framework stipulates as a requirement for both history and English classes that the students be able to conduct research and write a persuasive essay using outside sources and support for their claim (‘claim’ being the Massachusetts Curriculum Frameworks term for what is generally referred to as a thesis statement).

To compare the assignments for each of the two transcripts I will focus on the differing approaches to the completion of the analytical essay, as an indicative example of how the two essays differed overall. For this comparison, I have put the transcripts from Justinian and Arthur Miller High side-by-side, providing examples of how they are similar in the fundamental aspects of the assignment, and how they differ. The first section of transcripts demonstrates the difference in the focus of the analytical essay, and describes the initial assignment and requirements. The second section, goes on to reinforce the differences in the lack of in-class expansion on details by the teacher at Justinian High and the long-term work on specific concepts for Arthur Miller High.
The first thing to note is the overall length of time spent on the essay, both in and outside of class. At Justinian High, the assignment is given very little class time, either for explaining the assignment or for students to write it. A large portion of it must be completed outside of class. In stark contrast to this is the nearly two weeks of class time is used for this analytical essay at Arthur Miller High. I should note that both Justinian and Arthur Miller High students are using recently studied material for essay topics (a point which may not be easily inferred from the excerpts).

Additionally, the students at Justinian High are given an assignment with minimal direction, and told to complete it at home, thus limiting the amount of in-class practice time. The students at Arthur Miller are given a similar assignment and are taken through it day after day, working with peers, feedback and drafts. The clear difference between these two assignments is that the Justinian High class is testing the students’ ability to research autonomously and use “information in meaningful contexts” (Doyle, 1983), while students at Arthur Miller High are focused on honing the abstract skills required for an analytical essay, using the teacher as moderator.

For each of the transcripts the relevant sections are highlighted in red, and accompanied by a brief discussion of their importance. This discussion may be presented above or below the highlighted text enclosed in square brackets.

Section One: The Lesson Transcript
[Both classes were required to write 3-5 pages and told to analyze reference texts and choose a thesis/opinion statement]

<table>
<thead>
<tr>
<th>Justinian High School</th>
<th>Arthur Miller High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>So this is going to be due... I’m going to give you guys this right now. You want me</td>
<td>We’re gonna want to know as readers what the claim is’ whether it’s a peer reviewer or</td>
</tr>
<tr>
<td>to put it up and we can all read it together.</td>
<td>me.’ above the body paragraphs. The claim is the thesis.</td>
</tr>
<tr>
<td>This is what you guys are going to do... Should be at least 2 pages – at least 3,</td>
<td>Text – is it analyzed?</td>
</tr>
<tr>
<td>between 3-5. Organized around a good thesis statement.</td>
<td>Old show and tell idea. Show us something, and analysis is telling us why it matters.</td>
</tr>
<tr>
<td>You need to include a thesis statement one way or another.</td>
<td>Take a look at what’s expected of you. Final draft of this essay – next Thursday</td>
</tr>
<tr>
<td>If you use outside sources, anything other than you textbooks you need to cite it.</td>
<td>Aim for Claim + 3 paragraphs for Friday – so then on the weekend, you’re just chillin’.</td>
</tr>
<tr>
<td>This is going to be major assignment.</td>
<td></td>
</tr>
</tbody>
</table>

[The initial description of assignments is indicative of the way the students are required to complete the essays. On the left Justinian is very explicit in the length and parameters in addition to the thesis. On the right, Arthur Miller focuses on the thesis and the supporting paragraphs, and less on the finished document.]
[In both schools the students were required to create their own original/creative topic or opinion based on previously assigned referents from a lesson.]

<table>
<thead>
<tr>
<th>Justinian</th>
<th>Arthur Miller</th>
</tr>
</thead>
<tbody>
<tr>
<td>So what you guys are going to do you're going to be writing a paper on nationalism. The effectiveness and impact of nationalist movements...</td>
<td>Boardwork:</td>
</tr>
<tr>
<td>Bringing Europe and Latin American for what are they looking for - Liberty, Equality, Fraternity</td>
<td>1. Updike – A&amp;P – pov, conflict</td>
</tr>
<tr>
<td>You need to discuss 2 Latin American counties... I have some books on Latin American countries.</td>
<td>2. Chopin – Desiree's Baby</td>
</tr>
<tr>
<td>You also need to discuss 2 European countries... You have to go back to the second set of revolutions...</td>
<td>3. Tyler – Average Waves and Unprotected Waters</td>
</tr>
<tr>
<td>And then You can either pick Italy or Germany that you are working on.</td>
<td>just describe, then we'll analyze that decision.</td>
</tr>
<tr>
<td>How you present that – as long as you get there</td>
<td>Make sure your essay that you write – it's an argument. We could be split 50/50 on the argument.</td>
</tr>
</tbody>
</table>

[The focus of the Justinian assignment is to describe and explain the assignment in full, while at Arthur Miller the students are given a broad understanding of the goals of the assignment, and the final parameters are discussed only later. The Arthur Miller High teacher seems to be most concerned that the students “just start writing”].

[Next, both classes are told they must support their thesis with evidence based information from the readings or texts, and that the object of the assignment is the evidence-based analysis not the choice of topic.]

<table>
<thead>
<tr>
<th>Justinian</th>
<th>Arthur Miller: Full class discussion and one-on-one work with students</th>
</tr>
</thead>
<tbody>
<tr>
<td>You may come up with your thesis statement... and they may say these revolutions weren't effective. Do some research. Doing some research you should come up with an idea. There's no right or wrong, it's what you prove.</td>
<td>Full class discussion:</td>
</tr>
<tr>
<td></td>
<td>That first sentence of your thesis or claim is going to be about the decision. Let your essay structure follow that. Your first part can be distant/objective.</td>
</tr>
<tr>
<td></td>
<td>One-on-one:</td>
</tr>
<tr>
<td></td>
<td>Don’t worry about the reasons yet, just start writing the paragraphs. Just pick some that go together and start writing a paragraph around that.</td>
</tr>
<tr>
<td></td>
<td>One-on-one:</td>
</tr>
<tr>
<td></td>
<td>I know she's made the correct decision, I don’t know exactly why. Build paragraphs that way. Start in the middle. Once you write the paragraph, the claim and those reasons will become clear.</td>
</tr>
<tr>
<td></td>
<td>One-on-one:</td>
</tr>
<tr>
<td></td>
<td>My suggestion would be, look at the text you have remaining...</td>
</tr>
<tr>
<td></td>
<td>Build a paragraph and see what it tells you. See</td>
</tr>
</tbody>
</table>
Section Two

The assignment is similar in its relationship to the Massachusetts Curriculum Framework, but the assignments as understood by the students, and as enacted in the classroom, were noticeably different. These slight but meaningful differences can be observed below.

<table>
<thead>
<tr>
<th>Justinian High</th>
<th>Arthur Miller</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Students are told to choose a topic from a very general list of historical Latin American nationalist movements and comment on their success with reference to European counterparts.]</td>
<td>[Students choose a topic from the assigned stories (all students have full knowledge of all stories) about the correctness of a character's decision.]</td>
</tr>
<tr>
<td>You’re going to evaluate the effectiveness and impact of nationalist movements... bringing Europe and Latin American for what are they looking for - Liberty, Equality, Fraternity</td>
<td>On board:</td>
</tr>
<tr>
<td>You need to discuss 2 Latin American counties...</td>
<td>Show → tell</td>
</tr>
<tr>
<td>You also need to discuss 2 European countries... And then you can either pick Italy or Germany</td>
<td>RL1: Close reading to determine what pieces of text will help support and argument</td>
</tr>
<tr>
<td>It should be over two pages to be effective.</td>
<td>RL3: Analysing characters, action, setting. Tell us why the text you've chosen is important</td>
</tr>
<tr>
<td></td>
<td>Embedding text</td>
</tr>
<tr>
<td></td>
<td>Embed: to fix in a surrounding mass.</td>
</tr>
<tr>
<td></td>
<td>Ex: Holden admits he is a “nervous guy” (Salinger, 34) and we see from his ensuing questions that the nervousness comes as a result of Stradler and Jane's date.</td>
</tr>
<tr>
<td>[The students complete the assignment out of class over three days.]</td>
<td>[The students complete the assignment over two weeks.]</td>
</tr>
</tbody>
</table>
So this is going to be due... Monday? (on Thursday)
This paper is due on MONDAY.
Final draft of this essay – next Thursday
Aim for Claim + 3 paragraphs for Friday – so then on the weekend, you’re just chillin.

[The students must complete the essay autonomously and largely outside of classroom time on a home computer.]
[The students complete the task largely during class time on personal school computers [all students are given one at the start of their freshman year]]

[confirmed by subsequent observations]
One-on-one:
- We want to iron out the writing.
- It seems a lot of us are in different positions.
- Re-read [the] story. Quotes that help you understand the story.
- I think you have to play around with the language, it gets a little wordy.
- I like the idea – the detached stuff – make it a little clearer.
- Cut words that are Updike’s it leaves more space for your words. Too much text overwhelms your voice.
- You’ve done a little analysis on each. Create some sentences. Sentences around those sentences all of a sudden we have a paragraph. Inside out.

[Students are advised to outline autonomously.]
Drafts, peer edits, teacher edits, and re-drafts are all done during class. Students are also asked to work on their writing outside of class.

This is going to be your individual project.
I would definitely, definitely work off an outline.
Full class discussions
- ‘We’re gonna want to know as readers what the claim is’ whether it’s a peer reviewer or me’
- Bold the section that you want me to read.
- Part of it is participation, we’re going to be here reading each other’s work.
- Check your own work as you revise for that sort of thing.
- I’m gonna come around and check your status, where you should be at...
- We need people to start doing stuff at home.

Concluding Comments
While there are distinct similarities in the assignment such as the requirements of analysis and inclusion of evidence-based support, it is the equally distinct differences that demonstrate the practical realities of how these assignments function within the classrooms. Overall, the Justinian High assignment is an autonomous task, as the analytical portion of the assignment is primarily completed outside of class with minimal teacher
support. By contrast, the assignment at Arthur Miller High uses large amounts of teacher and peer support and the core of the lessons over the classes is to practice analytical skills and produce evidence-based support for a thesis. One interpretation could see this as a “difference in preparation” (Reardon, 2013a) as these lesson give the appearance of Arthur Miller students perfecting and honing a skill that the students at Justinian have already acquired.

5.3.2. HISTORICAL FIGURE PROFILE ASSIGNMENT

This example focused on a lesson from Harper Lee High, a Lower Middle Class school, as compared to a similar lesson at Justinian High, an Upper Middle Class school. To illustrate a lesson heavy in directions as opposed to a lesson with minimal instruction, I present the two lesson transcripts below, each of which is from a lesson where the students are asked to construct a creative profile of a historical figure. The class at Justinian High was assigned a résumé and a cover letter for acceptance into the Revolutionary Hall of Fame. The class at Harper Lee High was assigned a Facebook page for their figure. Both classes were told it was to assist in the understanding of the historical era they were looking at. The teachers wanted the students to get an in-depth understanding of the historical figures surrounding the topic or unit they were focusing on.

Each of the transcripts has the teacher assigning the profile and describing the requirements of the assignment. Justinian High, provides an illustration of student autonomy and the implicit foundational knowledge that is required of the students for many assignments. Harper Lee High, illustrates an approach where the teacher is providing a foundational understanding of what is expected, and then taken example by example, through the assignment.

Notably, the Justinian High teacher spends most of the minimal teacher talk discussing the particulars of the assignment, deadlines, and templates. The assignment directions at Harper Lee are far more extensive, with nearly a whole class period spent describing and exemplifying the specifics. It is made apparent that at Justinian High the process of researching information autonomously and developing it into a creative profile, is a skill that the students are almost assumed to possess and one that eschews large amounts of directions in favor of students working outside of class. The students at Harper Lee, in contrast, seem to require far more in-depth understanding of the skills necessary to complete this particular assignment.

The discrepancy in the amount of text requires a different set-up for this assignment. This lesson is presented in three parts. First, in section one, I will show side-by-side how the two lessons differ in the introduction and the assigning of the project. Then, in section two, I will go into a short discussion about the requirements and details noted in the Justinian High
assignment. Section three will go into extended detail of the Harper Lee assignment, noting the distinctive qualities of lessons that focus on directions and instruction. The set-up for each of the transcripts is similar to the previous excerpts, with the relevant sections highlighted in red, and accompanied by a brief explanation of their importance.

**Section One: Comparison**

[The classes were both told they were getting a 'fun' assignment. While Harper Lee was told it would be worth a quiz, Justinian High was told it would help them with another, related assignment and were given no other information about the weight of the assignment.]

<table>
<thead>
<tr>
<th>Justinian</th>
<th>Harper Lee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ok, I have an activity that you can do. Something else that was also really fun, the debate. You guys can pick a revolutionary person... and you're going to write a cover letter to the revolutionary hall of fame and you have to - that should include a resume. What you can do, you guys can get into character. Assume the identity of a revolutionary war hero. Whoever you are – a cover letter and resume. It should be written in the first person. Why you should be admitted to the Revolutionary Hall of fame. You know what a resume is? Everyone know what a resume is. Also with that you need to include an 8 x 10 picture. No, you can print them up. So We can decorate the back of the room. We will be doing a little presentation. This is really going to help you learn.</td>
<td>The teacher hands out written instructions on a separate worksheet, including instructions to research your author: Looking at the instructions here. It says understanding. You will research a transcendentalist or a romantic author. You will then create a Facebook page for that person. Wikipedia? You can use it as part of your research. You wanna make sure You look in multiple places.</td>
</tr>
</tbody>
</table>

[At Justinian High, much like in Example 1 the assignment is given in full detail up front, rather than an extended step-by-step explanation, and the students are then left to do the assignment autonomously at home over the week.]

### Section Two: Justinian High

This paper is due on... Monday.

I’d rather have the paper, truthfully its better for it to be done through the unit... once you gather all the information. We have Thanksgiving.

Lets look at this we’ll plan together. The last day before is the 27th... you’re gonna have your test, Tuesday November 26th... I know everyone is gonna test you that day but deal with it. If you know you’re not gonna be here.

The paper was due next Monday... unless you wanna do your... I think it makes more sense to do your résumé before the paper, don’t you think?

I think we’ll have the paper still due on Monday?

I am gonna right now, go in and change this date for you guys. I have US going to the library on Friday... This will be due for you guys on Wednesday.
A large proportion of the discussion of this project concerns its deadline, rather than its academic requirements. As seen here, the deadline is a negotiation, where the teacher asks for the students’ input.

I can make a résumé template for you guys… Here is a template for the résumé. If you go on Microsoft Word, there is a résumé template. This is just an empty template of a résumé.

The students are offered a résumé template, then directed to Microsoft Word to find it.

And then a cover letter? You guys know how to do a cover letter?

And let me give you the cover letter template. It’s basically a letter that you send along with your résumé. Basically states who you are, why you want the job, where you found the listing, what you have to offer.

This is who you’re going to address it to.
The Date, which is the due date. Dear board of directors.

The teacher asks if the students all know how to do a cover letter in a manner that implies she assumes at least a large percentage will. She then finds them a cover letter template online.

Section Three: Harper Lee High

At Harper Lee High the directions were far more extensive. One-on-one student questions and a thorough go through of the directions lasted the entirety of the first 45 minute class. The students then spent day two working on the project, while students who had finished it on day one had silent free time.

Day One of Historical Profile Lesson

At Harper Lee High the teacher hands out written instructions on a separate worksheet, including instructions to research your author, a large pre-purchased Facebook template, and a list of potential authors for the students to choose from.

Now I get to pass out the template of the Facebook [profile]

The list of historical figures on the handout:

- Margaret Fuller
- Ralph Waldo Emerson
- Mark Twain
- Nathaniel Hawthorne
- James Fenimore Cooper
- Oliver Wendell Holmes
- Washington Irving
- William Gilmore Simms
- Elizabeth Palmer Peabody
- Herman Melville
- Edgar Allen Poe
- Louisa May Alcott
- Mary Cassatt

Incomplete list due to typographical issue
[The teacher then goes on to explain that on the handout there is explicit instructions on what to include on the page.]

I decided to annotate what the page would look like. Do you guys know what annotate means?

[The teacher then goes on to illustrate each point in order to clarify understanding of the activity. Following this list the excerpts will describe examples given for the requirements listed on the hand out.]

[Career/Profession]

If you chose Edgar Allen Poe, and you wrote author, I think he worked in like a cemetery or a -
Yea, if you saw that they grew up and tended the farm, you knew they were a farmer for a while.
Melville... you know he probably worked on a ship or a whaling vessel.
If you choose the ladies, they really didn’t have other jobs. But you might find that they had a lot of kids.
You can write Mother... that is a job you don’t get paid for.

[Education]

Some of them taught themselves, a parent or guardian. Other folks you’ll see they went to some elite private high school.

[Interests]

You might find that your person is interested in things such as canoeing.
Do you have those instructions from yesterday?
I’d like to see some other things besides some other things.
If you just write it out... things that are not just associated with what they are known for.

[Friends]

In the friends box. I want you to find out if your author was friends with anyone else on the list, or any other famous people. If not I want you to find out who they were friends with.
How many friends am I looking for? Margaret Fuller should have at least 2 or 3 friends... shouldn’t be hard at all.

[Comments]

I want those to have a date associated with. You’ve seen Facebook. I want you to have the date and time, I definitely want 3 things. You can post comments from other people.
If you chose Melville and you wrote April 5th 1835... I hope you have a whale of a time when they read it... maybe it’s friend the Boston Herald saying “this is a great book”.
Maybe there’s another one... after reading this book “I’m shipping up to Boston”.
Mark Twain... With a Facebook page that would be really interesting to work with. Imagine Mark Twain was like “I just published Huckleberry Finn today” and Samuel Clemens came on and commented – “it’s an awesome book and everyone should read it”.

[Real Quotes]
Have you seen that quote? "One must travel to learn"... that's Mark Twain, I have tweeted it out a bunch of times.

[Events]

In the timeline here. Plenty of room for you to have 3 events and add a picture and have people comment on them. So you need to have at least 3 events. It doesn't all have to be associated with what we are researching them for. If it's an author it should at least be about stories or poems.

[Real Names]

Eminem... is his real name really Marshall Mathers?  
The girl from the Thor movies... Natalie Portman, Portman is not her real name. she changed it. Keep looking, you can't find it...  
If Natalie Portman had a Facebook page would say Natalie Portman... not her real name.

**Day Two of Historical Figure Profile**

Alright so here's the deal guys. You're gonna have the rest of the class period today.  
If you've already finished it... if you have work for another class... I won't get mad at you  
The only thing I'm gonna ask that you not to is interfere with someone else doing their work.

[The next day of class at Harper Lee the students work by themselves on the assignment for the period. The teacher works with the students 1:1 and they ask specific questions. Students who have completed the assignment already (at home or the previous day) are given free time to work silently on other work.]

**Concluding Comments**

There is an unambiguous difference in the amount of step-by-step instruction that is taking place between the two lessons. The assignment the teacher gives at Justinian High demonstrates the students’ skills in reapplying the information they have previously learned, meaningfully (Doyle, 1983). At Harper Lee High the teacher defines and exemplifies the concepts necessary for the assignment, as well as driving the requirements of the class (Delpit, 2006; Johnston & Hayes, 2008).

5.3.3. **Literary Symbolism and Devices Lesson**

This example compares a lesson in literary criticism, symbolism, and literary devices. While the teacher from Elizabeth Proctor High from a Middle Middle Class school uses two pieces of nonfiction to illustrate these concepts, the Hansberry High teacher from a Lower Middle Class school uses Martin Luther King’s *I Have A Dream* speech in its entirety.

To exemplify the differences between an approach that heavily utilizes a step by step directions and defining and describing and an approach that favors practicing skills consider the two lessons, each exploring the use of literary symbolism and devices in speeches, text and rhetoric. For each of the two classes, I will focus on the differing
approaches to the teaching of allusion, as an illustrative example of how the two lessons differed overall.

Once again the first thing to note is the overall length of the lessons on literary devices. In the Hansberry High, the lesson on the basics of what literary devices are is spread over four days using the Martin Luther King ‘I Have A Dream’ speech, which is introduced as a model for the students’ future assignment of a persuasive speech; in contrast, in the Elizabeth Proctor, the basics of literary devices are covered in two lessons using two recent illustrative media articles that do not appear elsewhere in the students’ lessons (at least not the ones observed). However, this difference in duration does not accurately demonstrate the difference in the way in which the information is delivered.

Because the classes are spread out over four and two days in the excerpts from the transcripts, I use a single literary device – that of allusion – as representative of this wider gap in comprehension and ability to apply more abstract concepts. The overall difference is that foundational knowledge and constant reinforcement are paramount in the Lower Middle Class schools’ classes, while in the Middle Middle Class school future academic success, day-to-day application and focus on abstract functions is the primary objective.

The layout here is divided into two sections, one for each school.

**Section One: Hansberry High**

Please note that the classes are numbered over four days, yet allusion is not referenced on all of these four days. I focus on allusion as the teaching of it in this class is particularly illustrative of a class that includes a large amount of instruction and comprehension checking. The entire Literary Devices lesson takes place over these four days and each device is taught in a similar fashion to allusion.

**Day Three (of four)**

We’re gonna look at some examples of literary devices...
Another literary device he uses is allusion.
It’s like a reference to something either directly, or by implication.

[The teacher commences the discussion of allusion by explicitly giving and explaining the definition of what constitutes an allusion.]

By using a classic American’s speech, actually he says 5 score, but he is referencing the Gettysburg address. Also using African American Spirituals. He sort of uses the spirituals, he starts with the references with Gettysburg address... He ends the speech with the words from the Negro spiritual free at last, free at last oh god almighty we’re free at last.

[The teacher explicitly describes an example of Dr. King’s allusions and the targets of those allusions.]

Uses the two allusions as bookends: Maybe he’s demonstrating the worth of both cultures.
Third, having laid out the basic definition of allusion and directed the pupils to the targets of the allusion, the teacher suggests an interpretation of why Dr. King uses the allusions he does at this point in the speech.

There are several allusions... you're going to find them.

[The teacher then directs the students to look for other allusions in the text of the speech.]

Day Four (of four)

"Let freedom ring"
Let's talk about that because that falls into another category....
It's an allusion, what's it an allusion to?
Wanna do some more allusions since we're there?
"5 score years ago"
"Free at last, free at last, thank God almighty we are free at last".

[Here, the teacher is reinforcing the students' understanding of allusions by gathering more examples and confirming their comprehension of the literary device. A similar strategy of using examples to reinforce understanding is used in the Historical Figure Profile lesson.]

Did anybody get for allusion, "Life, Liberty, Pursuit of Happiness..." "We hold these truths to be self evident"?
That's alliteration also

[The same basic pattern can be seen with regard to other literary devices throughout these lessons, with the teacher first defining, then explicitly identifying examples and targets in the speech.]

In the Elizabeth Proctor transcript the approach to allusion is very different. The focus is not ion the definitions, or specific targets and interpretations, but instead on getting the students to understand how allusions ‘make meaning’ from their own experience of the world and popular culture. Then later they practice the ability to identify allusions and how they make meaning in other documents. The focus is very much that of initially practicing the use of allusion while considering the power and rhetorical uses of those allusions.

Section Two: Elizabeth Proctor High

When you left, we were having a little bit of a discussion... and I need to know how...

How well that allusion hits the audience.

[The teacher points to the allusions being made at that very time in the classroom itself. A kind of ‘allusion spotting’.]

I feel like people are scared to say they don't get an allusion.
I'm up here saying I don't get Gary the snail.

[The teacher reintroduces the topic of allusions and the concept of ‘making meaning’, before specifically referring to ‘making meaning’ by normalizing the process of ‘getting’ allusions and not getting them.]

I’m gonna say how well is this connected.
This is what we're gonna do, we're gonna move a little bit faster. I have a few that I'm going to hold onto. How effective was that allusion? If you had to put a percentage on it. Mixed depending on your audience.

[In asking students to think about the effectiveness of allusion, the teacher goes beyond the practice of spotting them, and towards their interpretation and use in making meaning.]

YOLO?
How well does that allusion connect... What aspect of society? And what is it a reference to? American society? Can we specify. What aspect of American society... teenagers, the younger section. Why? Because a singer named Drake made it possible. Pizza Da Hut
Hands down
It's a movie that makes fun of all the Star Wars movie without referring... that movie is really funny. Because of all the allusions.
Happily Ever After...
Once upon a time in a land far far away lived a poor servant girl and SHE met a prince... and they lived.... This is a repeat.
Luke, I am your father.
I like this one quite a lot.
Where I go in the summer there are a lot of t-shirts...
We're gonna need a bigger boat.
It is a reference to Jaws.

[The teacher initiates a discussion of the application of allusions in things experienced by the students in their daily lives, including popular music and advertising. She also includes pinpointing the target of allusions to sources such as films.]

What if you're the only person in the room that doesn't understand it because that one piece of the audience doesn't understand. But the goal is supposed to be to reach as much of your audience as you can.
What was the takeaway... it was fun but what are you supposed to take away from that lesson?
Ok. Who feels confident?
They help make meaning. It's not always to be funny or scary... our trying to help your audience make meaning.

[Here the teacher introduces the abstract skill of 'trying to help your audience make meaning'.]

"I call it the Goldilocks effect".
She's giving a talk to a live-
Who is in the audience?
What's the allusion to? What's the allusion, what does she refer to? She referred to the story of Goldilocks and the three bears.
She explains the takeaway. They should make us think the big idea. Does she want us to walk about with three bears? Is that the takeaway she wants.
It kinda helps her case. It says that too much technology will mess up human interaction.
Is it catchier to say Goldilocks effect? It goes back to her main idea - is BALANCE.
Does she say get rid of it? She says she wants us to use it just right. She wants people to walk out of there remembering the Goldilocks Effect.
She does it on purpose to make her argument catchy. And for people to remember what she said.

[There is then a short class discussion of how the phrase “The Goldilocks Effect”, found in the article, is used to support the author’s argument and results in a memorable ‘takeaway’.]

The article right now uses allusions... but not in the same way. I want you to just look at the blurb. You can read it to your partner or you can read it to yourself.

[The teacher gives the students time to practice looking for allusions that make meaning by reading a review of the movie The Social Network. Both articles use a discussion of the effect of technology on human relationships.]

Master programmer – virtual reality Jeron Lenier... I don't, I have no clue who that is...

It doesn't help Me as an audience. That guy is not of my generation. He has written a short and frightening book, "You are not a Gadget".

Does nothing to make meaning of her argument.

What are we trying to get across to you about this author and some of the techniques that she uses?

Ask yourself right now, did she do a good job or a poor job of making meaning for the audience. She doesn't really use allusions and anecdotes.

Maybe Sheldon Cooper?

Allusion.

[The teacher exemplifies how meaning is lost when the writer fails to 'make meaning' of an allusion, or when an allusion is too obscure for the audience. She then uses Sheldon Cooper, itself an allusion, a character who plays a genius on a popular TV program, as someone who may have been able to make meaning of the author’s allusion to Jeron Lenier. This leads into a discussion of writing for your audience.]

Underneath. When she said she lost me... This article was originally published in the New York Times Book Review. What I do know is her ATTITUDE... is pretty apparent. Because she wants to sound like the smart one.

If she's trying to sound smart who do you think her audience is?

Number one ‘cause I don't understand it, so I’m not impressed. Her audience is another group of people... who might be big thinkers like she is. Her allusions might work for that little tiny audience.

So we have to prepare you... I want you to think every time you read non-fiction:

Who wrote this thing, why are they writing it and who are they writing it for?

I want you to skim the next page and try to locate an allusion.

Zuckerberg, so we've got that one.

[In these final two excerpts, again the teacher at Elizabeth Proctor High enforces the abstract concept in relation to herself as the audience, explaining that an allusion is not solely defined by its reference to something, but by its ability to 'make meaning' for the audience.]

Concluding Comments

The similarities found in these classes are less stark than with lessons that include large amounts of directions and step-by-step instruction, but there is an evident distinction between the way Hansberry High uses reinforcement and constant recycling of the curriculum materials to create a firm foundational understanding of literary devices, which will then be reactivated in a lesson on persuasive speaking. Elizabeth Proctor uses materials to incite the students understanding of literary devices in context, which she then employs as a means to introduce and practice the more abstract concept of ‘making meaning’.
Further discussion in the resulting framework suggests that a possible reading may be that these two lessons, while using the same concept, may be producing different “cognitively stimulating experiences” (Reardon, 2013a).

5.3.4. History note-taking

This example demonstrates an information dense lesson at Justinian High, an Upper Middle Class school when compared to a shorter less information dense lesson at Arthur Miller, a Middle Middle Class school. To demonstrate the differences in the amount of information between a Justinian High and a Arthur Miller High history class, we look at the note-taking of the two history classes. Notes, as observed in all four of the history classes, are a part of many class lessons. The teacher prepares the class for note-taking and then by PowerPoint, or board work have the students copy out information.

The note-taking sessions are very different in that in Arthur Miller High the notes are a word-for-word out loud review of board work to be written down. Justinian High produces a PowerPoint of bullet points with ongoing added commentary while the students take meticulous notes. It was indicated that the PowerPoint was a guide, and in no way a complete version of the notes the students were to take for the lesson. That this message got across was made clear by the student’s attention to the lecture, and the urgency with which they wrote down what was said. At Arthur Miller High, there was no indication that the board work was not a completed version of the notes required.

The most obvious discrepancy is the amount of notes that are given at one time. It is important to add that these notes are only a portion of unit notes for both classes (see Figures 4B and 4C). Still, there is a noticeable difference in how much academic information the students are receiving throughout the lesson, information which we can infer the students are expected to retain and study for assessments.

As this is a note-taking exercise, the set-up was less straightforward. First, in section one, the notes are printed in full in Figure 4A and 4B. This is strictly to demonstrate the length of the notes, and it is not necessary to read them in full for the comparison. Also, in Figure B, the Justinian High notes, you will notice that some words and phrases have been made bold and underlined, this is to point out which words were part of the Power Point outline, and which words were part of the teacher’s verbal elaborations on the subject.

After observing the visual aspect of the differences in notes, in section two I give some exemplary excerpts from the same transcripts of these notes.

Section One: Comparison of notes

Within the notes from the two history classes there is a difference not only in the amount of notes and information, but also in the way the notes are presented. At Justinian, the board notes are sparse and then students must make choices about what information is important
and needs to be recorded, while at Arthur Miller High the notes on the board are a full version of the notes as copied by the students. Additionally, it is worth noting that at Justinian High the students are expected to organize their own notes (with some direction from the teacher), while at Arthur Miller High the notes are presented in an organized outline, though this could be teacher specific.

See notes below:

**Arthur Miller High: History notes**

I. Battle of Lexington and Concord
   a. Where it took place
      i. 2 separate locations
         1. Lexington is where they have the first little skirmish: 70 colonists (militia) and seven hundred British soldiers
         2. Colonists disburse/10 killed
         3. 4,000 colonists chase the British from Concord

II. Second Continental Congress (May 1775)
   a. Delegates
      i. Samuel Adams, John Adams, John Hancock, Thomas Jefferson, Benjamin Franklin
   b. Olive branch Petition – to King George
      i. Negotiate for peace, end violence, representation and trade
   c. Declaration of Independence (June, 1776)
      i. Written by Thomas Jefferson
         1. Influenced by John Locke
            a. People have natural rights
            b. Monarchy doesn’t make any sense – genealogy
            c. Life, liberty and property
      2. Four Parts
         a. Preamble
         b. Declaration of Rights
         c. Grievances
         d. Declaration of Independence from England
   ii. Big Ideas
      1. Natural rights
         a. Everyman has, are given by god
         b. The people have the right to change or abolish their government
            i. If they are being treated unfairly
         c. The government gets power from the people
            i. So all people should have a say
   iii. Hypocritical
      1. Slaves, women, Native Americans, non-land-owners
   iv. States
      1. Uniting only to gain independence

III. Revolution
   a. Fort Ticonderoga
      i. 20,000 patriots secure the 6,000 British troops in Boston
      ii. Attacked the fort, and take supplies and canons
   b. Battle of Bunker Hill
      i. Actually takes place on Breed’s Hill
      ii. 2400 Red Coats vs. 1600 Patriots
      iii. First two attacks are repelled
      iv. Third charge, the British take the hill because the Patriots run out of ammo
      v. British win the battle
      vi. British have 1100 casualties vs. Patriots 400
      vii. By March of 1776 the British are forced out of Boston by canon fire

**Justinian High: History Notes**

Ok this is left hand side. Continue where we left off the other day.
I wanna talk about Theodora, then the church and then the collapse and then we’re done with the Byzantine Empire. Quiz on it next week and then we’ll move on to the Muslims.

• Theodora – Wife of Justinian
• She’s not just his wife though. She gave him great ideas. She encouraged him. She helped to build schools and fight for women. She was like a modern day first lady in government.
• She was called the Empress Theodora.
• Her father was a bear keeper in the Hippodrome. She came from humble...
• It’s kind of interesting that a poor girl ends up being an empress.
• They call her an ‘actress’ which is kind of a euphemism for prostitute.
• Tough politician. She challenged Justinian to make changed to the empire. She challenged him to fight back against people who were revolting.
• Fleeing is cowardess. He listens to her, her encouragement. The Byzantine Empire lasts as long as it does because of her.
• Nika Revolt. 2 groups – caused by riots between supporters of two chariot racers.
• You see this present day. You see soccer matches where fans are fanatics about soccer and they will riot if they lose.
• These two groups join together and plan a revolt against Justinian. Word gets to Justinian and his advisors that this is going to happen; that tens of thousands of men are gathering at the Hippodrome to lead this revolt.
• Justinian is like… I’m leaving.
• Theodora is like – NO YOU'RE NOT.
• he doesn't want to fight, she wants him to.
• She urges him. Go in there and fight them. You have the military ... You can do it. Again she is a first lady who isn’t just taking on social causes. She’s taking on political causes. Hillary Clinton. She’s kind of got the same belief. She wasn’t just behind the scenes says ‘hey bill do what you want’.
• they close the doors to the Hippodrome so the people couldn’t get out and then they killed them all.
• The people that were in the Hippodrome were all going to riot. they decided they would gather there.
• Animals?
• Somebody else said that, that’s interesting.
• It was like a race track for horses… big like that. It was a good size.
• And then she died of cancer in 548. Through written records discussing her symptoms, that is how they figured it out.
• Any questions about Theodora. I wanna say she was in her early 40s, but I could be wrong.
• This is a mosaic, Justinian on the left, Theodora on the right.
• The really important thing that came out of the Byzantine Empire is Byzantine Christianity. (Eastern Orthodox Christianity).
• Pope... Jesus and his disciple. Paul went out and spread the world, they built churches. During the Byzantine Empire the emperor decided he was going to be the head of the church.
• Now the Emperor is in charge of political, economic, military and religion.
• he believes he is close to god.
• The emperor appoints someone below him to run the church. The Patriarch. Not all that different from the Pope...
• No they do not have a pope.
• The people in the east did not believe the pope should have authority over everybody. How could somebody a thousand miles away from me? The pope doesn’t have a lot of authority... but the Pope is still demanding that he has authority.
• they needed a reason to leave the pope behind.
• And the major reason they split over the use of icons.
• What’s an icon?
• If it’s some sort of object that you would pray to or a statue of Jesus or a cross. And the east and the west are going to disagree on the use of icons. So you have two different opinions. This is what is going to lead to the split.
• 1054 – this is a very important date – you need to know this date. 1054 is when the church split. Today we still have two churches. It's called a schism. Two churches separating making THEIR own rules.
• On the next slide We are going to compare the two religions.
• Differences between Eastern and Western Christianity.
• You’re gonna wanna put them side by side so you can have point by point comparison.
• Maybe make two columns...
• There’s maybe 5 bullet points.
• Eastern Christianity
• Eastern orthodox or Greek Orthodox
• Services in Greek [today they're in the vernacular, what's the vernacular]
• If you go over to St. Johns What language is the church service in? Anyone go to St. Johns? Anyone go to Church?
• Holy Day, Easter
• By The Emperor (nowadays it's by the patriarch, I mean the government might have a day)
• Church officials could marry.
• No icons.
• Western Christianity, Roman Catholic
• Services in Latin and Christmas
• The Bible, what language was the bible published in, had to change it to the other day
• The Pope - Could not marry
• Icons.
But you should know this chart. You should not even be able to study...

Crisis and Collapse.
The Byzantine Empire is going to face a crisis... then it's going to collapse completely.

Crusades... are known as holy wars. There's going to be a lot of them.
The Crusades began in about 1090... that's not the date you need to know. I am just giving you kind of a time frame.

It really began as a disagreement between the Byzantine Christians and the Muslims or the Seljuk Turks.

Fighting over the land in Asia Minor and the Middle East. Most of these wars are going to take place in the Middle East.

If there was a matching exercise you should be able to recognize.

Later on, the Crusades start between...

they turn into a war over Jerusalem... What is Jerusalem... The beginning of Judaism and Christianity... and Christians claim it as THEIR holy city. And then the Muslims are going to fight over this holy land.

Jerusalem... most of these wars or all of these wars, are because of religion.

Weakening the Empire.
The end of the empire then follows.

1453 Constantinople was captured by the Ottoman Turks. The Byzantine empire collapsed.

Even though Constantinople was surrounded by walls... the Ottomans are able to lay siege on the city, get though the walls and take the city.

Ottoman Emperor Muhammad II renamed Constantinople – Istanbul. Turned the Hagia Sophia to a Mosque.

Section Two: Justinian High

Power Point Notes:

Theodora – wife of Justinian

[The PowerPoint notes were not very extensive, but would just note a famous historical figure, era or religion. One example of this was Theodora.]

- Theodora, wife of Justinian
- She's not just his wife though.
- She gave him great ideas.
- She encouraged him.
- She helped to build schools and fight for women.
- She was like a modern day first lady in government.
- She was called the Empress Theodora.
- Her father was a bear keeper in the Hippodrome.
- She came from humble...
- It's kind of interesting that a poor girl ends up being an empress.
- They call her an ‘actress’ which is kind of a euphemism for prostitute.
- (She was a) tough politician.
- She challenged Justinian to make changes to the empire.
- She challenged him to fight back against people who were revolting.
- (She told Justinian) fleeing is cowardess.
- he listens to her, her encouragement.
- The Byzantine Empire lasts as long as it does because of her.

[The supplemental information for Theodora, wife of Justinian, is an extended description, very little of which was detailed in the Power Point]

Section Two: Arthur Miller High

While the teacher at Arthur Miller High also added asides and extra information, it appears that he uses these asides to answer a question, illustrate a point or add contextualization, not as compulsory for the note-taking that was expected of the students.

- Battle of Bunker Hill (May 1775)
  - Actually takes place on Breed’s Hill
  - 2400 Red Coats vs. 1600 Patriots
  - First two attacks are repelled
  - Third charge, the British take the hill because the Patriots run out of ammo
v. British win the battle
vi. British have 1,100 casualties vs. Patriots 400
vii. By March of 1776 the British are forced out of Boston by cannon fire

Anything else about having a hill? If you were having a snowball fight... Mike was trying to run up and take the hill... who would win?

[In the notes for Arthur Miller High, when the teacher comments on The Battle of Bunker Hill, he attempts to couch the understanding of the battle in a real-world understanding of how hills are militarily beneficial.]

[a. The people have the right to change or abolish their government
b. The government gets its power from the people
]

Even though Dan doesn’t think he should pay for healthcare... but what’s much more likely? What is a much more likely way that you would change that? How do we usually change that law... Vote – that’s much more likely.
The government can’t make laws that you overwhelmingly disagree with.

[Again, the teacher comments on Natural Rights in the Declaration of Independence by referencing a current issue that the students may be aware of to aid in their understanding of the concept.]

As explained previously, classes that rely heavily on practicing skills are not devoid of academic content, as demonstrated by these Arthur Miller High notes. The content in the notes at Arthur Miller High is less information dense and relies on subsequent activities to give students supplemental information and an extended understanding of the topics.

In this example, Justinian High engages in one of the most prominent characteristics I observed in the Upper Middle Class school, that of an extensive amount of “valid information in an academic discipline” (Doyle, 1983: 168). The difference in these two lessons highlight the recognizable tendency for the schools to use different methods of teaching the same topic and lesson.

5.3.5. CONTEXTUALIZING ARTHUR MILLER’S THE CRUCIBLE LESSON

This example shows the similarities of two lessons from Arthur Miller High, a Middle Middle Class school and Elizabeth Proctor, the other Middle Middle Class school.

This example illustrates two Middle Middle Class schools employing lessons that focus heavily on practicing a skill I review the two lessons, both of which are lessons in Creating Context for The Crucible by Arthur Miller. The focus in both lessons is on the ways in which the lesson “situates learning in real world problems” (Hmelo-Silver et al., 2006: 236).

The teacher from Arthur Miller High uses this activity to remind students of previous lessons, and asks them to use their newly learned ability to identify points of view in literature in the present activity. Additionally, both at Arthur Miller High and at Elizabeth Proctor High ground the activity in the student’s lives, assisting in their conceptual understanding of The Crucible's literary significance and message.
As in many lessons at Arthur Miller High and Elizabeth Proctor High, the students work on activities while the teacher acts as moderator. Both of these lessons are illustrations of this strategy.

**Arthur Miller High**

Next we’ll be reading *The Crucible*. Is anyone taking part in the presentations? It think it’s that time of year... I want to make sure you’ve read it before they put the play on.

So what were the plays you read in class last year – *Antigone*, *Julius Caesar*?

So we talked about different points of view.

What type of point of view do you think we’ll find in the play?

[The teacher refers to the concepts learned in the previous lesson on narrative point of view and asks the students to apply it to the present lesson.]

Let’s pack stuff up and get ready to move around.

[The teacher divides students into different groups.]

**BOARDWORK:**

1. Sections of a newspaper/types of writing we’d find within a newspaper – include examples – begin to differentiate the types
2. Details about Salem and New England from late 1600s – early 1700s.
   a. What did that world look and feel like?
   b. What did people do day to day?
   c. What products did they use?
   d. What did they believe in?

It’s sort of brainstorming/notes/ if you guys wanna share a Google doc...

Think – Newspaper. Salem.

Try to generally get a feel for what the world is like, not including the witches.

[Using the newspaper activity the students research numerous aspects of historical daily life in 1692 for a frame of reference for reading *The Crucible*.]

We’re looking for lists of newspaper parts. How is feature writing different than obituary etc.

Stop for a minute. What are some of the sections in a newspaper?

Feature article, Advertisements, Police Log, Sports, Obituaries, Local interest news stories – ‘wood in Salem especially dry this year’, Comics, Real Estate, Horoscopes, Weather, Advice/Dear Ann, Reviews, Op-Ed

If any of you can draw you could make the comics.

There will be other aspects to your fake newspaper. But part of that requires research.

Not to lie, steal his idea, but an advertisement for nooses. Then you can build the other articles off those details. What types of animals did they have? What did they eat?

What kind of performances could a newspaper back then review?

Common foods, Common jobs, that’s the kind of research you need.

[As can be seen, both teachers attempt to contextualize the literature for the students. The teacher at Arthur Miller High has the students imagine what the world was like in 1692, while the teacher from Elizabeth Proctor High, will ask the students to imagine what an event like The Witch Trials would be like in 2013]

**Elizabeth Proctor High**

Open up to a clean piece of paper – you’re gonna be doing some writing. You guys will probably giggle at this, like you giggle of everything.

Write Now. Right Now.
It has to do with whatever we’re reading in class. The reason I do these is so you can make connections to the literature.

We couldn’t possibly do the witch trials now?

[Here the teacher explicitly tells the students the reason for the activity is in order to “make connections to the literature”, and explains that while the Witch Trials may not be possible now, the following activity would support their understanding of what was happening in Salem in 1692.]

Right now, write now!!

Take a second to think about the person you love most in this world. Write his or her name on the top of your page.

Now imagine the police came to your home and arrested that person - the one you love most in the world - for a serious crime you know they did not commit.

Even worse, the sentence for this crime is death.

How would you feel?

What would you do?

What would you say?

Two paragraphs or half a page, whatever you get to first.

[The teacher here uses an aspect of Problem-Based Learning which works on the assumption that students learn by using their own lives and experiences as models for solving problems (Barrows & Tamblyn, 1980).]

No, you can’t just say, “I would just get a lawyer”.

These girls weren’t very high on the totem pole of 17th century Salem... maybe they were having some fun, some excitement, maybe it’s the first time anyone has ever listened to them.

They are empowered by the witch trials. They are determining people’s fate by accusing them of being witches.

[The teacher continues to clarify the ways in which this lesson will help the students approach the literature. By explaining to the students the social position of young girls, he is able to convey a possible reasoning behind their actions.]

These two lessons exhibit major characteristics of lessons that put the student's ability to apply skills to practice above the need for large amounts of information. The lessons use strategies to help students contextualize the information they receive and understand it in a way that assists in making connections to the real world. Both teachers, using different methods, are attempting to have the students comprehend The Crucible and the Salem Witch Trials in a more meaningful and relevant way.

5.4. Basis for Content, Practice, Direction Framework

The findings from this chapter, using Anyon’s Ethnographic Observational Analysis were used in conjunction with the Reflexive Interviews and Corpus Analysis to establish a promising framework for future research. The framework heavily reflects the differences illustrated in the excerpts and classroom comparisons, and attempts to clarify the ways in which classes and lessons may be different in smaller, less socially unjust, ways. The framework was solidified and defined through the use of previous frameworks and theories in the literature in concert with the findings from the data. The starting point of the
framework was drawn directly from the initial themes observed and noted in data transcription, fieldnotes and presentations to teachers.

**CONCLUDING COMMENTS**

The research question in this chapter asked:

*How is classroom ‘work’ being done across the middle class? And if it is being done differently, in what way?*

While the findings here only give us a small picture of a larger body of socioeconomic variation among the middle class, the observed data gathered over six months provided some evidence of a recognizable difference in the way lessons are conducted among the schools. This difference falls along socioeconomic lines, even when the spectrum of socioeconomic status is only incrementally unequal across schools. These differences in lessons add new insights to Anyon’s study which discussed the major differences in ‘work’ across social class. The findings support the possibility that a difference in lessons remains even in light of only small differences in socioeconomic status and within a social class.

In the comparable lessons exemplified in this chapter there are clear discrepancies in content. This is evidenced in the amount of instruction needed in the Lower Middle Class schools and the amount of student autonomy afforded by students in the Upper Middle Class school. The Middle Middle Class schools, rather than straddling the line between these two, take an approach that favors practicing the skills that are being taught in the Lower Middle Class schools, but absent the extensive amounts of content seen in the Upper Middle Class school.

The examples in this chapter provide substantial support for lessons being taught differently across the schools. In the next chapter reflexive methods are used to approach the data from the perspective of the teachers that were being observed. This approach allows the data to be assessed by the participants who may be able to verify the extent to which the findings are indeed indicative of an existent class division in lesson types across incrementally unequal socioeconomic categories.
6. Reflexive Interviews

The following chapter focuses on reflexive teacher interviews and adds teacher input to inform and interpret observations from previous chapters. The interviews were conducted subsequent to each of the classroom observations. As with the ethnographic observations, these interviews are from ten specific individual classroom teachers and should not be seen as representative of all schools or teachers.

The interviews focused primarily on themes drawn from each of the schools’ four-week classroom observation periods for each school. Some of these themes are explored in the Corpus Analysis chapter by looking at Material and Assignment words, though the themes were extrapolated from isolated observational data, meaning all schools had not been observed at the time of many of the interviews, the teachers were asked to compare their perception of students, teachers, and classes in their own schools to those in cities situated in higher and lower socioeconomic positions, enabling a level of understanding about perceived social class differences in teacher talk and lessons. While the teachers input on this topic largely influenced the construction of the framework described and detailed in the Content, Practice, Direction chapter, references to the language are coincidental though sometimes appear to relate directly to this framework.

The aim of combining both ethnographic observations and reflexive interviews in my research is, “developing deep understandings to guide action within a community or context” (Talburt, 2004: 83), rather than to produce a replicable account of classroom teachers’ language. The two methodologies complement each other by accounting for the areas where the other is left wanting. In this case the observations show what is genuinely happening in the classroom, and the interviews illustrate the teachers’ perception of what is happening in classroom.

Ultimately the goal of this chapter is pursuant to the stated purpose of much reflexive interview research as described by Orb, Eisenhauer and Wynaden, which is to make some attempt to “describe a phenomenon from the participants’ point of view” (2001: 94). A perfect version of the participants’ perspective is unattainable, but the focus of reflexive research should be on approaching their versions of reality in order to provide a more nuanced look at the observations.

This chapter combines a look at teachers’ perceptions of their own classroom observations with their considered exploration of my observations and initial findings. I begin by using the teacher’s interviews, as well as some literature, to investigate perceptions of the active

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29 The interviews with teachers were conducted once each set of four week observations was completed. Themes were drawn only from the current, incomplete data at the time.
use of research-based practices in their own teaching. Then I proceed to discusses new, potentially important points that were not discussed in the Ethnographic Observational Analysis chapter, providing additional support for some of the themes identified in the observations.

As mentioned in the Methodology chapter, in each instance there is an awareness from my perspective and the assertions of the teachers that they make some level of conscious choices in their manner of speaking, the topics they address and their self presentation (Gearity, 2011: 611). To a greater extent, the analysis and interviews are done with the knowledge that the presence of an observer, the specific questions asked, and the teachers' understanding of the project are all instrumentally interwoven in the interview responses, and therefore reflect the combined image of the teachers' desired perceptions, reality and my interpretation of their answers (Lather, 1986; 2011).

My position regarding the interpretation of interview responses aligns with that of Tusting and Maybin (2007) in the belief that researchers cannot extricate ourselves from the research: “the researcher is inevitably part of, and shapes, the research that is being produced” (578). Any study should be fundamentally informed by this fact. This information enables a sense of reflection on what biases we may or may not be introducing into our analysis of the respondents’ answers and indeed before that, on the choice of questions to ask and answers to analyze.

Reflexive qualitative approaches acknowledge that the researcher and research cannot be meaningfully separated, and that neutrality is impossible. Researchers and participants both influence and are influenced by the process of research (Hand, 2003; Lather, 2001). Dorr-Bremme (1985) discusses this as a positive aspect of studies where there is continual observation and interaction. In these studies the perpetual stream of data and fluid research questions grant the researchers a choice to refocus on newly compelling findings as they are discovered within the constant flow of data. Furthermore, both the participants and the researcher are engaged in a construction of reality that can be adjusted and informed by both myself and each of the participating teachers to create a more meaningful collection of insights (1985: 65-67).

6.1. Research Question

The interviews considered one research question in particular:

*How do the teacher’s reflexive understanding of the observations and awareness of their classes help to make sense of the classroom differences across socioeconomic categories*

In addition to this specific question, I shall be exploring what further dimensions the teachers’ reactions to the initial findings may add to the final results themselves.
6.2. **Interviews**

*Presentation and interview questions:*

The interviews were conducted with teachers during lunch breaks, after classes, or outside of school. Depending on the teachers’ schedules the interviews varied from individual one hour sessions to two and a half hour combined sessions.

There were three parts of the interview process:

1. Short presentation of preliminary findings
2. List of factors that may affect a student’s education
3. Open-ended questions

First, the teachers were given a short presentation of preliminary findings and asked to comment on them. During the next portion of the interviews the teachers were given a sheet with two parts to discuss: Part one was a list of factors that researchers believe have an impact on student education and part two was a set of open-ended questions. The teachers were given the sheet and ample time to look it over before beginning the open-ended response portion of the interview. Strategies such as these are used in interviews to allow the respondents ample time to discuss their personal thoughts, while guiding the discussion so as to keep it within the general area of the interviewers’ research. It also allowed the teachers a significant amount of freedom to bring up issues and skip around to connections that were most salient in their mind. The purpose of these methods and strategies (Menard-Warwick, 2008; Yang, 2015) was to inspire a flow of conversation about students, classes, lessons, research and ideas rather than orderly answers to each of the questions.

The presentation, list of factors that possibly impact students’ education, and open-ended questions were all considered prominent themes in the previous observations and in the Corpus Analysis chapter (see Baker, M. 2004 and Pantopolous, 2012 for a full discussion of prominence and its usefulness in research). The presentation, questions and subsequent consideration of topics, as well as the examples and themes that follow in this chapter are informed by the understanding that choices and construction of the questions and “… the accumulating [sic] of data always reflect the investigator’s perspective of what is important” (Dorr-Bremme, 1985: 67).

Below is a sample of a slide used in one of the presentations. The bullet points are in the form of statements, the teachers were asked their opinions on whether or not they agreed with the findings and to what extent.
**Group Work**

1. Most of class is spent working either in groups, pairs or individually.
2. The teacher only lectures occasionally.
3. The teacher gives directions, then roams around the room checking up on students and answering questions.
4. Teachers are there to support students not to tell students what to do.
5. Teachers assume this is better than lecturing.
6. Student opinions are pretty important to group assignments.

Figure 5a Sample Interview Presentation Slide

Below is a sample interview sheet. The first section of the sheet is a list of research-based topics that may, in some respect or another, play a role in student success and achievement. Others in the list are discussed as possible complements to student success along with other strategies and methods.

The set of questions were constructed before the observations, then edited slightly for continuity and to add specificity. Questions were chosen to elicit long, open-ended responses. As was discussed, the primary focus of the interviews is to gather information on the teachers’ perspectives of my initial findings in order to gather a more complete picture. However, the primary focus of the project is social class and teacher talk. Thus, these questions used the frame of social class to ask subtly about curriculum, research-based methods and teachers’ perceptions of other schools in addition to explicitly asking about social class, materials and teacher talk differences.

The teachers were given this document and a broad explanation of how the interview was to go forward, explaining to them some of the aforementioned reasons for giving them the sheet of factors and questions first, rather than directly asking them the questions in order. Still, as with all research, there is some level of explicit and implicit order in how the list and questions have been constructed (Shor, 2012).

In order to counteract this as much as possible the participants were given a free rein over the format of answers and discussion. No questions within this list were specifically focused or expanded on, as the interview method required that the interview be guided by the teachers once they had seen and reviewed the worksheet.
Teacher Interview Question Sheet

How do you think the following things affect your students’ education, if at all?
- Desire to learn
- Income
- Diet and Exercise
- Social Class (Poor, Middle Class, Rich etc.)
- Education of parents
- Parental involvement in your education
- School Spirit
- School amenities (Technology, stadium, school supplies provided by the school etc.)
- Politics/Government
- Self-esteem
- Teacher’s Education

1. Tell me about your teacher education. What did you study in terms of theory and practice and how have you employed this in your classroom?
2. How prepared did you feel when you finished your degree? Were you able to see the reasons for your PG classes?
3. Do you consider Social Class in your everyday life? How would you define it?
4. How often do you discuss class relations, either present day, historical or fictional, in school?
5. What types of things do you think I observed at your school? At other schools?
6. What do you think would be the difference, if any, in the way teachers talk between a failing school and an elite private school?
7. What types of things do you expect of your students? In the future?
8. The school rankings put XXXXX High at number XX in Massachusetts (as of September 2012). What do you think that means? What do you think it would mean to be #1 or #239?
9. Do your books discuss social class issues: either fictionally, historically or presently?
10. What do you think about the books you teach from? Do you like them? Are there other books you’d like to assign in classes?
11. What’s the purpose of getting an education? What do you learn – as a whole – in school?
12. Is there a difference between knowledge and information? Which do you teach in class?

6.3. Results and Responses

The findings of the interviews are separated into three sections. The first section is slightly different from the others, as it combines teacher interview excerpts with excerpts from the classrooms to show an interesting discrepancy is what teachers believe about their teaching and the reality of their classroom actions.

1. Teacher perception of research and theory in the classroom

Next, the interviews are looked at in order to add new information and context to the observational findings. The new input received from teachers is reflected in two potential new points of interest:

1. The role and impact of parental education and parental involvement and student achievement
2. Student motivation and desire to learn
The remaining section considers three ideas examined in the ethnographic observations that either reinforce or add support for the observations’ identified themes across lesson types and teacher talk:

1. Students’ need for foundational learning and the requirements for teaching these foundations
2. Teacher understanding of how their students and schools compare to other schools in Massachusetts
3. The exposure and awareness of students to issues of social class

6.3.1. Observed research-based teaching strategies

The first section addresses the differences in how teachers perceive educational theory and research and its role in their teaching versus their actual classroom use of theoretical and research-based approaches. Interestingly, some of the teachers expressed serious doubt about the effectiveness of university and postgraduate level education courses despite teacher education being identified by researchers as a key to the improvement of classroom development and public schools (Borko & Putnam, 1996: 181). The teachers dismissed theoretical components of their teacher education and training most strongly, stating that they are inapplicable once you enter a real classroom. One teacher at Arthur Miller High stated:

I always hated the theory stuff. If you can communicate ideas to people, you’d be ok. The theories and the pedagogy... I hate that stuff. The high critical teaching theory, it seems so far removed from the day to day trenches... Any type of criticism feels far away from the day to day.

Such sentiments are seldom referred to in the literature, except insofar as they are reported on by researchers who feel that teacher education courses somehow encourage this anti-theoretical/pro-application type of education curriculum. There is extensive literature on theorists who reject the pervasiveness of theory and research when considering the realities of the classroom and advocate for applicable methods (Pinar, 1978; Schwab, 2013).

Two notable exceptions are Bartolomé’s rejection of a methods fetish, in favor of a humanizing pedagogy (1994) and Kumaravadivelu’s postmethod pedagogy (2001), which advocate for more holistic views of teaching that are less about applicable strategies and more about taking into consideration the historical, cultural and sociopolitical contexts that surround education. Katzer, Cook & Crouch (1978) accept that practitioners, and even some university educators, see research as “too theoretical” and add that this is ironic in light of educational theory being regarded in much of the academic world as “atheoretical” (Kaestle et al., 1993: 469).

Some of the interview responses from teachers were less dismissive of educational theory, but continued to express that the impact of theoretically oriented classes they took were not as informative as the practical ones, or of any great novelty.
Arthur Miller 2: “There is a little bit that’s new and different, but all the articles are just a recap of what I got in undergrad. Just a review”.

Arthur Miller 2: (Explaining that he takes mostly the history-based options for the teaching course) “My teaching courses are just material which is really interesting to me”.

Even when the teachers were enthusiastic about education research, and believe it had some level of influence on their methods, they focused heavily on case studies and influenced by anecdotal understandings of the theories. In this excerpt specifically, the teacher refers to Bourdieu’s concept of “social capital” (1986: 23) to discuss a discrepancy in parental involvement. She also refers to the idea of “teachers as stakeholders”, a common theme in educational research (see Kieran et al., 2012).

Elizabeth Proctor 1: “So it’s hard to whittle it down. One thing… the way an educated upper middle-class [parent] handles a conflict vs. working class. You’ve got Johnny and Cindy which are the parents of Johnny Jr… Parents had the confidence to email the teacher ‘hey Johnny failed the test – we can work together’… The fact that she went through that avenue shows her confidence, she has this social capital, I’m a stakeholder in this child’s education. Contrast [with], Cambodian working class family… but because of their notions of teachers as authority - teachers as co-partner, they don’t connect to the teacher. They don’t have – they may just not realize that is the way things are done”.

Lather believes, “Empirical and theoretical insights continue to be aimed at other intellectuals… Only those with advanced education have a shot at piercing through the theory and the jargon and arriving at a greater understanding of social forces”. She then goes on to ask if these theoretical frameworks can be “productively and fairly be constructed in a way that kicks back at… how we – in my research community – typically see and interpret things?” Seemingly there needs to be a larger effort to adjust from the former to the latter (Lather, 1986).

While the teachers expressed many nuanced responses to being questioned about the educational research they encounter in their preparatory education these insights lead to a question (again) of the deeper impact of theory and research in education. Even the teachers who claimed not to have retained much of anything from that education may express that claim using a vocabulary that they have taken away from it. The teachers demonstrated that they continually make an effort to facilitate the students’ engagement and participation in class, and to get. in their words, “… non-motivated students to buy into the assignment”. Yet as discussed, many teacher responses discussing theory rejected the idea that theory or research has had much impact on their teaching.

Incidentally, the strategies they use for engaging students are in line with those methods that research advocates for student responsiveness, namely ‘cultural congruency’ (Au & Jordan, 1981) and ‘withitness’ (Irving & Martin, 1982). Research on student participation states, “Only 36% of students went to school each day because they enjoyed it (Cooper,
So it is no wonder that the teachers employ these tactics. It is important to note that while “disengagement with school has also long been cited as a critical precursor to the decision to drop out”, while high levels of engagement have consistently been linked to academic success (Cooper, 2014: 363-4), none of the schools observed in this middle-class spectrum have a relatively high dropout rate, so Cooper’s statistics may not reflect a proportion of these classes, or that their engagement strategies are effective.

That being said, when looking at a spectrum of middle-class schools we can infer from the low drop-out numbers (see Methodology) that disengagement, in this context, may not lead to dropout. In these schools, and as far as these teachers are concerned, it appears to play a role in student motivation and desire to learn. Hence, it emerges clearly within the observations that the teachers attempt to implement strategies that engage the students’ desire to learn and promote classroom enjoyment. It remains important to remember that “Our understanding of why students do or do not engage in high school is underdeveloped, and our toolkit for increasing engagement is limited (Cooper, 2014: 364)”. The teachers were clearly not very aware of the engagement strategies they were frequently employing, citing rapport and their ability to interact with students as their primary tactics. Yet the teachers did not appear to realize that their classroom strategies involved far more than adjusting curricula and creating lesson plans the students could relate to, but that these methods were couched in educational research and theory.

**Observation Extracts**
As the teachers seemed unaware of their personal use of these strategies, I offer the following extracts drawn not from the teacher interviews, but from the observational data itself. Using the teachers’ actual classroom activities to illustrate the research-based methods they employ works to demonstrate that these teachers are implementing research-backed practice.

Three specific strategies are exemplified here: references to local and social issues, pop culture and creating personal connections with the students by disclosing anecdotes about themselves.

**References to local/social issues**
- Arthur Miller 2: (Referencing The Affordable Care Act) “Dave doesn’t think he should pay for healthcare... What is a much more likely way that you would change that? How do we usually change the law? Yes, vote – that’s much more likely”.
- Hansberry 2: (Discussing the overthrow of the government during the American Revolution) “We’re talking about governments. Can we learn by what we’re doing in our government? Government shutdown is a bad phrase for it, but... non-essential parts of the government. The zoo is shut down, museums and parks”.
- Hansberry 1: (Exemplifying a literary device in Martin Luther King’s *I Have a Dream* speech) The places he picked were not chosen at random. He’s not an – if you want to talk about Newtown, CT – I think about the school shooting there. It
would have been common knowledge. When he’s talking about Mississippi... there were all sorts of church bombings”.

References to pop culture

- Arthur Miller 2: (Discussing the British’s treatment of the colonies during the Constitutional Convention) “He refused to change or get rid of the laws for the good of the people. You can say that he’s not allowing them to YOLO. He won’t let them pass laws without his consent, right? And makes them wait, right?”

- Harper Lee 2: (In reference to pseudonyms in an example of Real Names for the Facebook Profile lesson) “Eminem... is his real name really Marshall Mathers? The girl from the Thor movies, Natalie Portman, Portman is not her real name, she changed it. Keep looking, you can’t find it. If Natalie Portman had a Facebook page it would say Natalie Portman... not her real name”.

- Arthur Miller 2: (Exemplifying how to translate a Constitutional Amendment into everyday English) “Why is it taking Aaron Hernandez [indistinguishable] as opposed to others? The 15th Amendment, and Hernandez’s trial is... his attorneys have asked for more time. You guys think he could have a fair trial within 5 miles of Gillette Stadium?”

- Justinian 1: (Likening it to the upcoming PowerPoint presentation on Romanticism) “Why do you think the Twilight series does so well? I think those people, [the ones that] run out in the field... that’s Romanticism”.

- Arthur Miller 2: “So, hedonism... he’s not talking about Miley Cyrus. Like, ’I can do whatever I want, and I don’t care what anyone thinks.’ He’s separating happiness and hedonism”.

Personal connections with teachers as individuals

- Harper Lee 2: “Transcendentalism. I probably told you that I hate it. I like to apply some things in life to other things in life. When I was a teenager my dad used to run a seafood restaurant. My dad ran this restaurant for years, and when I was six there was a family fallout and my dad left the restaurant. From that point on I hated seafood... But I try it every single summer... Now I am the guy that has to cook all the food. We have like a place in Maine. But on the 4th of July I find myself cooking lobster in steamers. I try it again and again... The whole reason I bring up my hatred, my disdain, my loathing is I feel the same way about transcendentalism. We’re gonna do some today, see if I like it a little bit more”.

- Justinian 1: “My generation we used to fight like cats and dogs. I remember one time my little sister crawled on my dresser. I used to collect perfume bottles. She must have been six years old. I heard all the noise and all my perfume bottles broke -- Another time, she did something so embarrassing. She decided to go in my room, take out my bra, put tennis balls in it and parade around the neighborhood in it, in front of my whole gang!”

- Arthur Miller 2: “My mother is what is called an Army Brat... My mother was actually born in the Azores. She’s as Irish as the day is long. My grandfather was a colonel in the army... constantly moving. My mother constantly changed the house around, so I slept in every bedroom in my house”.

- Justinian 2: (Making reference to a student who commented on her inner child) “You’re still a child – you shouldn’t have an inner child. You will always be your mom’s baby. I am old and my mom still refers to me as her baby”.

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30 The upcoming murder trial of a local pro-football player, Aaron Hernandez, was headline news at the time of the lesson.
As mentioned previously the reflexive interviews on the strategies the teachers used for engaging students seemed to minimize the impact of these strategies, while revealing an implicit understanding of them. One teacher believed that teacher-student relationships were the key to student engagement, while another believed it was treating them as equals:

Arthur Miller 2: “The more personal rapport I can build the better they do in my class. If you are comfortable where you are and you enjoy being there you’re going to actually care”.

Arthur Miller 1: “I try to treat students like regular human beings. Talk to them like friends or people on the street. Be natural”.

While some teachers mentioned the introduction of varied, alternative and supplemental materials within the curriculum as vital to the classes’ engagement, they did not link these to any theoretical knowledge or strategies that they understood to be particularly salient in the canon of educational research:

Harper Lee 2: “I much prefer to find my own sources how it’s impacting the average America. If you can find real words and real pictures”.

Harper Lee 1: “I think what is sad about the choices that we have is they haven’t changed”.

Arthur Miller 2: “That’s how I set up my units, they have access to them online. If I can get them interacting with the material”.

Arthur Miller 2: “...But as far as a unit, resources that I find or I deem best fit as a lesson. I use it supplementarily [sic]... Filling in the information. You have to cover the corollary issues”.

Discussion of student engagement and motivation provided a new and surprising insight into teachers and their understanding of what drives a class. The information gathered from this section sheds light on one possible reason that theory frustrates teachers, namely a lack of connection in their minds between theory and practice within teacher education programs. This finding specifically has potential for further investigation, but only a cursory look was within the scope of this study.

The next section complements the results discussed in the ethnographic observational analysis and adds thought provoking aspects previously not considered.

6.3.2. The role and impact of parental education and involvement

The first new insight that came out in the interviews was the way in which teachers see the effects of their students’ parents’ social class on the students academic discussion/disposition. During the interviews the first theme that the teacher’s chose to
discuss was the role and impact of parental education and parental involvement on students. The teachers' first instinct seemed to be that these things were inextricably linked.

One teacher stated:

“The education of your parents and social class go together hand in hand”.

Interestingly, the first piece of meaningful information about the teachers' relationships with their students gleaned from the interviews was that the teachers in fact had no definite knowledge of their students' parental education. Despite this fact, in some instances they tend to assume that their students' achievement depends on this factor. The scope of the teacher's knowledge of the student's individual social class (or parental education and employment level) were described:

Harper Lee 2: “I don’t meet enough of the parents because education is probably not something... (trails off)”.

Harper Lee 2: “I still think over half of our kids’ parents still aren’t college grads”.

Arthur Miller 1: “I have no idea... I could make fairly good guesses”.

This is intriguing as it reflects some of the impact of assumed social class. It also supports the underlying assumption of my thesis that a city's social class has some level of impact on the public schools' socioeconomic status - in general - rather than it being specific to any individual student’s socioeconomic status.

Another new point of interest was the contrast between teachers who believe the parents' education had a direct effect on the student's performance and those who believed the effect was more on parental involvement than student achievement itself (i.e. the more educated the parent, the more involved). It was clear that all the teachers interviewed equated higher education in parents to higher parental expectations of the student's achievement.

Some teachers believed this aided in student achievement and motivation:

Harper Lee 2: “Most [kids whose] parents have a higher income or higher education those kids do better they have a focus or desire”.

Arthur Miller 2: “If there parents are well educated they stress education”.

Other teachers believed it played a larger part in parental involvement in both directions (the less educated, the less involved), but were not so sure that it equated to the students' concern with achievement:

Arthur Miller 2: “The pushback you'll get feels like... you get parents who will be like.. Stevie is used to getting A's”.
Harper Lee 2: (referring to parental involvement) "...less focused on grades and more focused on respect...is my kid an asshole? No? as long as he's doing ok, and as long as he respects you".

Elizabeth Proctor 1: “Each family is going to prioritize something different”.

All the teachers agreed that parental education correlated with interest in their child’s education. However, this education did not always translate to the student’s interest in their own education. These thoughts were many times linked to a discussion of student motivation and desire to learn.

6.3.3. Student Motivation and Their Desire to Learn

The teachers’ responses surrounding the topics of student motivation and desire to learn added significant information on how teachers perceive student participation in classes. The participants’ reflections on these topics dominated the interviews across the schools. Both of these topics intersected with nearly every other topic (specifically parental education and involvement and social class awareness) and each of the teachers mentioned it numerous times.

The responses in this section aligns closely with the resulting frameworks in the next chapter. The teachers in the Middle Middle Class schools and Lower Middle Class schools describe making major efforts to make lessons particularly relevant to the benefit of student engagement, even if it was to the detriment of the amount of content the students were given. The teacher’s interviews express awareness of the constant struggle to engage the students and interact personally with them in order to have successful lessons:

Arthur Miller 2: “Big part of my consideration when I plan lessons. Idea of class as a whole... having a good rapport. You can get some much more done if kids are on the same page”.

Arthur Miller 2: “The more personal rapport I can build the better they do in my class. If you are comfortable where you are and you enjoy being there you're going to actually care”.

Arthur Miller 1: “Being able to interact with students, adding stuff more accessible to them”.

Another focus of the discussion of motivation and desire to learn revolved around students who have a lack of both.

Arthur Miller 1: "...he’s just waiting until he’s 16 to drop out. The amount of kids who don’t care...”

Harper Lee 1: “There’s an issue of apathy... some of them will say openly I hate school”.

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Or alternatively that the students’ desire and motivation only stem from a ‘checklist mentality’ (a list of requirements for good grades in class) where the students do all the things necessary, but never more than required for the grade they need.

Harper Lee 1: “But I realize that most of the kids... [of my] 120 kids, 115 of them just want to get through the day. And I’m ok with it”.

Harper Lee 2: “They are adept at finding out what they need to do to be relatively successful to do”.

Elizabeth Proctor 1: “I don’t want to speak too unfairly because the students do realize they have to work hard for something... I don’t think they truly grasp it completely. Everyone goes to college thing. Whether the kids get straight As or straight Ds... both”.

Elizabeth Proctor 2: “... just enough to get good grades”.

The observed Upper Middle Class schools’ lessons varied slightly on this theme. These classes seemed to actually look forward to “fun” activities as opposed to other, inevitably boring activities such as tests or note-taking. In the Middle Middle Class schools and Lower Middle Class schools’ teachers created “fun” activities as not-so-veiled attempts to get them to do what they knew the students considered boring work. The students seem to be concerned to a greater extent with a genuine grasp of the information in the Upper Middle Class school, and have less of a ‘checklist mentality’. Although, alternatively, this could be due to the ‘checklist’ at the Upper Middle Class school seemingly including a full comprehension of the topic, rather than just a cursory understanding. Without the interviews from the Upper Middle Class school we can only speculate, but in comparing lessons we can garner some insight into how differently these classes approach activities.

6.3.4. Students’ Need for Foundational Learning and Skills

The teachers responses strongly supported the initial findings on the students’ need for foundational learning and the teachers’ perception of what is necessary in order to provide this foundation. The input from the teachers is not entirely new information, as the preliminary analysis of some of the classroom observations came to similar conclusions. But the interviews in this section are reflexively important because they focus on working to answer these questions indirectly: What methods do teachers feel compelled to employ in their lessons? What needs do students have in terms of language and skills that teachers feel the need to fulfill in their lessons?

Initial analysis saw these answers as more technical aspects of teaching as opposed to highlighting a hierarchical set of student’s academic needs. A reflection on the framework detailed in the Content, Practice, Direction chapter, the teachers are making a clear connection back to the students’ need for foundational knowledge and skills. Their answers
also demonstrate a subconscious understanding of the difference in lesson types identified across classroom observations as an instructional mandate for including the *hows*, in addition to the *whats*, and *whys*. This concept was best identified by the teachers at Harper Lee High:

Harper Lee 1: "We've gotta make sure they know what analyze means. We've gotta make sure they know describe. It's admirable to say, [said with scare quotes] 'we should have students use higher order thinking'...The teacher's job is kind of doubled. We're teaching them content and model effective language for them like, 'What does this look like, if I were to do this in a paper? How is that different from summarize, difference, defend?""

Harper Lee 1: "As an English teacher I know these are important. If [you say] ‘evaluate a primary source,’ they've gotta know what evaluate means'.

This statement was the most valuable support for the themes identified in the ethnographic observations and in the Content, Practice Direction framework. Here the use of the word ‘content’ is explicitly used as a necessary concept in lessons.

The teacher gives a description of a lesson where the students need a foundational explanation of what terms mean before moving on to ‘content’, showing an applied understanding of lessons where the teacher gives large amounts of step-by-step directions:

Elizabeth Proctor 2: “There's so many other things that we need to talk about first. It makes it almost impossible – they still don't know that they need to capitalize your proper nouns”.

Harper Lee 1: “If I could add a third criteria, is skills. I have to teach them... they have to get through these works. We talk about getting through the value of the skills”.

The students lack of (or lack of desire for) understanding the content in the lessons on a deeper less skills-based level was expanded on by numerous teachers.

Elizabeth Proctor 1: “You cannot get abstract or meta”.

Elizabeth Proctor 1: “Build your base of routines. Build your way up from the base. We don't have base. If we talk about these concepts .... If we did talk about these concepts... would it help [them] achieve? Maybe not”.

Harper Lee 2: [Discussing an excerpt from *The Narrative of The Life of Frederick Douglass*] “When I was explaining the excerpt there were some kids that were like 'why?'. [The lessons of the excerpt are that] reading and writing expands your mind. Their power over me [Frederick Douglas] isn’t just ownership. I feel like that gets lost. They think I’m like 'Here, read this'”.

Elizabeth Proctor 2: “They did the lesson, they did the activities...They don’t want to think any further than that".
Conversely, the next major point of discussion is the students’ need for this foundational base and simple skills in lieu of content. Several teachers noted that the students were unprepared for more, and that the basic skills take up a large portion of teaching time.

Harper Lee 2: “One of my struggles - even having them prepared every day”.
Harper Lee 1: “I give a pen out everyday”.
Harper Lee 2: “A lot of students say ‘I had to work... so I didn’t do your homework’.”
Arthur Miller 2: “The amount of kids who... 20 fucking times before they get it”.

The teachers stress the difficulty they have covering large amounts of advanced academic content when student preparation may not even be at the level of students bringing their supplies everyday. These teacher interviews and discussions add vital strength to the initial findings from the ethnographic observational analysis and the ways in which the needs of some students within the middle class differ from others and in what ways.

6.3.5. Teacher understanding of how their students and schools compare

Alongside these statements of frustration at the students’ preparedness are expressions of how the teachers see their students in comparison to students in other schools. What follows are the reflections of teachers’ ideas of perceived differences between their schools and other schools in higher socioeconomic classes with more successful academic records.

Though the interviews with the Upper Middle Class school are unavailable it is of note that these assumed differences align with some of the initial findings from the Upper Middle Class school observations, but also go on to make predictions about more extreme versions of language use in the highest levels of socioeconomic class.

(answered, what do you think it’s like at a “top ranked” school?)

Harper Lee 2: “I imagine like, they’re professors. (makes gesture of handing out an assignment) ’Read the directions’ [end]. I have to give them a list of what instruction words mean...The onus is on us”.

Harper Lee 2: “As far as language differences I would expect to see is - expectations for students... That word selection has got to be critical”.

Harper Lee 1: “In a failing school it’s more along the lines of struggling to get them motivated. [To get] Non-motivated students to buy into the assignment. At the higher performing schools that’s not a struggle”.

EP1: “I was a student teacher at Leicester South... it’s a different audience... [At our school] They don’t want to have these abstract concepts. They’re just not self aware”.

Harper Lee 1: “To me it’s - I care more about that kid being able to write... so that’s something they never have to worry about at Chichester”.

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31 Anonymization of a school in a relatively more upper middle class neighborhood.
32 Discussion surrounding the high schools the teachers had previously attended or worked at took up a fair amount of time in the teacher interviews and allowed them to speak about their experiences of schools in different socioeconomic positions.
6.3.6. **Social class exposure and student awareness of social class**

The final subject focused on in the interviews was that of a blanket discussion of social class exposure and student awareness of social class, and its role in student’s lives. As these students epitomize, to some extent, the ‘ideal’ (McIntosh, 1990) or at least the ‘average’ in terms of Massachusetts, my prediction of the students’ understanding and interest in social class and how often lessons led to interactions revolving around social class issues, was that this rarely or never happened. The interviews revealed the students were exposed to issues of social class slightly more often than predicted, spanning from rarely to sometimes in classes whose teachers were part of the discussion. Teachers expressed that the main problem was not that there was no outlet in which to discuss these topics, but rather apathy or lack of self-recognition among the students and lack of context rather than an absence of the topic.

*Othello* and other Shakespearean plays, *The Crucible*, *The Great Gatsby*, *To Kill a Mockingbird* and *Catcher in the Rye* were all discussed as texts with social class themes. The history teachers mentioned almost every era that was being taught during the observations (Puritan New England, The Enlightenment, The Revolutionary War, The Civil War, World War II, Romanticism, Roman Empire, Ottoman Empire, Byzantine Empire) as opportunities to discuss social class with the students.

Yet the central issue remained, the students understanding of their own social standing in context made these types of lessons and dialogues difficult, and as one teacher put it, “there are a couple of things they just don’t get”.

Elizabeth Proctor Two: “I think they are a little big ignorant of reality”.

Elizabeth Proctor One: “While I discuss social class, it’s not the focus. We discuss social class. I don’t teach anything where the focus is social class. I think the kids here are pretty oblivious to their social standing”.

Elizabeth Proctor Two: “I don’t think they realize how many students in [this city] are going to the Toys for Tots drive. I think they assume they are going to the needy in Croydon or Brixton**34**”.

Interviewing the teachers showed that the lack of awareness that the students demonstrate in class, does not seem to reflect the teachers’ understanding of social class themes. The teachers and their desire to discuss the underpinnings of of social class issues in their materials was sometimes glossed over in exchange for more skills or moved on from for lack of student interest. Nonetheless it is a constant and major factor in their understanding of classroom lessons.

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33 Anonymization of a very wealthy neighborhood.
34 Anonymization of cities in underserved areas.
Harper Lee 1: "Yes, I think that there needs to be more conversation about class... when I look at it I look to try to see all perspectives. I don’t know how much they care about that”.

Elizabeth Proctor P1: “Inequality in America – socioeconomic inequality is far more complicated that poor-middle-upper. Causes of why we have such potent inequality... our schools subconsciously reinforce... You think education is the way to close that gap”.

Elizabeth Proctor 2: “Education is touted as the golden ticket, it's kind of complicated. It seems like it would, but that's not the only piece of the puzzle... there's so many other factors”.

Elizabeth Proctor 1: "I am very aware of my social class. We know cultural proficiency demands that you don’t act blind”.

6.4. BASIS FOR CONTENT PRACTICE DIRECTION FRAMEWORK

Drawing from the reflexive interviews there can be little doubt that there is at least a perceived difference in the lesson and instruction among schools. Specifically that there is a need for varying level of foundational instruction across the socioeconomic spectrum. In some interviews teachers were explicit in their discussion of student needs and the manner of teaching in order to assist in the development of the students needs and foundational skills to varying degrees. At times the discussion of this separation was explicit to the point of inadvertently echoing the Content, Practice, Direction framework terminology. In line with my observations that there was in face a separate type of instruction taking places are that employed different methods and approaches to lessons. The teacher input was subsequently used in large part as a basis for the development of the Content, Practice, Direction framework described in the subsequent chapter.

Concluding Comments

The question asked in this chapter was:

*How do the teacher’s reflexive understanding of the observations and awareness of their classes help to make sense of the classroom differences across socioeconomic categories*

The teachers themselves expressed that differences in teacher talk and lessons that were apparent in the observations was something they had both also observed and experienced at other schools. They also base some of this on assumptions or with respect to a school’s socioeconomic category. The explicit description of the need for more foundational skills, such as capitalization; the description of teachers as facilitators; and the association with higher-order and more abstract skills with higher socioeconomically positioned schools provides member checked support for the analysis of schools in the ethnographic observational analysis.
Consideration of the perspective of my participants produced valuable additions to the ethnographic observational analysis. The Corpus Analysis chapter also shows that these themes were potentially for revealing in terms of descriptive trends when the classes are looked at in terms of word use associated with lesson types (i.e. Material or Assignment words).

The reflexive interviews shed light on how the teachers perceive their own methods, and how based in research they are. It also revealed unexplored ways teachers saw parental education and involvement and a students’ genuine desire to actively participate in learning. The teachers believed it was a major factor in terms of how they conducted classes and the impact these factors had on student success. A final discussion surrounding foundational education and social class added another level of support for the themes established from the ethnographic observations and work to strengthen my claim of the prominence of these categories of lessons.
7. CONTENT, PRACTICE, DIRECTION: A FRAMEWORK

7.1. FRAMEWORK INTRODUCTION

In this chapter I present a framework for exploring variation in teacher talk and lesson types across schools. Some of the relationships between the three aspects of the framework may be specific to my study, but the general purpose of the framework is provide an approach to smaller, less socially inequitable differences. This is done with a view to allow for critical reflection on the way these differences may be meaningful in terms of a wider view of social class. Prominent themes that were drawn directly from observations, as well as the information garnered by the teachers’ reflexive interviews all provided input in developing the framework.

7.1.1. THE PROBLEM WITH OTHER FRAMEWORKS

As previously discussed in earlier chapters, literature on educational gaps across social class primarily focuses on traditionally underserved communities and groups. The gap in educational achievement between schools in underserved communities compared to high performing middle or upper-class schools is well recorded. Quantitatively, Reardon (2011; 2014; 2016) and Chetty et al. (2014) provide large-scale statistical documentation of the educational gaps that socioeconomic inequalities contribute to.

Theoretical examinations, (e.g. Doyle, 1983; Harris et al., 2009) and both formal (e.g. Knapp, Shields, & Turnbull, 1995) and informal frameworks, along with pedagogical tools (Darling-Hammond, 2007, Delpit, 2006; Johnston and Hayes 2008) for qualitatively observing and documenting these stratified educational differences are abundant in the literature.

Doyle’s (1983) examination of social class differences in education is similar to Anyon’s as it is in large part based on institutional education without the context of widespread standardization. Covering organizational objectives and the “intellectual demands” of schools that cater largely to disadvantaged students (1983), Doyle’s theoretical framework provides additional foregrounding for some of the overarching themes in my thesis. Unfortunately, it is grounded in an outdated context that does not take into account mandated or standardized curricula.

Harris et al.’s (2009) TPACK framework offers another option though it provides heavily for a professed focus on ‘effective technology integration and its interactions with content and pedagogies’. These concerns are ultimately relevant to the contemporary discussion, yet the specificity of the framework and the requirement of an obligatory consideration of technology does not facilitate an easily accessible framework for my observations. Additionally, the lack of explicit conversation around the issue of social class is missing.
Finally, the most promising framework for assessing and analysing my data was put forth by Knapp, Shields and Turnbull (1995). Knapp et al. (1995) presents a structure that employs an examination of the linear progression across academic skills from basic to advanced. While this appears ideal, the central focus of the framework is on high-poverty classrooms and an extended analysis of the problems teaching restricted and tightly controlled skill sets. The nature of Knapp et al.’s work could be developed to provide a more flexible framework for exploring more small-scale differences. Unfortunately as is, it epitomizes the limitations of previous frameworks.

These frameworks are not functionally applicable for the purposes of my particular thesis. The unequal distribution of resources among the schools and communities in my study rarely appear in qualitative research on socioeconomic inequality in education. In quantitative research they fall into close groupings that are generalizable as one category (i.e. most often, the middle class). Frameworks suited to demonstrate the grosser inequalities in education do not seem fit for purpose to analyze the differences between the socioeconomically similar, yet incrementally unequal, classrooms in my study.

Established frameworks are unable to illustrate meaningful differences in schools across these similar socioeconomic groupings, as students in these schools perform above average in The United States in terms of educational achievement measures, and are comparably average in terms of socioeconomic measures in Massachusetts. These average numbers translate to 85%+ graduate rates, 90%+ pass rates on the MCAS, and nearly 80% participation in higher education. There is no denying that a majority of students in the communities I observe do not fall into the category of underserved. The problem I faced was the lack of research covering the variation within middle-class classrooms did not allow for a proper or effective model to follow when conducting an analysis.

Curriculum Theory and Teachers’ Beliefs Literature

Alongside previous frameworks, research on curriculum theory and teachers’ belief literature are similarly problematic. Both focus on polarized aspects of their fields, specifically traditional vs. progressive and abstract concepts vs. basic skills. This leaves little room for observing, exploring and problematizing curricula and classrooms that operate with a combination of approaches.

Support for more nuanced perspectives of teachers’ beliefs is put forward by Cuban (2007). Cuban, referring to the false dichotomy of traditional vs. progressive educators, laments the

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35 I use the US for academic indicators and Massachusetts for socioeconomic indicators. The reason is that there is some standards of educational achievement that are measured across the country, but in terms of socioeconomics, standard of living, housing prices and wages make generalizing across the nation in terms of where these students sit in terms of socioeconomic in the case that they lived in say, Alabama, is an unknown.
36 Massachusetts Comprehensive Assessment System
37 http://profiles.doe.mass.edu/
concept that teachers are either unable to, or do not want to, find a balance between the two schools of thought. He explains that in most classrooms teachers are blending and creating hybrids of the two educational philosophies (2007). Young’s recent three Future curriculum theory framework is a clear and concise description of the way in which neither the traditional or the progressive (or Future 1 and Future 2) conceptions lead to an idealized classroom. He explains that both the ‘one way transmission’ model and the ‘knowledge as socially constructed’ are flawed and an ideal curriculum would take aspects from both, and build on them in a meaningful way (Young, 2014).

As described in detail in the Literature Review, the Massachusetts Curriculum Framework appears to be in line with a combined conceptualization. The benchmarks and objectives cited throughout the document repeatedly focus on a content learning objective that aligns with a more traditional approach, and then goes on to require students to enhance, question, and reapply the learned content - the aim of more progressive approaches. It is a balance that allows a discussion of how the content is employed practically, and considers the ways instruction may enable this outcome. However, the difficulty is in describing and unpacking these classrooms without using the polarizing terminology and categories of the previous literature.

Both curriculum theory and teachers’ belief literature struggle with issues of categorization, specifically in cases that do not entirely function within initially prescribed frameworks. The Content, Practice, Direction framework emerged from this struggle within the research, and attempts to provide an alternative way to look at classrooms enabling a proportional and combined understanding of differences among classrooms.

7.1.2. Similar cognitively stimulating experiences

There is one frame of reference for looking at lessons is useful in light of these limitations. It is not a framework in itself, but allows for a good basis for initial inquiries. I submit it as a potentially constructive manner of approaching data with a view to understanding smaller differences in concert with the framework developed in this chapter.

A principal theme drawn from my research throughout the observations is that a different level of implied foundational preparedness was evident among the classes in the various schools. Many researchers claim that discrepancies in preparation among students of different social classes start in pre-school and that, “this difference in preparation persists through elementary and high school” (Reardon, 2013a; see also Berliner, 2013; Burkham, 2013; Darling-Hammond, 2015; Autor, 2014; Reay, 2006).

Reardon, whose research on socioeconomic achievement gap makes the claim that underlines that the ultimate goal in closing the gap should be, “to ensure that all children
have similar cognitively stimulating early childhood experiences” which will lead to remedies for many of the problems in education, including failing schools and meaningful assessment (Reardon, 2013a; 2014). While ‘similarly cognitively stimulating experiences’ is an abstract notion it is useful because it enables a a look at even smaller differences in instruction and lessons.

Reardon’s (2013a) notion of "similar cognitively stimulating experiences" is particularly compelling because it allows for direct comparisons in an analysis of lessons or ‘experiences’. Comparing similar lessons side-by-side exemplifies the lessons’ differences and allows for an examination of the idea of similar cognitively stimulating experiences.

The comparative analysis is therefore conditioned to not only ask – Are there different types of lessons taking place? But, more specifically, are each of these schools offering similar cognitively stimulating experiences?

Limitations and advantages of a framework for the middle classes

Before discussing this framework, it would be remiss of me to exclude consideration of how this framework might differ from one that would look at underserved, definitionally disadvantaged or ‘failing’ schools. A large share of research on progressive pedagogy and methodologies is published with a view to social inclusion, closing achievement gaps and racial disparities in education. One widely salient feature of contemporary teaching methods and effective pedagogies is the reliance on cultural understanding and examining the ‘cultural appropriateness’ of classroom interaction between teachers and students (Ladson-Billings, 1995: 466; see also Adams T, 2015; Devlin, 2013; Endo, 2015; Hue & Kennedy 2015; Karataş & Oral, 2015).

Both Ladson-Billings (1995) and Brown-Jeffy and Cooper (2011) discuss these culturally relevant 38 (Ladson-Billing’s term) pedagogies and their impact in educational settings. Generally, these studies focus on classrooms that aim to match the teaching style to the cultural norms, behaviors, interactional style etc. of the population they are teaching or at least to lessen the “cultural mismatch” (Ladson-Billings, 1995: 467). This appears to oppose more mainstream methods - presumably aimed at a white middle-class population.

A short survey of the literature surrounding cultural relevance represents a consistent campaign for this type of method. This campaign is supported by a wide variety of evidence-based research surrounding the justification and implementation of culturally relevant pedagogies. While the terminology is not consistent, the outcomes are. Brown-Jeffy and Cooper itemize the terms: (a) culturally appropriate (Au & Jordan, 1981); (b) culturally congruent (Mohatt & Erickson, 1981); (c) mitigating cultural discontinuity (Macias, 1987);

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38 In the following paragraphs I use Ladson-Billings’s term ‘culturally relevant’ as an umbrella term that covers all forms of this classroom strategy, specific terms used in individual research are noted.
(d) culturally responsive (Cazden & Legget, 1981; Erickson & Mohatt, 1982); and (e) culturally compatible (Jordan, 1985; Vogt, Jordan, & Tharp, 1987). There are also others who conceptually advocate similar pedagogies such as Irvine’s cultural *synchronization* (1990), Lucas and Villegas’ *linguistic responsiveness* (2013) and McIrney, Smyth and Down’s *place-based education* (2011). Overwhelmingly, the application of these pedagogies conclude that the more the teachers’ language echoed the voices of the students and the lesson objectives mirrored the lives of the students, the more effective and engaging these classrooms were (Au & Jordan, 1981; Erickson & Mohat, 1982; Goodman & Kuzmic, 1997; McIrney, Smyth and Down, 2011; Orner, 1996).

Au and Jordan’s (1981) research in schools with native Hawaiian students found that, “teachers who used language interaction patterns that approximated the students’ home cultural patterns were more successful in improving student academic performance” (139). Studies in many different realms of cultures including African American, Latin American, and Native American students have been successful in helping students improve performance by utilizing teaching methods that apply culturally relevant pedagogies (for a thorough survey of these studies see: Au & Jordan, 1981; Brown-Jeffy & Cooper, 2011; Erickson & Mohat, 1982; McIrney, Smyth & Down, 2011; Orner, 1996).

My study differs from these in that the schools are all achieving at adequate or above levels for Massachusetts standards (between .6 and 2.0 grades above expected: see Methodology), the teachers are all white with the requisite higher education qualifications, the students are primarily white and the population of all the cities chosen are predominantly white and middle class. It could be assumed, according to a culturally relevant pedagogy that, without much effort, these teachers are more easily able to make the language of the classroom and the lesson objectives relevant to many of the students that would typically be found in their classes, if by definition, language and cultural relevance are the indicators for these factors (Au & Jordan, 1981; Brown-Jeffy & Cooper, 2011; Erickson & Mohat, 1982; Goodman & Kuzmic, 1997; Jordan, 1985; Ladson-Billings, 1995; McIrney, Smyth & Down, 2011; Orner, 1996).

Data collected specifically on teacher talk in predominantly middle-class white classrooms and focusing on their white middle classedness is sparse, even more so in a United States context. Much of the research states that students of color, new immigrants, and indigenous students have trouble due to the adjustment period in which they need to learn the culture of the school. However, there is little to go on to confirm that white students do not need to adjust. Their educational advantage in terms of a cultural match is left effectively to an inverse assumption. This assumption of cultural matching is not to dispute the widely-researched, consistently-confirmed understanding of the educational advantage of middle-class white students. It serves only as a reminder that we do not investigate the causes of
educational advantage from this angle very often and therefore is not thoroughly researched or well recorded. Thus, it leaves very little foundation to work from. The lack of understanding of this topic within the field is a gap the Content, Practice, Direction framework is aimed at filling.

7.1.3. Creating a Different/Adjusted Framework

In order to sufficiently analyze the data gathered from the schools I needed to analyze the classrooms in a way that addressed the differences without likening them to extreme social inequity. It was necessary to create a framework that incorporated an analysis of smaller differences in classroom practices, lessons, and teacher language. Using larger frameworks and theories, I developed a sense of the stratification across the entire spectrum of social class and used this to inform my framework. Within it was a focus on smaller discrepancies, proportionality, and a less value-led judgement on a class-by-class basis. A precondition of my development of this new framework was that it could unpack smaller differences without approaching them as ranked and could recognize the parallels to the larger body of research with a recognition that these similarities were not absolute.

Framework development

To develop an adjusted framework that enables the discussion of smaller differences across social class, I reviewed and then compiled research on lesson types and instructional methods. I incorporated the previously referenced work (Delpit, 2006, Knapp, Shields & Turnbull, 1995; Kozol, 2007; McGill, 2015) on socioeconomic inequalities in teaching among underserved communities in an investigation of the differences in instruction and lessons apparent across those schools. I then evaluated these differences in instruction and lessons and considered the way in which these manifested themselves in more limited, but salient ways in the schools I observed.

Ultimately, I developed a framework of three interconnected and overlapping lesson types: Content-based lessons, Practice-based lessons and Direction-based lessons (also referred to as Content, Practice and Direction lessons for ease). Though I generally discuss the three lesson types as a hierarchy, it is important to note that it should be looked at as a proportional hierarchy, meaning that the top level of the hierarchy is when Content is used most often and Direction is used least often, while the bottom level of the hierarchy is when Direction is used most often and Content is used least often.

There is some proportion of all three of these lesson types in almost every class, the framework does not intend to imply that a Content-based lesson is merely a teacher relaying a stream of information for an hour, nor is a Direction-based lesson step-by-step to the point of zero student autonomy or input, and a Practice-based lesson requires aspects of both Content and Direction to work at all. Again, the differences in the schools is down to
the proportion of lesson type in each class or school, and not the lack of existence of the others. Additionally, in some instances a lesson type can be implied by the teacher or inferred by the students, such as a teacher’s use of the students’ previous knowledge to forgo the inclusion of some aspect of the lesson (i.e. explicit direction).

The following sections describe the development of the framework and how it may be useful for pinpointing lesson type proportions across the incrementally socioeconomically different schools. It then goes on to define and detail each of the three interconnected, overlapping aspects of the framework. The final section in the chapter provides an illustration of the framework’s capability in identifying salient differences across the lesson types using Catcher in the Rye, a book included in the Massachusetts Curriculum Frameworks.

7.2. Framework Description

7.2.1. Lesson Types: Content, Practice and Direction-Based Lessons

In my initial observations I found several differences across the schools and drew out the most prominent themes. The most noticeable of these was the difference in the way teachers conducted what were deemed to be similar lessons. The findings were that the Upper Middle Class school’s teachers relayed large amounts of information in the form of notes and lectures, the Middle Middle Class schools spent most of their time on practicing a skill, usually in groups, working around a shared topic and producing an end product over time, and the Lower Middle Class schools were taught skills and definitions, and then carefully monitored for their ability to complete specific tasks that were indicative of their understanding.

The differences were not in the topic of the lessons, but in the way a topic was being taught and the way the learning was implemented. In this section I will define and categorize teaching, learning, and comprehension strategies and types of lessons found in the literature and used by my participants. I divide them into three main categories: Content, Practice and Direction-based lessons. The framework has potential for usefulness as an adaptable model for future research on the diversity within socioeconomic categories.

I use lessons rather than teaching on the grounds that these observations are indicative only of the 140± hours of observations gathered across four weeks of classes in five schools. As with Anyon’s characterization of her ethnographic observations, they are in no way meant to be definitive depictions of the teachers or their teaching. These definitions are provided for use in demonstrating and discussing to what extent these skills were being taught in each of the classes over the time observed. Once these types are defined, the differential in lessons among schools becomes more evident.
Research on new and different teaching methods and strategies in the field of education are abundant in number and terminology. A full collection of educational strategies is beyond the scope of this thesis, and as mentioned, not the aim of the observations (for a look at educational strategies and educational strategy research see: Davis, Sumara & Luce-Kapler, 2015). The division of these lesson types into categories was done in the preliminary analysis of the observations. I then used the strategies and theories I have compiled below to clarify the concepts of Content, Practice and Direction-based lessons.

The following are theories and ideas which have contributed to my definitions of lesson types. While each of the concepts have specific and nuanced meanings, I have simplified them for the purposes of this particular study, and supplied further information on each throughout. The research consulted includes: Content Knowledge/Content-Based Curricula (Harris et al., 2009), Problem-Based Learning (Hmelo-Silver, 2004), Thinking Skills Model (Marzano, 1985), Direct Instruction (Adams & Englemann, 1996), Conceptual Knowledge (McCormick, 1997), Differentiated Instruction (Garelick, 2013; Hall, 2002; Tomlinson, 1999), Linguistically Responsive Teaching (Lucas & Villegas, 2013), Procedural Knowledge (McCormick, 1997), Process-Based Learning (Marzano & Arredondo, 1986).

I have surveyed the above literature as well as other work on lesson types and instructional methods and developed a framework that helps to explain and describe apparent differences in classroom practice and lessons among the participating schools. The framework is composed of three lesson types. All three types can be found in every classroom to different extents.

The lesson types are as follows:

*Content-based lessons* - In Content lessons, the Direction is generally implicit or quickly conveyed and Practice is generally autonomous and at times unsupervised and out of class.

*Practice-based lessons* work on the foundations needed to interpret Content, while Directions are easily understood and reiterated on an individual bases.

*Direction-based lessons* may introduce very little Content at first or use a large amount of Content, but over a significant period of time, and Practice is implemented slowly with reiterations of Directions and examples.

In order to discuss the discrepancy in lesson types across the schools, I have identified what I refer to as a Content, Practice, Direction Gap. It is characterized by the proportional differences in use of one of three lesson types. It implies that there is a clear difference in the proportion of each of the lesson types across the schools, and that this forms a gap in knowledge, understanding, or skills.

It is important to stress once again that all three teaching types are necessarily used to varying degrees in classrooms (i.e. *Direction* lessons cannot be devoid of *Content* etc.).
Conclusions drawn from the data represent a schools’ tendency for the prevalence of one type over the others. These tendencies for teaching one type of lesson more than the others appear to correlate with socioeconomic divisions among the schools (i.e. the Upper Middle Class school teaches Content lessons more often than the Middle Middle Class schools or Lower Middle Class schools). These lessons types do not work in isolation. All three of the lesson types function individually on a day-to-day basis, allowing for us to see a delineation among the schools but the lessons types also seem to progress into each other. It is this difference in proportion of lessons that has proven to be especially significant in comparing lessons with regard to the Content, Practice, Direction Gap.

If none of the lesson types exist in isolation from one another, and all of the classrooms employ all three to different extents, the Content, Practice, Direction Gap then is able to refer to the extent to which they are used, or not used in each class. The progression into one another suggests the hierarchical nature of Content, Practice, Direction lessons, illustrating that one needs Direction before Practice, and Practice before Content. Importantly, there is no value judgement on this progression, and no suggestion as to the proportion of lesson type that is ideal. The framework is strictly observational, and makes no implication as to a lesson type proportion that should or shouldn't be included. However, I use the word Gap to imply that there is some level of delay throughout the progression.

Observed in Upper Middle Class classrooms was the absence of any significant amount of Direction-based lessons. This seemed to be not because of the differences in the topic or content of the lesson, but the idea that the Direction is implied rather than explicit, allowing the Upper Middle Class schools to move directly past Direction and to Practice-based lessons or Content-based lessons.
7.2.2. **How is the framework useful, why is it important?**

The Content, Practice, Direction framework adds to a body of research, not least Anyon’s work on illustrating and discussing the difference in what the students are learning across social class. One prominent theory within this research is that of scaffolding. Scaffolding is broadly understood as the process by which teachers provide students with support until such time they are able to do the work on their own. Wood, Bruner and Ross (1976) are thought to have first coined the term, which they define as:

> process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts. This scaffolding consists essentially of the adult “controlling” those elements of the task that are initially beyond the learner’s capacity. (Wood, Bruner & Ross, 1976: 90)

Most definitions echo this original description, supplementing it over time with other factors such as the “provi[sion] of support structures to get to that next stage or level” (Raymond, 2000: 176); its function being purely temporary, and stating that the end product is learner autonomy for the task (Van Der Stuyf, 2002; van Lier, 1996).

The key difference between scaffolding and the three way distinction between Content, Practice and Direction lessons is the focus that scaffolding places on the instructor supporting an *individual* learner. Scaffolding “facilitates a student’s ability to build on prior knowledge and internalize new information” (Van Der Stuyf, 2002), which draws a parallel to a similar progression between Content, Practice and Direction. However Content, Practice, Direction is removed from the analysis of any *individual* students’ achievement. In other words, this framework is not concerned with *individual* students' understanding of
foundational knowledge, practice or content knowledge, but the teacher’s relaying of these concepts to the entire classroom in the lessons themselves.

This progression from foundational to abstract knowledge is discussed by Darling-Hammond, who supposes that the ultimate goal of all students is for them to be able to, “apply knowledge to complex problems, communicate and collaborate effectively and find and manage information” (2007: 13). To some extent, the three lesson types are a means to this end. They work in a similar way to the Quality Teaching Framework (Johnston & Hayes, 2008) an approach to education that attempts to develop “higher-order thinking, quality learning environments, high and explicit student expectations, multiple ways of knowing, and meaningful connections with prior knowledge” (2008: 110).

Thus, while Darling-Hammond’s ideas are being advocated for less advantaged schools, my framework enables us to pinpoint the possibility that these same concepts are evident to some extent even across incrementally different middle-class classes.

The three concepts are explored and defined below. Theoretically, they are a combination of the many different methods and strategies I found throughout my classroom observations. I used these concepts as a way to describe the differences between the schools, not to prescribe that any of these lesson types or descriptions are in any way superior to one another. These observations are in no way hierarchical in status, but were observed as hierarchical and linear in the way they function. It is too generalized a statement to say that it seems as if the teachers were teaching across a spectrum of Content-based, Practice-based and Direction-based lessons that coincide with their socioeconomic categories, but there is a clear indication of a strong preference by the Upper Middle Class school for Content-based lessons, by the Middle Middle Class schools for Practice-based lessons and by the Lower Middle Class schools for Direction-based lessons.

7.3. Content, Practice and Direction: Defined

The concepts of Content-based lessons, Practice-based lessons, and Direction-based lessons are an amalgamation of the aforementioned contributing terms and theories. It should be noted though that because these definitions and teaching strategies come from various fields, their associated meaning is based only on the corresponding research. Each of the lesson types will first have a three-point definition that will be referred back to, then a short review of the literature that was used to develop each category within the framework.

7.3.1. Direction-based lessons

Direction lessons furnish the foundation of the hierarchy of Content, Practice, Direction; all other lesson types build upon it. It includes basic skills, definitions and preparation for future academic work.
Direction lessons are characterized by:

- Defined and exemplified concepts that are universal enough to apply to students’ future lessons and other courses; Concepts included in direction-based lessons are (but not limited to) phonetics, pronunciation and vocabulary, understanding literary techniques and mathematical problems (Delpit, 2006; Johnston & Hayes, 2008).
- Close adherence to mandated curriculum as a vehicle for the above skills and concepts
- Teacher-centered lessons, with the teacher driving the requirements of the class, and often including "differentiated instruction" (Garelick, 2013; Hall, 2002; Tomlinson 2001)

**Development of Direction**

Haberman’s reports from his observations in urban classrooms stated that the classrooms provided an atmosphere “in which learners can 'succeed’ without becoming either involved or thoughtful” (Haberman quoted in Kohn, 2011: 32; see also McGill, 2015)

Much of what Direction lessons cover is what some of the literature calls ‘basic skills’ (Harris et al. 2009; Knapp, Shields & Turnbull, 1995; McCormick, 1997; Reardon, 2013a). Delpit explains, “What we call basic skills are typically the linguistic conventions of middle-class society and the strategies successful people use to access new information” (2006: 222). She includes everything from pronunciation and vocabulary to understanding literary techniques and mathematical problem solving in these basic skills, claiming that “all children need to know these things” (222).

While this categorization does not require that Direction-based lessons are basic skills, this part of the definition of Direction lessons relies on lessons that address students’ need for basic skills before moving on to more complicated concepts. Researchers (as above) tend to agree that these are the first order skills needed for student achievement, or even, in some instances, simply for participation in education.

Reardon (2013a) asks, “How can we contest the assumption that [poorer kids] are incapable of anything more challenging than ‘the basics’?” But what is so problematic about ‘the basics’? No one contests that they are important. What much of the research contends is that while they are necessary life skills, they are not sufficient for instruction that is meaningful. Unfortunately it follows that without basic skills, education based on meaningful tasks is unattainable (Bartlett, 2014). As stated, these lesson types build on one another, unable to function completely without understanding of the previous step.

Johnston and Hayes (2008) observed classrooms teaching basic skills in New South Wales, Australia, and found classrooms where the teachers spent much of the class “conveying procedural information” (114). This is an instance of the hierarchical structure of Direction-based lessons before Practice-based lessons. The conveyance of procedural information
alludes back to the findings in Anyon’s study where for the *Working class schools*, “work is following steps in a procedure”, without any indication of context or application, while in the affluent professional schools the students are “continually asked to express and apply ideas and concepts” (1980:1).

The other key aspect of Direction lessons is the relationship between teacher and student. Unlike in Content and Practice, the lesson is teacher-centered, with the teacher driving the amount and direction of the lesson. Teachers act as the authorities on the subject, rather than moderators. Students are monitored step-by-step, with increasing autonomy, depending on the student.

### 7.3.2. Practice-based Lessons

Practice-based lessons, the next stage in the hierarchical relationship between the three lesson types, focus on the learning process and the application and reapplication of this process. The following are characteristic of Practice-based lessons:

1. The introduction of an abstract skill such as analysis or interpretation for application to classroom activities and attempts to contribute to the student’s knowledge for use outside of the classroom (Barrows & Tamblyn, 1980; McCormick, 1997).
2. Using framework mandated curricula to practice the initial skill autonomously or in groups (Marzano & Arredondo, 1986).
3. Teacher as moderator, with minimal all class instruction, large amounts of student input and maximal one-on-one assistance (King, 1993).

**Development of Practice**

One previously researched strategy that plays a large role in constructing the concept of Practice-based lessons is Problem-Based Learning (PBL). Specifically, the notion that students learn by solving problems and reflecting on their experiences (Barrows & Tamblyn, 1980). In PBL and Practice-based lessons problem solving is the key component of the lesson. Reflection on knowledge, concepts, and theories learnt is part and parcel of Practice lessons, and the reflection is communal and collaborative (Hmelo-Silver, 2004: 237).

Problem-based learning is not about the teacher imparting knowledge, it is about students "actively constructing knowledge" (Hmelo-Silver, 2004: 239) along with the teacher. These characteristics can be seen in Practice-based lessons where the teacher acts a moderator rather than as an expert. Looked at from the perspective of Problem-Based Learning this serves to minimize the necessity of a teacher as the keeper of information (Bransford, Brown & Cocking, 1999; Pfundt & Duit 2000: 397). From the perspective of Practice-based lessons, PBL serves as an equalizer for a student-teacher reciprocal relationship. Practice lessons are much like the teaching trope of not being a "Sage on the Stage" but "A Guide on the Side" (King A, 1993). Another way of looking at it is that of Wubbels and Brekelmans (2005), who would have labelled Practice lessons as being substantially ones of *Cooperation*
where the teacher and the student work in concert as almost equals, in their research into teacher-student relationships (6).

Procedural knowledge is linked to 'know how', versus Conceptual knowledge's 'know that'. Some proponents of procedural education embrace, "process as a relief from the tyranny of a content-laden and dominated curriculum" (McCormick, 1997: 141). Its claims are that procedural knowledge is timeless in that it allows for change and development of the information used in processes. Content knowledge can easily become obsolete, "in a world where there is an ever-changing (content) knowledge base" (McCormick, 1997: 141). However convincing the campaign for this particular knowledge conveyance may be, the broader idea of a knowledge of processes and 'know how', rather than subject specific information, is the key to understanding Practice lessons in the context of this study.

Neither Content lessons nor Practice lessons are completely devoid of aspects of the other. For example, one cannot write an essay without content. Likewise, most students cannot write essays without knowing the essential processes of thesis statements, persuasive language, or paragraphs. Lessons types have a preponderance of one or the other, and in Practice lessons, the main focus is on the process or practice of the activity, rather than the information gathering.

The final factor in Practice based lessons is the focus on reapplicability. If Practice-based lessons are prolonged periods of learning procedures, one hopes that these processes ought, at some time in the student's future, to be useful academically or otherwise. In that respect, Practice-based lessons are consistent with the three stages of learning a procedure, laid out by Marzano and Arredondo (1986):

1. "Cognitive - student can verbalize a process and perform a crude approximation of it
2. Associative - errors are detected and the procedure is gradually smoothed out
3. Autonomous - the procedure is refined, eventually reaches a level of automaticity"


In Practice-based lessons, it is intended that stage three will include practical experience for life outside of school, and the reapplication of these procedures throughout the students' education. A Practice-based lesson, like Problem-Based Learning, "situates learning in real world problems" (Cognition and Technology Group at Vanderbilt (CTGV), 1997, in Hmelo-Silver, 2006: 236).

**7.3.3. CONTENT-BASED LESSONS**

Content-based lessons use three main ideas, relying on the students' implied preparedness for activities with information they are given. A characteristic Content-based lesson includes one or more of the following:
- A large amount of “valid information in an academic discipline” (Doyle, 1983: 168).
- The ability to use the information autonomously in meaningful contexts (Darling-Hammond, 2007; Doyle, 1983; Hmelo-Silver, 2004).
- Student-driven lessons, allowing for student input, adaptation and opinion on lessons, assignments and information (Wubbels & Brekelmans, 2005).

Students’ pre-preparedness and ability to infer the requirements of the assignment are not discussed in lessons, but they are relied upon by the teacher in order to be able to relay an abundance of information with minimal directions.

**Development of Content**

The key concepts in Content-based lessons are taken from Marzano’s *Thinking Skills Model* (1985), also called “content thinking skills”. Marzano derives his definition from the idea of ‘domain specific knowledge’, which is used in cognitive psychology to mean both an area of intense expertise and the cognitive processes involved. The use of ‘domain specific knowledge’ and ‘content thinking skills’ here builds only on the educational sense of intense expertise or subject specific information.

The definition of ‘domain specific knowledge’ in education represents a broad understanding of the first two components of Content-based lessons. By dividing domain specific knowledge into two fundamental components “of valid information in an academic discipline” as well as “strategies for using that information to represent (comprehend) problems”, Doyle (1983) provides an understanding that a Content-based lesson would include both academic information and an ability to apply that same information (1983: 168).

*“Network of valid information”*

Dividing Doyle’s (1983) definition into two parts allows for a deeper understanding of Content lessons. Looking at “valid information in an academic discipline” is crucial to understanding the differences in classroom lessons among Practice, Direction, and Content lessons. Students in Content lessons receive this information and do with it what they assume is the correlative action related to the questions given. Harris et al. (2009) describes Content knowledge as “subject matter that is to be learned or taught, including, for example, middle school science, high school history, or graduate-level astrophysics” (397). Unfortunately, this fails to make clear what is, in fact, taught in these classes. Harris et al. (2009) go on to discuss Shulman’s (1987) discussion of content knowledge with a broader scope, inclusive of “concepts, theories, ideas, organizational frameworks, methods of evidence and proof, as well as established practices and approaches” (397).

This “network of valid information” (Doyle, 1983: 168) bears a resemblance to McCormick’s (1997) description of Conceptual knowledge, used in contrast to Procedural knowledge. Conceptual knowledge has been aligned with a ‘know that’ vs. procedural’s ‘know how’
A debate about these alignments continues in the field, here a reference to ‘know that’ is in line with Content knowledge. However it also allows for the problematic notion that, at some point, once finished with the content, the students are asked to complete tasks, which would by these definitions require Procedural knowledge or ‘know how’. Despite this partition, the claim made is that these two types of lessons are simply distinct, not that they are mutually exclusive. A Content lesson provides the ‘know that’, while a Practice lesson requires ‘know how’. This suits the hierarchical nature of Practice → Content, as they are both applied to varying degrees in lessons, yet in Content lessons the ‘know how’, the practice, is implied, while the content, the ‘know that’ is novel. In these terms, Cross, Naughton and Walker (1986) refer to these distinctions as Procedural being tacit (as with technology) and Conceptual being explicit (as in the sciences) (McCormick, 1997). Neither type is without aspects of the other.

Delpit (2006: 176) continues to explain the lack of mutual exclusivity, but remains firm that the context of lessons need to be engaging and situated in meaningful and relevant tasks for effective teaching of skills or procedure. This also includes teaching ‘basic skills’, but should not be to the detriment of learning information. Crossover between Practice lessons (Delpit, 2006) and Content lessons are necessary in all classrooms, but in my observations there were heavily Content-based lessons that required students to grasp relatively large amounts of information in a short time, and the Practice took place outside of the classroom. In others, the Content was less, but the Practice aspect consumed significant portions of class time.

“Strategies for using this information”

Next, we look at the second half of the definition of ‘domain specific knowledge’. It refers to a reasonably similar idea in Content lessons, that of providing students with “strategies for using this information to represent (comprehend) problems” (Doyle, 1983: 168). Again, this is not far from Practice-based lessons, but it is significant that it forms the latter half of the definition and includes a reference to the original information (“strategies for using this information”). Practice lessons differ in that their usefulness is rooted in the learning of the strategies, and the content is a by-product.

Kozol, as mentioned, defines a concept similar to Content-based lessons by stating, “The children of the suburbs learn to think and to interrogate reality” (2007: 121), as opposed to the education the inner city kids receive. A characteristic description of this component of a Content lesson is that the work is contextualized and meaningful. Although Kozol’s research is on the inequality of disadvantaged urban schools vs. advantaged suburban schools, it is noticeable that this advantage of suburban schools is found largely at the top of the progressive hierarchy of the lesson types and could be researched further as to its contribution to in reproducing the stratification among these three socioeconomic groups.
A final portion of Content-based lessons is the idea that Content lessons are steeped in a student-centered environment. This does not imply student-centered teaching methods; in fact, in the observed schools, this was not the case. Student-centered in this case is defined by the students experiences being guided by the students themselves. The students’ input drives the amount and aim of the content. Teachers may ask for student consultation on types of activities and assignments or ask students which aspect of a topic they would like to cover. This type of "less authoritarian school ethos" (Reardon, 2013a: 176) is a major component of Content lessons. Although the examples in this project show much of Content lessons are carried out in teacher-centered classes (teacher lectures, students take notes and ask questions), it is not a required aspect of Content lessons.

7.4. CATCHER IN THE RYE EXAMPLE

To illustrate the progression across Content, Practice and Direction and differences between the three types of lessons, I will look at activities with questions about J.D. Salinger’s (1951) The Catcher in the Rye (a book on the suggested reading list for the Massachusetts Framework for 10-12 grade English Language Arts). The questions found in each of these lesson types give a good idea of which category they fall into. Example questions are drawn and adapted from the website SparkNotes (2007), a site summarizing and analyzing texts that are commonly assigned in high school classes. SparkNotes is a site with which few high school students would be unfamiliar with. I chose to use excerpted questions from a familiar website source for educational activities and review for a direct comparison to aid in the understanding of the use of the lesson types, which are by nature, complicated and occasionally intertwined.

7.4.1. Content-based: Catcher in the Rye

A Content-based lesson on Catcher in the Rye might include questions such as:

1. What is the significance of the carousel in Chapter 25?
2. Though Holden never describes his psychological breakdown directly, it becomes clear as the novel progresses that he is growing increasingly unstable. How does Salinger indicate this instability to the reader while protecting his narrator’s reticence?
3. Think about Holden’s vision of the nature of childhood and adulthood. Are the two realms as separate as Holden believes them to be? Where does he fit in? (SparkNotes Editors, 2007).

Note any reference to symbolism, themes and motifs are absent. Yet, in Question 1 they ask about ‘the significance’ of the carousel, which allows us to assume that the students understand that symbol of the carousel, along with character analysis, psychological issues and themes such as childhood are a part of fiction and required for the answering of questions about literature. The students are never asked directly to ‘analyze’ the symbolism of the carousel, Holden’s instability or the nature of childhood,
but the questions require analysis and imply a need to see underlying meaning on the student’s part.

7.4.2. Practice-based: Catcher in the Rye

A Practice-based lesson on Catcher in the Rye might include questions such as:

1. Discuss the different types of relationships Holden attempts and the different types of intimacy in the book. What is the role of sexuality in The Catcher in the Rye?
2. “The best thing, though, in that museum was that everything always stayed right where it was. Nobody’d move... Nobody’d be different. The only thing that would be different would be you”. How does this quote illustrate the theme of alienation in the book? Find another quote that illustrates the theme of alienation or loneliness. What about the quote signifies its inclusion in these themes?
3. Holden’s red hunting hat is one of the most recognizable symbols from twentieth-century American literature, what makes this true? What does it symbolize in terms of Holden’s personality? Can you think of anything from pop culture today that symbolizes something similar? (SparkNotes Editors, 2007).

In Practice-based lessons, students are given the skills to process the definitions and then analyze literary themes like sexuality or intimacy. Here, students are told to search for or given examples such as the quote in question two, asked to analyze those examples, and then asked to reproduce the activity with other examples. Using this new skill, the students are now expected to be able to analyze something from outside the lesson.

7.4.3. Direction-based: Catcher in the Rye

A Direction-based lesson on Catcher in the Rye might include questions and definitions such as:

1. Themes are the fundamental and often universal ideas explored in a literary work. What kinds of themes are found in the book in addition to loneliness and isolation? What other universal ideas are explored?
2. Motifs are recurring structures, contrasts, and literary devices that can help to develop and inform the text’s major themes. Lying and deceit is a major motif in Catcher in the Rye, why do you think that is? Can you think of some examples of lying or deceit in the book?
3. Symbols are objects, characters, figures, and colors used to represent abstract ideas or concepts. For most of the book, Holden sounds like a cantankerous old man who is angry at the world. What does Holden do in Central Park that represents the curiosity of youth and a joyful willingness to encounter the mysteries of the world? (SparkNotes Editors, 2007).

In Direction lessons, students are given detailed information about the literary devices of theme, motif and symbols, and their broader implications outside of the literal text. Examples of analysis are given in the questions, such as “What does Holden do in Central Park that represents the curiosity of youth and a joyful willingness to encounter the mysteries of the world?” They are asked to find symbols, or given lying and deceit as examples of motifs and asked to explain why they are categorized in that way so that the
ideas of themes, motifs, and symbols are clarified, using the *Catcher in the Rye* text as an example.

**Concluding Comments**

The framework was developed as an effort to assist in observation and analysis for a selection of socially stratified schools that are not considered underserved or failing, nor are they considered to be solely catering to the students of the wealthy or elite. It was necessary to establish a framework that fit this criteria as theory and reference to stratification of and difference and within the middle classes is lacking throughout the literature. Therefore illustrative application of frameworks for this purpose are not readily available. There are very few models that show a spectrum of differences that cover the diversity within middle of the socioeconomic spectrum.

Previous frameworks (Darling-Hammond, 2007; Johnson & Hayes, 2008; Knapp Shields & Turnbull, 1995) largely discuss major discrepancies in education among underserved students in disadvantaged areas, to more academically successful students in more socioeconomically privileged areas. Others (Harris et al., 2009) are too subject specific, and some are based in a context that is no longer reflective of contemporary classrooms (Doyle, 1983).

That is not to say those frameworks do not add valuable insight into the observations of schools in the middle class when discussed in these terms. It is purely to note that there is a need for a framework that operates on the premise that differences in the way teachers are framing their classes and the various lesson types are not necessarily linked to any form of advantage or disadvantage.

Lesson types may not be directly responsible, but it is clear large gaps in content knowledge for disadvantaged students are responsible for playing some role in the gaps in academic achievement (Darling-Hammond, 1990; 2007; Kozol, 2007) when talking specifically across the entire spectrum of socioeconomic class.

What the framework of Content, Practice, Direction lesson types I developed demonstrates is that the lesson types work as a sort of subset of the ideas in previously developed frameworks. These previous frameworks cite the ‘basics’ vs. ‘advanced’ knowledge and *procedural vs. content* knowledge, and the ways in which each of them correlate with student success or lack thereof.

The nature of the Content, Practice, Direction framework is to approach observations with the perspective on lessons as proportionally different in terms of teacher talk, lesson type and instruction. This allows research to be done with the knowledge that these classes are getting *sufficient* input in terms of academic success, and then enables a focus on more
precise differences in the *how* of the classrooms vs. the *what*. It is in the way that the framework promotes the analysis of small differences that enables the possible contribution to knowledge the division of Content, Practice, and Direction-based lesson types provide.
8. CONCLUSION

Here I will summarize findings from the previous chapters and discuss some of the contributions to knowledge that my thesis presents. The central aim of my study was to revisit an influential study on social class inequality, Jean Anyon’s *Social Class and the Hidden Curriculum of Work*, with a focus on the classroom differences within one of the categories from her study - the middle class. The middle class has been largely overlooked in much of the research on applied linguistics and education (Block, 2013; Keane, 2011; Vandrick, 2009). Need for a more varied look into socioeconomic inequalities left a substantial gap in the research that my thesis aimed to devote attention to.

An objective of my thesis addresses another gap in the research concerning the middle class. The study focuses on classroom differences within the middle class, and approaches the middle class as a heterogeneous group across the socioeconomic spectrum in terms of schooling. To do this I use classroom observations across incrementally unequal schools to pinpoint differences in teacher talk and lessons within the middle class under similar curricular mandates.

The initial research questions I approached the fieldwork with were:

1. If the general inference is that students across the socioeconomic spectrum are on a more equal footing because of a standardized curriculum, is the “work” the same in schools where the socioeconomic class is seen as broadly the same?
2. If ‘work’ is not the same, how is it different - specifically in terms of language, instruction and teacher talk?

The questions posed about socioeconomic differences in teacher talk and lessons across the middle class schools in this study are answered by examining three research questions from in three different angles:

1. Is word use or lexical richness across the three incrementally unequal socioeconomic categories quantifiably different?
2. What does ‘work’ look like across these incrementally socioeconomically unequal schools? And if ‘work’ looks different, in what way?
3. How do the teachers’ reflexive understanding of the observations and self-awareness of their teaching help to make sense of the differences across the classrooms?

The research focuses on three questions specific to the different methods of analysis chosen to gain a wide range of interconnected methodological perspectives. These methods also allowed for several validity checks to be applied to the observational data. Validity checks

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With some exceptions. Specifically the exception use as a reference point for a more dominant focus on the working class and poor (eg. Reay, Crozier & Clayton, 2009; Reay, Crozier, and James, 2011), though as mentioned this research is done in a United Kingdom context.
enable each chapter to be considered both individually as reflective of the results of the data, but also cumulatively as a triangulated set of findings from three methodological standpoints: a corpus linguistic analysis, ethnographic observational analysis and reflexive interviews. I have provided member checking of the teachers and rich, thick descriptions of the schools. In combination, triangulation, member checks and rich, thick descriptions present a strong empirical case for the findings in my thesis.

The results of the ethnographic observational analysis and reflexive interviews provide important evidence in themselves of an incremental difference that can be seen clearly. The quantitative analysis appears to highlight the role that individual teacher variation plays in terms of lexical richness and word use, as well as offering some support for the themes identified in the interviews and observations.

8.1. Corpus Linguistics

In the corpus analysis chapter I addressed the Research Question:

*Is lexical richness and word used across middle class schools different, even when the socioeconomic differences are small?*

I use a corpus linguistic analysis as a method of quantifying word use and lexical richness between the socioeconomic categories, the schools and individual teachers. The results of the lexical richness measures did not provide evidence of any substantial socioeconomic differences in terms of lexical richness. The findings do however provide a view of how individual teacher variation shapes the data.

The exploratory section of the corpus linguistic analysis used a qualitative analysis concept in order to investigate whether these qualitative intuitions of over/under use of specific word types are indeed quantitatively meaningful. Two interesting patterns emerged. In the first review of prominence I looked at *Material* words (words referring to tangible in-class materials, i.e. books, binders, pens). My initial perception was that the Lower Middle Class schools used far more *Material* words than the other schools. This perception was not only proven incorrect, the analysis demonstrated that in fact, the Lower Middle Class schools used fewer *Material* words than the Upper Middle Class school. In the second review of prominence I looked at the use of *Assignment* words (words referring to tests and classwork, i.e. exam, grade, homework). My initial perception was that the Upper Middle Class school used *Assignment* words far more than the other schools. The numerical analysis revealed that while the Upper Middle Class school’s teachers were not the only frequent users of these words, the Upper Middle Class teachers did possess two of the top three relative frequencies of *Assignment* words.
The corpus linguistic analysis adds insight into how the differences in lexical richness and word use can be quantified and how meaningful these differences are in terms of socioeconomic category, school and individual teacher. In particular, the measurements seemed to indicate that individual teacher differences are an essential aspect of language in classrooms. Additionally, the corpus analysis incorporated qualitative perceptions of prominence that could contribute to more integrated analysis using small scale corpora.

8.2. Ethnographic Observational Analysis

In the Ethnographic Observational Analysis chapter I addressed the question:

*What does ‘work’ look like across middle class schools? And if ‘work’ looks different, in what way?*

I returned to Anyon’s original analysis method used in *Social Class and the Hidden Curriculum of Work* in an effort to use a method that reflected and corresponded to her work as closely as possible as well as providing a clear foundation for my analysis. The use of the ethnographic observational analysis model worked to enable an analysis that resembled Anyon’s, but also one that served as a means to be minimally intrusive to the participants as a researcher, while still gaining a level of closeness with them. Though each of the schools taught similar topics as per the Massachusetts Curriculum Framework, the focus of the chapter relies on the difference in the classroom lessons and teacher talk divided by socioeconomic category.

I observed that the Upper Middle Class school’s classes were information-laden lecture type lessons. Students took large amounts of notes and were expected to process, analyze and produce work that demonstrated understanding autonomously. The Middle Middle Class schools created a student-centered classroom with teachers as moderators employing large amounts of group work to practice and applying concepts in class. The Lower Middle Class schools taught clear, step-by-step instruction, with the teacher as a guide and a sage, exemplifying each portion of the lesson and checking for comprehension. The chapter introduces salient examples of observed lessons and uses them to demonstrate the contrast and similarities across the schools.

What is most relevant to effectively answering the research question is that the differences across lessons seem to fall along the socioeconomic category boundaries that were defined in the Methodology chapter. This indicates that there may be some suggestion that these differences are a result of incremental socioeconomic inequalities. While these schools have similar positions relative to the entire socioeconomic spectrum, the differences within these similar socioeconomic positions may contribute to understanding some of the achievement differences that have been reported among these socioeconomically similar schools (Reardon, 2016).
8.3. Reflexive Interviews

The final data chapter employs reflexive interviewing in order to further solidify the validity of the observations and preliminary findings.

The research question posed in this section is:

*How do the teachers’ reflexive understanding of the observations and self-awareness of their teaching help to make sense of the differences across the classrooms?*

The major benefit of reflexive interviews is that they allow participants to review the analysis of the observations, and add insights that were not apparent at the time of data collection according to their point of view. In the interviews, I found that there were two different types of teacher insight that added depth to the initial analysis and findings. First, the teachers provided new perspectives on the impact of factors most significant in affecting the way classes were conducted.

Every teacher gave credence to the notion that a parent’s involvement in their child’s education was integral to student success to some extent. Further, the priorities of the parents in terms of educational success translate to the student’s priorities and has a massive impact on their performance in school. Interestingly, the teachers admitted they were not fully aware of the parental education of the majority of their students, but held on to the assumption that a higher level of parental education would no doubt amount to their children doing better in school (which is indeed supported by much of the research (see for example: Dufur, Parcel & Troutman, 2013; Wang & Sheikh-Khalil, 2014). The teachers gave detailed explanations of how necessary relating to the students was, and how developing lessons to suit the students’ interests remained paramount to their teaching in order to motivate students and spark in them some natural interest in the subject.

The second insight can be seen in the responses that confirmed the findings of the analysis of classes in the chapter on ethnographic observational analysis, that is later recalled and drawn on in the creation of the Content, Practice, Direction Framework. The teachers reflected on the needs of their specific students and how they speculated that these needs were different from students in school districts in higher socioeconomic categories. They also reflected upon the ways in which the concept of social class is integrated into lessons.

The teachers also individually remarked on the students’ need for more foundational skills before they felt they were able to approach teaching more advanced information. They commented on how they believe this need for more foundation may be specific to their socioeconomic category and those in more advantaged school districts did not have to worry about defining general concepts or instructing students to use capitalization.

Finally, the teachers considered social class as a topic within lessons. Most teachers discussed attempts to insert social class at some level into lessons such as *The Great Gatsby*
or many historical eras. Though, it was notable that while the teachers were acutely aware of issues of social class inequalities, they believed that their students were, in the most part, oblivious to their own socioeconomic standing.

Concluding Comments

These three different methods of analysis were chosen in order to get a wide range of methodological perspectives. They also allowed for several validity checks to be applied to the observational data. The addition of validity checks enable each data chapter to be considered both individually as reflective of the results of the data, but also cumulatively as a triangulated set of findings from three methodological standpoints: a corpus linguistic analysis, ethnographic observations and reflexive interviews.

The results of the ethnographic observational analysis and reflexive interviews provide important evidence in themselves of differences across the schools that can be clearly identified. The quantitative analysis appears to highlight the role that individual teacher variation plays in terms of lexical richness and word use, but falls short as a significant indication of any classroom differences across socioeconomic categories. However, it is illustrative of the ways in which a qualitative analysis of corpus linguistic enables a richer quantitative exploration of language differences within a small-scale corpus.

8.4. Content, Practice Direction Framework

At the end of the data chapters I present a framework that incorporates the findings from these three chapters into a framework for future research. The development of the framework is in response to the lack of theoretical and practical models for observing minor differences across social class without the underlying implication of societal injustice. The framework is drawn from a project with a small set of observational and interview data, spanning only around one hundred and thirty hours of observations across five high schools in five school districts. Yet, the establishment of the framework creates a foundation that can be built upon for further research on and within the middle class. The framework describes a hierarchy of lesson types across the schools where each school employs a different proportion of each of three types.

The three types of lessons are as follows:

- **Content-based lessons** - In Content lessons, the Direction is generally implicit or quickly conveyed and Practice is generally autonomous and at times unsupervised and out of class.
- **Practice-based lessons** work on the foundations needed to interpret Content, while Directions are easily understood and reiterated on an individual bases.
- **Direction-based lessons** may introduce very little Content at first or use a large amount of Content, but over a significant period of time, and Practice is implemented slowly with reiterations of Directions and examples.
Figure 8.1: The Content, Practice, Direction Framework and its hierarchical structure

The framework is a progressive hierarchy starting at Direction-based lessons to Content-based lessons. Drawn from the preliminary observations, corpus analysis, ethnographic observational analysis, reflexive interviews and select literature on lesson types and teaching strategies, it provides a guide for looking at social class research in terms of differences within similar social class categories. While developed from a smaller study, its usefulness can no doubt evolve with additional research and data.

8.5. Contributions to the literature

Location in the literature

The gap in the literature reveals that the discussion surrounding inequalities is to a great extent missing middle-class schools and classrooms. Without a complete understanding of socioeconomic disparities it is easy to fall into making the type of choices that Gorski warns against when he states that researchers and policymakers too often attempt to fix inequalities by “fixing’ disenfranchised communities rather than which disenfranchises them” (2011: 154).

My research focuses on the middle class, a group of students that are largely seen as socioeconomically homogeneous. I attempt to revisit Anyon’s generative text Social Class and The Hidden Curriculum of Work to develop a more contemporary version that takes into consideration the context of curriculum standardization reform, and concentrates specifically on one of the Anyon’s school categorizations of social class, the Middle Class Schools. My thesis specifically addresses the lack of research and understanding of the incremental socioeconomic inequalities across schools within the middle classes.
Reardon’s (2016) work contributes to the knowledge that there is a significant socioeconomic achievement gap, but also to the knowledge that within socioeconomically similar communities there are achievement differences. These differences are ones that we may not consider problematic. In my study all of the schools observed are achieving at above average grade levels, however this does not discount the importance of understanding these differences. Learning more about the educational differences between schools within the middle class allows us to gather insight into how this fits into the wider picture of socioeconomic inequalities. It also provides a perspective on how these classrooms function. Without a more thorough depiction of the full spectrum of socioeconomic difference, the body of research lacks depth with which to understand social class inequality.

**Contribution to the literature**

A major contribution of this thesis lies in the discovery of a potential differences in lesson types between schools with incremental socioeconomic inequalities. Specifically, it contributes to an understanding of the differences in language and teaching across the middle class, which is more often than not seen as homogenous. The research adds to the literature by placing a focus specifically on middle-class schooling, a faction rarely seen for the variety of socioeconomic categories it is comprised of. In doing this the research also responds to the need for a look *within* the middle class at the classroom differences across socioeconomically similar school districts. An analysis of this type adds a new dimension to a perpetually growing body of knowledge on socioeconomic inequalities in education.

**Future Research Directions**

Throughout my thesis I cite several topics that would be fruitful areas for further research that could aid in understanding even more about middle-class classrooms and the differences in language and lessons with it. Some are the traditional directions such as different geographical areas, more extensive data collection or a fuller concentration on one aspect of my study. All of which could contribute to the body of knowledge on the socioeconomic achievement gap in a new way. I’d like to put forth two alternatives to these more common methods.

Though I do incorporate a small discussion of teachers’ beliefs research, an extended and concentrated study on middle class teachers’ beliefs about social class could provide a valuable consideration of a perspective that is often overlooked. As discussed the middle class is largely portrayed as a somewhat uniform social class. This is indeed not the case (Pew Research, 2008; 2011) and a study focused on learning more about how those differences come across in the classroom could add to the field tremendously.
Within corpus linguistics, there is a renewed sense of how much the field can add to the study of language, now that self-directed computerized software can process an analysis of an enormous corpus quickly and efficiently. My thesis experimented with an integrated approach to corpus linguistics in this field, attempting to look at a small corpus for patterns and trends that were prominent in a qualitative observational analysis of the data. This experimental analysis, while small, provided insight and validity checking of perceptions that are not always as thorough or efficient. A large scale study using the predominantly translation studies based notion of prominence to ask questions of corpus data could add a new quantitative dimension to the educational research and applied linguistics fields.

**Implications**

This study was inspired by a desire to revisit Anyon’s *Social Class and the Hidden Curriculum of Work* (1980) in a more contemporary context, one that responded to calls in the research on the socioeconomic achievement gap for deeper investigation into the heterogeneity of the middle class. My thesis is to a great extent a response to that call.

Through ethnographic observations and reflexive interviews, this study revealed that even across schools that are considered to belong to the same socioeconomic class – the middle class – differences in instruction and lessons could be clearly observed. Though the body of literature discussing the middle class, in terms of the variation within it, is very small, this extensive study contributes to this literature, and hopefully creates avenues for further research.

Using Anyon’s approach of observing ‘work’ across social class in classrooms, the research builds on Anyon’s findings in a contemporary context. Insight into the ways in which difference manifests in smaller ways in the classroom may be fundamental in understanding how small differences compound across the socioeconomic spectrum to create gaps. The impact of this research on the socioeconomic achievement gap is a better, more complete, look at the picture of how the distribution of resources across the spectrum plays a role in classroom differences. It also offers some indication of the issues among the middle class, and how these may be paralleled to larger degrees in other areas of the socioeconomic spectrum.

The research allows for the observation and analysis of difference in schooling without the exacerbation that many times accompanies gross social, economic and racial inequalities in education (Ayers, 2009; Greene, 1993; Kozol, 1991; 2005; King, 1991; Ladson-Billings, 2014).

Insight into how difference in the classroom project students’ foundational needs, as well as their differing levels of preparation, even among students thought to be in similar economic
positions, adds a new and exciting avenue to explore the socioeconomic achievement gap. A gap that persists, and continues to grow despite the efforts of generations of researchers theoretical solutions. I state this by no means to trivialize or criticized this work. Simply a consideration of the ideas put forth in my thesis are novel contributions opening the prospect of engaging with a new angle to investigate an old problem.

My thesis, by incorporating two aspects of middle-class schooling, also addresses an issue that may not feel urgent in terms of the students who benefit directly, but a fuller picture of the entire spectrum of socioeconomic inequalities in education is integral to being able to participate in changing the system. McIntosh reflects this sentiment in her writings on privilege, by stating that in order, “To redesign social systems we first need to acknowledge their colossal unseen dimensions” (McIntosh, 1990). Middle-class education in particular is clearly an unseen dimension in the research, and aims to acknowledge smaller educational differences across schools in similar socioeconomic circumstances.

By virtue of recording and learning more about the existence of these differences, it may make it possible to begin to understand which (or whether) methods and strategies could be used to close larger educational gaps more affected by socio-historical and socio-political forces thought to contribute so heavily to larger educational inequalities.

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40 As explained by Weinbaum and Supovitz (2010) there are indeed a selection of strategies and programs that have been successful, “but when these programs are scaled up and used by large numbers of schools in settings all over the country the effects are often inconsistent and disappointing” (Elmore, 1996).
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DART comparative analysis tool: [http://www.doe.mass.edu/apa/dart/](http://www.doe.mass.edu/apa/dart/)


Federal Highly Qualified Teacher Requirements: [http://www.k12.wa.us/titleiia/HighlyQualifiedTeachers.aspx](http://www.k12.wa.us/titleiia/HighlyQualifiedTeachers.aspx)


Massachusetts Curriculum Frameworks: [http://www.doe.mass.edu/frameworks/current.html](http://www.doe.mass.edu/frameworks/current.html)

Massachusetts Department of Education: [http://www.doe.mass.edu/](http://www.doe.mass.edu/)


National Association of Education rankings: [http://www.nea.org/home/44479.htm](http://www.nea.org/home/44479.htm)


School and district profiles: [http://profiles.doe.mass.edu/](http://profiles.doe.mass.edu/)


United States student outcome data: [http://www2.ed.gov/rschstat/landing.jhtml](http://www2.ed.gov/rschstat/landing.jhtml)
APPENDIX
# Initial IRB Application Form

**Boston College Institutional Review Board Application**

## Study Title
TEACHER TALK AND SOCIAL POSITIONING POST-NO CHILD LEFT BEHIND

## Principal Investigator Information

<table>
<thead>
<tr>
<th>Name of Principal Investigator</th>
<th>Institution or Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stephanie Delmonico</td>
<td>School of Philosophy, Psychology, and Language Sciences</td>
</tr>
</tbody>
</table>

## Institution or Department

School of Philosophy, Psychology, and Language Sciences

## E-mail Address
mstdemonico@gmail.com

## Funding

- **Do you plan to apply for funding in the future?**
  - Yes [ ]
  - No [ ]

- **List source and grant number:**

- **Federal**
  - List agency, department, and sponsor’s award number:

**Note:** IRB approval is required regardless of funding status.

## General Study Information

- **Participant Recruitment Numbers**
  - Total: 75
  - Females: 75

- **Estimated Project Duration**
  - Start Date: 10/13
  - End Date: 1/13

  - **Risky Issues:**
    - **Institution:**
      - **Faculty/Staff:**
        - Research
      - Undergraduate Honors
      - Master’s Thesis
      - Doctoral Dissertation
      - Other

- **Special Study Regulations (check if applicable):**
  - Minors (under 18 years):
    - Medical
  - Pregnant Women/Infants
  - Experiments on human subjects
  - Physical or mental capability
  - Other

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V. Research Risk

*Research must present no more than minimal risk to human participants in order to qualify for expedited review. Minimal risk means that the "probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests." (45 CFR 46.102)

A. Does the research propose greater than minimal risk to participants? □ Yes □ No

*If yes skip to part C of this section

B. Does the research include prisoners? □ Yes □ No

*If research includes prisoners, the application must be reviewed by the full board

C. Check all procedures that apply to the research:

☐ Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture.

☐ Collection of biological specimens for research purposes by noninvasive means. Examples: hair and nail clipping, saliva, tears, and/or exhaled breath.

☐ Collection of data through noninvasive procedures routinely employed in clinical practice, excluding procedures involving x-rays or microscopes. Examples: psychological, educational, or behavioral assessment.

☐ Research involving data, images, or information that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis).

☐ Collection of data from video, audio, digital, or image recordings made for research purposes.

☐ Research on nonhuman or group characteristics or behavior (including, but not limited to, research on perceptions, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior or social sciences employing survey, interview, and/or focus group programs evaluation, human factors evaluation, or quality assurance methodologies).

☐ Continuing review of research previously approved by the convened IRB as follows: (a) if the research is continually conducted to the knowledge of new participants; (b) if the research involves only or longitudinal follow-up of participants; or (c) if the research involves the activities are limited to data analysis.

☐ None of the above categories apply. For a comprehensive list of Exempted Categories see http://www.fda.gov/orirp/irb/download/exempt-criteria.html

D. Does this study involve any of the following? (Check all that apply)

☐ Deception or Deception

☐ Covert observation

☐ Inducement of covert or otherwise physical harm

☐ Procedures which may result in physical or psychological harm to the participants

☐ Material issues commonly regarded as socially unacceptable

☐ Information regarding sexual orientation or practices

☐ Information relating to the use of alcohol, drugs, or other addictive products

☐ Procedure that might be regarded as an invasion of privacy

☐ Information pertaining to legal conduct

☐ Genetic information that may be linked to a participant's health status, such as genetic markers for cancer, heart disease, etc.

☐ Information normally recorded in a participant's medical record, and the disclosure of which could reasonably lead to social stigmatization or discrimination

☐ Information pertaining to an individual's psychological well-being or mental health

☐ Information that if released could reasonably damage an individual's financial standing, employability, or reputation within the community.

E. Provide details on all procedures checked above. How are they integral to the study?
Research Summary

Please attach a brief research summary (3-4 pages maximum) using the topic headers A-I below. Please use simple language, avoid technical jargon and bold headers.

Notes: Grant, thesis, dissertation or course work proposals may not be submitted in lieu of the Research Summary because traditional proposals do not include specific information on risks, benefits and detailed informed consent procedures.

A. Introduction and Background
1. State the problem and hypothesis
2. Provide the scientific or scholarly reason for the study and background on the topic

B. Specific Aims / Study Objectives
1. Use the purpose(s) of the study (what are you hoping to learn as a result of the study)

C. Materials, Methods and Analysis (quantitative and qualitative)
1. Describe the data collection methods/procedures as specific
2. Describe the specific instruments or tools that will be used to collect the data—be specific
3. Describe the formulae and how long each procedure will last
4. Describe how you will analyze your data, describe the analysis type and procedures including statistics and scientific or scholarly justification for the use of these analyses—be specific

D. Research Population & Recruitment Methods
Describe:
1. Inclusion and Exclusion Criteria (what participant traits are needed to be included, what traits exclude participants?)
2. What is the scientific or scholarly justification for the number, gender, age, or race of the population you intend to recruit?
3. How did you choose the source of participants or data (i.e., public records, BC students, mental health centers, etc.)
4. Recruitment procedures (if applicable) including who will recruit participants
5. Tools that will be used to recruit (cost, advertisements and flyers, social media, etc.)

E. Informed Consent Procedures
Describe:
1. Who will perform the informed consent procedure?
2. How will the informed consent be obtained (in-person, mail, email, etc.)
3. How will the prospective participant’s competence and understanding of the procedures be assessed? Will participants be asked questions about the procedures, or encouraged to ask questions?

F. Confidentiality
Describe the provisions for participant and data confidentiality:
1. Where the data will be stored, and who will have access to the data and the area?
2. How will the data be stored, and in what format (hard or digital copy, identifiable or de-identified)?
3. Will the participant’s identity be known? Will the codes be used to identify participants in the database? (Note: If you are working with a Hospital or Clinic, please see information on HIPAA and Research at http://www.hc.gov/hips/things/human.html.)

G. Potential research risks or discrepancies to participants
1. Indicate the type of risk that may result from participation. Consider psychological or emotional risks, social stigma, change in status or employment, physical risks or harm, information loss, breach of confidentiality, and any effect of loss of confidentiality. If the protocol involves treatment, what are the risks compared to other treatments in terms of “standard of care”?
2. Consider the likelihood and magnitude of risks or discrepancies occurring. Are they unlikely, or likely to occur and what affect would the discourses or risks have on the individual should they occur?
3. How will you minimize risks? Some examples include informed consent, adequate staff training and experience, debriefing, and monitoring adverse effects on participants.

H. Potential research benefits to participants
1. Describe the type of benefits that may result from participation. Consider psychological or emotional benefits, physical benefits, and benefits of participation. If the participant will benefit, identify if the benefit is tangible, a potential, or intangible. Describe the potential benefits and how they benefit society. Do not exaggerate the benefit.
2. Consider the likelihood of the benefits. Will all or some participants benefit?

I. Investigator experience
Please attach a current copy of your CV. Unless a current copy is on file.
### VII. Informed Consent and Waiver of Elements of Informed Consent or Documentation

A. The informed consent document should include all elements of consent (see BC Consent Guide for informed consent samples: [http://www.bc.edu/research/oric/human/irbsampleforms.html](http://www.bc.edu/research/oric/human/irbsampleforms.html)). Confirm that each element is included in your consent form (unless you are requesting a waiver or partial waiver of consent as per question VII.B):

- A statement that the study involves research
- A statement that the study involves human participants
- The expected duration of the participant's participation
- The statement that the participant is not required to consent
- A description of all procedures that may be reasonably expected to cause physical or psychological harm to the participant
- A statement that the participant may refuse to participate
- A statement that the participant may withdraw from the study at any time
- A statement that the participant's confidentiality will be maintained
- A statement that the participant will not be exposed to significantly greater risks than the normal risks of daily life
- A statement that the participant will be compensated for their time and effort
- A statement that the participant will be able to ask questions and receive answers regarding the study
- A statement that the participant will be able to seek legal advice if necessary

B. If you are requesting a waiver or partial waiver of consent, you must complete the [Informed Consent Waiver/Alteration Form](http://www.bc.edu/research/oric/human/irbsampleforms.html).

C. If you are requesting an alteration of the informed consent requirements, you must complete the [Informed Consent Waiver/Alteration Form](http://www.bc.edu/research/oric/human/irbsampleforms.html).

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### IX. Research Staff (e.g., Co-I, Research Assistant, etc.)

- **Name and credentials**: Stephanie DeMarco
- **Date of IRB Training Certificate**: 10.6.2013
- **Research Role**: Primary Researcher
- **University**: University of Edinburgh

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### X. Performance Site

- If the institution has an IRB, the IRB approval may have to be received from that institution as well as Boston College. If the institution does not have an IRB, the institution must authorize or provide permission for the research activities (please email, for which a site permission letter from the Institutional Office). If you are collecting data at a Hospital with an IRB, seek Hospital approval prior to submitting the BC IRB Review application.

- **Name of Institution**: [Appendix]
- **Date of IRB Approval**: [Appendix]
X. Acknowledgment

SUBMISSION OF A PROPOSAL TO THE BC IRB REQUIRES THAT THE PRINCIPAL INVESTIGATOR (AND MENTOR IF THE PI IS A STUDENT OR FELLOW) READ COMPLETELY THE DEFINITION OF "SCIENTIFIC MISCONDUCT" AND ANSWER ALL "CONFLICT OF INTEREST" QUESTIONS GIVEN BELOW.

A. Scientific Misconduct

"Scientific Misconduct" shall be considered to include:
1. Fabrication, falsification, plagiarism or other unprofessional practices in proposing, carrying out or reporting results from research;
2. Material failure to comply with Federal requirements for the protection of human participants, researchers and/or the public;
3. Failure to meet other material legal requirements governing research;
4. Failure to comply with established standards regarding author names on publications;
5. Failure to adhere to issues of confidentiality as provided in the participant consent form, the study protocol, and as outlined in the Code of Federal Regulations (45 CFR 46).

B. Conflict of Interest

1. Are you or any member of your immediate family (spouse or domestic partner and/or dependents) an officer, director, partner, trustee, employee, advisory board member, or agent of any of the following (check all that apply):
   - An external organization funding this project
   - Any external organization having business dealings in an area related to the work under this project

2. Are you or any immediate family member the actual or beneficial owner of more than five percent (5%) of the voting stock or controlling interest of (a) the external organization funding this project, (b) any external organization from which goods and services will be obtained under this project (including those to which you may be subcontracting a portion of the project work), (c) any external organization whose financial condition could benefit from the results of this project, or (d) any external organization having business dealings in an area related to the work under this project?  Yes [ ]  No [ ]

3. Have you or any member of your immediate family derived income within the past year, or do you or any member of your immediate family anticipate deriving income, exceeding $10,000 per year from (check all that apply):
   - An external organization funding this project
   - Any external organization having business dealings in an area related to the work under this project

*If you checked any of the above, please specify the extent of involvement:

4. For those projects funded by any external entities, do you have a current, up-to-date Conflict of Interest Disclosure on file with the Office for Sponsored Programs that describes this financial relationship?  Yes [ ]  No [ ] (if no you must submit an updated COI disclosure before IRB approval)
Human Subjects Consent Submission

A. Introduction and Background

The focus of this study will be on teacher language and social positioning across social class lines, inspired by Rich’s 1976 Student Social Class and Teacher Expectations and Arroyo’s 1986 Social Class and the Hidden Curriculum of Work, both foundational studies on disadvantaged and working class students. These studies were among the first to show that students are treated differently when expectations are placed upon them either directly (Barn) or indirectly (Arroyo). In recent years the implementation of the No Child Left Behind mandated a system in which all teachers needed to be similarly educated and certified as a “Highly Qualified Teacher”. I would like to observe what effect, if any, the standardization mandate has had on the middle-class and what types of overt and covert expectations are placed on students in these classes.

B. Specific Aims/Study Objectives

I aim to look at whether the “Highly Qualified Teacher” requirements may have disseminated better education research and teaching methods through to more teachers making their talk consistent among the spectrum of the middle classes. What methods and types of language are differentiating in the way teachers talk? By looking at the middle class, I hope to uncover ways that all teachers, regardless of social class, can benefit from standardization and teacher talk methods.

There will be no preceding definition of middle class in this project. I will begin with discussing Arroyo’s definition and then expanding on Benesch, Bourdieu and Bernstein’s definitions. I then will move to my discussion of analysis of the cities socioeconomic position within the state, including information such as income range, education of adults 25+ and home ownership.

Maccoby states, “Concerning the failure of education in this country, one variable that is never mentioned is class, even though it is a determinant factor in school success... Instead they create all kinds of euphemisms such as ‘economically marginal’, ‘disadvantaged students’, ‘at risk’ students” (Maccoby, 1994). The definition will rely primarily on what the cities I observe are not. Their schools are not failing, they do not have large proportions of “economically marginal”, “disadvantaged” or “at risk” students. These cities are not: in poverty; low income; largely renters; largely undereducated; largely new immigrants; all things that delineate the working class and the poor from the middle class in Massachusetts. The higher end of the spectrum will consist of those who have the lowest levels of poverty, the highest graduation rates, highest test scores and highest incomes (of the cities/schools chosen).

To a more important degree there will be long and detailed descriptions of the cities, where the cities fall statistically in comparison to the rest of the state and the amenities that are available to the students.

C. Materials, Methods, Analysis (also used for recruitment choices)

I aim to use three collection and analysis methods, none of which pose more than minimal risk for teachers and pose no risk for students.

1. For the schools chosen, I analyzed data from public sources on the socioeconomic of the city, and of the school-aged population. From this analysis I chose schools that ranged from
having very little poverty, high rankings in public schools, high graduation rates and high income per capita to low levels of university attendance, low home ownership and high drop out rates. A profile of a school is included in the application, and I can provide all profiles if necessary.

**Data collection from these major locations.**

- [http://profiles.doc.mass.edu/](http://profiles.doc.mass.edu/)
- [http://quickfacts.census.gov/qfd/states/25000.html](http://quickfacts.census.gov/qfd/states/25000.html)

2. Observe five public high schools (named later in the document) in Massachusetts for a three-week period, doing non-participatory observations, taking notes on the classroom language of the teachers. I will only be observing teacher language, student interactions will not be used and in the rare event that I would like to use them, students and parents will be asked for additional consent.

**Data-Gathering and Analysis**

Data gathering will consist of note-taking, when the teacher is communicating with the entire class, teacher created worksheets for the students, and school texts only. In a very similar previous study done with adults, *The Hidden Curriculum of Private Language Institutes* I attempted to record teacher language. The interruptions and teacher’s movement around the classroom made it impractical and confusing. Without seeing the position of the teacher, eye contact and interactions the analysis was unable to be to done properly.


3. In a final fourth week, I’d like to conduct reflexive teacher group interviews (interview protocols/samples attached)

**D. Research Population and Recruitment Methods**

The population I aim to use is high schools on the North Shore in Massachusetts. This allows for proximity of schools, but also a wide range of socioeconomics. The primary means of school recruitment was emailing and calling superintendents and principals of 11 schools in the socioeconomic spectrum appropriate for my project. Of these schools, 7 agreed to participate and 5 (3 attached here with the last 2 to follow) have continued with follow-up documentation. I have been given permission from schools in five cities that coincide with five different levels of socioeconomics from a lower level of middle class to the higher middle class. The schools were chosen using statistics ranging from poverty level of the city, MCAS scores and university education percentages.

**Inclusion Criteria**

- High school students grade 10 or 11;
- English proficient;
- Standard-level classes

**Exclusion Criteria**

- English, History or Social Studies

- Grade 10 students test preparatory classes
Limited English Language Proficiency (LEP)  
Gifted, Advanced Placement or remedial classes

The final choice of participating classrooms will be the decision of the school principal and teacher volunteers in order to minimize risk and decrease discomfort.

**Cities**

I have noted where on the spectrum these schools fall, but in the study only the statistics will be used and no labeling of 'which class level this school fits into' will be done, as class is many times subjective depending on the city or state.

**E. Informed Consent Procedure**

The principal researcher will conduct the consent procedure. There will be time for questions during informed assent and I will make myself available for questions. As I will be in class for three to four weeks the teachers will have an ongoing space for questions.

**F. Confidentiality**

All data will be encrypted and stored on a University of Edinburgh approved computer; all teacher data (unavailable to the public) will be password protected at my personal residence until which time I am able to return to the University of Edinburgh where it will be stored in a Research Office inaccessible to the public. The students' and teachers' identities will be anonymized, with only the supervisors of the project and myself having knowledge of their identities.

**G. Potential Research Risks or Discomforts to Participants**

**Students**

- **Social Risks:** The potential for risk is low, students will be observed as a classroom and not individually. In the case that there is any potential for this risk, details may be anonymized in addition to names.
- **Physical Risks:** There will be no physical portion of the research
- **Psychological Discomforts and Risks:** Students and teachers routinely have student-teacher observers, staff assessments and other classroom visitors so it will not be an undue amount of mental discomfort and poses very minimal psychological risk.

**Teachers**

Care will be taken to randomize and anonymize information pertaining to teachers. Teachers will be briefed heavily before the project begins and given many chances for questions.
How will you minimize risks?

1. Personal introduction and continued availability
2. Critical analysis of potential findings
3. Debriefing and full disclosure at the conclusion of the research

II. Potential Research Benefit to Participants

It is my hope that the generalization of new knowledge pertaining to teacher language and positioning will effect later generations in classrooms. The process of the research may be of benefit to the students, as they will gain exposure to aspects of critical pedagogy and reflective practices they do not encounter on a daily basis. The students will be given a letter of participation on their departure from or at the conclusion of the study.
TO WHOM IT MAY CONCERN:

The Massachusetts Department of Criminal Justice Information Services (DCJIS) has conducted a computerized search of the Criminal Offender Record Information database.

The attached is a true copy of matching information from the CORI database for DEMARCO BERMAN, STEPHANIE R and date of birth 09/21/1981.

Signed under the penalties of perjury this 19th day of September 2013.

[Signature]

Thomas R. Capasso
Massachusetts Department Criminal Justice Information Services
Massachusetts Criminal Offender Record Information (CORI)

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This Massachusetts CORI was generated on 09/19/2013 14:56 as the response to your request submitted on 09/19/2013 14:55 with the following details:

Request Details

Request ID: E13PER-01010161
Name: DEMARCO BERMAN, STEPHANIE R
Date of Birth: 09/11/1981
Sex: FEMALE
Father's Name: DEMARCO, ANTHONY
SSN: ***-72-3645
Race: White
Mother's Name: BERMAN, JACKIE (BERMAN)

Response Summary

NO AVAILABLE CORI

This response is the result of a search of the iCORI database using the subject's name and date of birth as submitted by the requestor. To ensure accuracy, it is the responsibility of the requestor to compare the information shown in the Request Details Section above to the subject's personal identifying information.

The DCJIS is not liable for any errors or omissions in the CORI results based on a requestor's entry of inaccurate, incorrect, or incomplete subject information.
District Analysis and Review Tools (DART)

User Guide for
DART for District and DART for School

March 2015

DART Analysis
Comparing Similar Districts and Schools

While districts often compare themselves to neighbors, it may be useful to see whether similar districts or schools are struggling or succeeding in a variety of areas—districts from around the state may be relevant. When the user selects a district, DART tools generate a list of ten comparable districts based on enrollment characteristics. Districts are compared within their grade-span group (K-12, elementary, secondary, vocational-technical/agricultural.) You are not limited to these districts in selecting a comparison district.

An internal ESE study showed that the percentage of low income students enrolled was by far the strongest predictor of district and school performance, and this variable is weighted strongly in the algorithm of the comparison model. The other four variables included in the algorithm are total enrollment (size), percentage of English Language Learner students enrolled, percentage of special education students enrolled, and district or school type (e.g., elementary school, middle school.)

District Comparison Methodology Details

Update: Because of the recent change to the low income collection, we used the 2013-14 low income data in the comparison methodology.

To build the components of the comparison methodology, all districts in the Commonwealth are assigned percentile ranks (1 to 99) for total enrollment, percentage of low income students, percentage of ELL students, and percentage of students with disabilities. Higher percentile ranks (closer to 99) indicate that the district enrolls more students or higher percentages of low income students, ELL students, or students with disabilities relative to districts with lower percentiles (closer to 1).

Districts are also categorized by district type: elementary, high school, or K-12. In order to simplify the definition of district types, districts that serve elementary and middle school grades are classified as elementary districts, and districts that serve middle and high school grades are classified as high school districts.

The comparison methodology matches districts by district type and minimizes the total absolute difference in enrollment, low income, ELL, and students with disabilities percentiles from the selected district. The formula sums the absolute differences between percentiles from the selected district and identifies the 10 districts with the smallest total differences. To reflect the strong correlation of low income status with district performance, minimizing low income differences is weighted more than minimizing differences in enrollment, ELL, or students with disabilities.

Each district has a fixed comparison group in any given year, but the next year’s enrollment data may generate a slightly different group. Among districts, comparison groups are not static; districts comparable to your selected district will have their own comparison groups that may not completely overlap.

School Comparison Methodology Details

Update: Because of the recent change to the low income collection, we used the 2013-14 low income data in the comparison methodology.

The school comparison methodology works the same way as the district one. To build the components of the comparison methodology, all operating schools are assigned percentile ranks (1 to 99) for total
enrollment, percentage of low income students, percentage of ELL students, and percentage of students with disabilities. Higher percentile ranks (closer to 99) indicate that the district enrolls more students or higher percentages of low income students, ELL students, or students with disabilities relative to districts with lower percentiles (closer to 1).

Schools are also categorized by type: early elementary, elementary, elementary middle, middle, middle high, and high schools; vocational schools; and alternative and public day schools. This is the same school categorization method that is used by ESE’s data reporting unit.

The comparison methodology matches schools by type and minimizes the total absolute difference in enrollment, low income, ELL, and students with disabilities percentiles from the selected school. The formula sums the absolute differences between percentiles from the selected school and identifies the 10 schools with the smallest total differences. To reflect the strong correlation of low income status with district performance, minimizing low income differences is weighted more than minimizing differences in enrollment, ELL, or students with disabilities.

Like the district comparison, each school has a fixed comparison group in any given year, but the next year’s enrollment data may generate a slightly different group. Among schools, comparison groups are not static; schools comparable to your selected school will have their own comparison groups that may not completely overlap.

**Wealth-based Comparison Methodology**

Finance analysts sometimes select comparison districts using a tool provided by ESE’s School Finance Office. Its methodology uses enrollment and wealth measures (property valuation and household income) to select comparable districts. The most current wealth comparison tool available is in the 2008 per pupil expenditures file, and a link to this file is provided on the Home page of the Staffing and Finance DART.
Introductory recruitment letter sent to superintendents and principals.

Dear 

Hi, my name is Stephanie DeMarco, a former Massachusetts public schools student. I am contacting you regarding a study I am doing on teacher talk and social class in Massachusetts schools.

I'm currently a PhD candidate at the University of Edinburgh in Scotland, but I grew up in Somerville and Lynn, MA and the dichotomy between the working class and middle class in MA was always of interest to me; So much so that I am doing a study about teacher talk and social class (now that teachers have standardized education and the HQT requirement). I would love for 

High to be one of my schools to observe.

I won't be doing any statistical analysis of the class (I'll leave that to the DOE), just observations of student and teacher interaction (all anonymized). I've been teaching for 8 years in community and private schools, so my intentions are to write something that uses positive instances of teacher talk to reflect what is happening in classes today. I would be eternally grateful if you would consider this, and hopefully it could be mutually beneficial.

It is my hope that the study will someday be published and will influence future education decisions and as a participating school, your students will be able to be a part of it. If you have any time, I would love to discuss further and tell you more about my project so I can address any questions and concerns you may have.

Thank you so much in advance.

Stephanie DeMarco

--- The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.
Chichester High Profile

### School Attainment and Higher Education Data

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Graduated</td>
<td>67.1</td>
</tr>
<tr>
<td>% Drop out</td>
<td>15.6</td>
</tr>
<tr>
<td>% Low Income Graduated *defined as eligible for free or reduced lunch prices</td>
<td>52.2</td>
</tr>
<tr>
<td>% Entering Higher Ed.</td>
<td>72.4</td>
</tr>
</tbody>
</table>

### Enrollment Statistics by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>% of District</th>
<th>% of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>4.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Asian</td>
<td>1.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>26.7</td>
<td>16.1</td>
</tr>
<tr>
<td>Native American</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>White</td>
<td>66.4</td>
<td>67.0</td>
</tr>
<tr>
<td>Native Hawaiian, Pacific Islander</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Multi-Race, Non-Hispanic</td>
<td>0.7</td>
<td>2.5</td>
</tr>
</tbody>
</table>

### City based Socioeconomic Data

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BA or Higher (people 25+)</td>
<td>29.7%</td>
</tr>
<tr>
<td>Per capita Income</td>
<td>$25,684</td>
</tr>
<tr>
<td>Persons below poverty level</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

### Grade 10 - English Language Arts

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVANCED</td>
<td>31</td>
<td>33</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>PROFICIENT</td>
<td>49</td>
<td>53</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>NEEDS IMPROVEMENT</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>FAILING</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

### Grade 10 - Mathematics

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVANCED</td>
<td>38</td>
<td>43</td>
<td>47</td>
<td>37</td>
</tr>
<tr>
<td>PROFICIENT</td>
<td>29</td>
<td>23</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>NEEDS IMPROVEMENT</td>
<td>22</td>
<td>22</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>FAILING</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

1 Details match a high school that did not participate in the study and has no connection to any data gathered in the study.
School Permission Form (Letterhead Here)

Attn: Review Board

I am writing on behalf of XXXXXX High School to inform the Boston College Institutional Review Board of our intention to allow Primary Researcher, Stephanie DeMarco, from the University of Edinburgh to observe classes during the Fall semester of 2013 in order to complete research for her doctoral thesis.

XXXXXXX High School will provide:

- 2 social science classrooms to observe for 3-4 weeks
- A pool of potential volunteers for interviews outside of class
- Access to guardians (via email or written communication) so that guardians and students are able to make inquiries about the project at will.

Primary Researcher, Stephanie DeMarco will provide:

- Permission slips for student participation
- A presentation on the research
- Official documentation of all permissions and documentation for students and teachers who would like to use the participation on applications or resumes
- All research tools, documentation and paperwork

This permission is granted under the conditions:

- All students involved will have guardian permission
- All students involved will give assent
- All teachers involved are willing to participate and be observed
- Primary Investigator will be required to obtain a CORI background check

If these conditions are met, XXXXXX High will consent to participate in the research project:

__________________________
Teacher Talk and Social Positioning in the Classroom

Thank you in advance.
FIELDWORK DATA ANALYSIS (ENLARGED)
POST FIELDWORK DATA ANALYSIS (ENLARGED)